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SUSTAINABLE DEVELOPMENT THROUGH A REDISTRIBUTION
OF POWER IN EDUCATION:
COMPLEXITY THEORY, THE CAPABILITY APPROACH AND THE
SOLAR NIGHT SCHOOLS OF THE BAREFOOT COLLEGE

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Sustainable Development through a Redistribution of Power in Education: Complexity Theory, the Capability Approach and the Solar Night Schools of the Barefoot College

by

SZÉKELY Schlaepfer Emilia Venanzia

A Thesis Submitted to

The Hong Kong Institute of Education

in Partial Fulfillment of the Requirement for

the Degree of Doctor of Philosophy

May 2015
To Tani, Abuelita and Gus.

To my parents.
STATEMENT OF ORIGINALITY

I, SZÉKELY Schlaepfer, Emilia Venanzia, hereby declare that I am the sole author of the thesis and the material presented in this thesis in my original work except those indicated in the acknowledgement. I further declare that I have followed the Institute’s policies and regulations on Academic Honesty, Copy Right and Plagiarism in writing the thesis and no material in this thesis has been published or submitted for a degree in this or other universities.

Emilia Székely

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May, 2015
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ABSTRACT

Sustainable Development through a Redistribution of Power in Education: Complexity Theory, the Capability Approach and the Solar Night Schools of the Barefoot College

by SZÉKELY, Emilia

for the degree of Doctor of Philosophy
The Hong Kong Institute of Education

Finding a sustainable model of development has become one of the central goals of the international community, as evident in the many agreements made during the last few decades and with greater emphasis during the setting of the upcoming post-2015 development agenda. While education’s potential as a catalyst of such an objective has gained increasing attention, research demonstrates that its contribution is being hindered by the unequal distributions of power that currently exist among its stakeholders to negotiate and settle on contested issues related to the design and implementation of educational initiatives. This thesis explores the significance and implications of redistributing power in the field by means of enhancing the self-sustainability of educational development initiatives at different levels of autonomy and across sectors, as a pre-requisite for improving the effectiveness of their outcomes in terms of sustainable development – which, it is suggested, should be considered in the operationalization of education’s quality.

The study proposes a new explanatory model based on the confluences and complementarities between complexity theory (principally as expounded by Edgar Morin) and the capability approach (as developed principally by Amartya Sen and Martha Nussbaum) – two theories that share most of their ethical and methodological implications in terms of sustainability, that define the substantial role of education for
its attainment, and hold as important the distribution of power among development (including educational) stakeholders.

Through an abductive inference modality, these theoretical propositions are analysed in comparison with the empirical evidence of an educational development initiative run by the Barefoot College in India – the Solar Night Schools Program, which offers an alternative model of schooling for children who are unable to attend regular school in the day – and informed by the findings of six other relevant case studies: Amigos de Calakmul, Fundación Escuela Nueva, Mercado Alternativo y Economía Solidaria, Red de Multitriqueque Tláloc, ChildFund International, and Projeto Saude e Alegria. The investigation included visits to these sites in India, Mexico and Brazil, observation, interviews and comparative document analysis.

The thesis concludes with a proof of concept of the importance of - and proposes ways forward for - shifting the focus of development in these domains towards increasing the self-sustainability of educational initiatives at different levels of autonomy and across sectors, and improving the mechanisms for their solidarity-based cooperation and negotiation so as to attack their roots in dependency. Such a shift would help to ensure that education is better connected to its developmental context, that it is more relevant to the interests and needs of the different actors affected by it, and, as a consequence, that its quality is enhanced – thus strengthening its potential as a cost-effective means and socially just objective of a development model consistent with the sustainability imperative.

**Key words:** Power Distribution; Education for Sustainable Development; Sustainable Development; Intercultural Education; Complexity Theory; Capability Approach; Solar Night Schools Program; Barefoot College; Education Quality; Self-sustainability
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LIST OF ABBREVIATIONS

CCT       Conditional Cash Transfers
DFID      Department for International Development
EFA       Education for All Scheme
ESD       Education for Sustainable Development
FEN       Escuela Nueva Foundation
FRC       Field Research Centres
MDG       Millennium Development Goals
PHH       Project Health and Happiness
RTE       Right of Children to Free and Compulsory Education Act (2009)
SMC       School Management Committees
SNSEP     Solar Night Schools Program
SWRC      Social Work and Research Center
UNF       United Nations Foundation
UNFIP     United Nations Fund for International Partnerships
VEC       Village Education Committees
WCED      World Commission on Environment and Development
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CHAPTER 1

INTRODUCTION

1.1 The Problem that the Thesis Addresses

During the last few decades, the number of public schools has increased in India’s rural areas. Nevertheless, many families still cannot bear the opportunity costs of sending their children, especially girls, to study. Instead, many children are required to assist with household duties such as looking after the animals and crops, collecting water for the family, and helping with other subsistence activities. As a result, the children from these rural areas are unable to attend school during the day.

In 1975, the Barefoot College understood this problem and started the Solar Night Schools Program (hereafter referred as SNSP) in the area of Rajasthan. Since then, the program has followed an alternative schooling model that has been extended to many other states of the country, guaranteeing the education of more than 75,000 children. This success has been attributed to the program’s ability to adapt to the particular socio-economic and cultural contexts of the children and their families.

In order to provide these children with education, the program follows four main strategies. First, the class schedule will adapt and change according to the children’s needs. Second, the program integrates the schools within a network of other development programs. Third, the program has decentralized the decision-making process, giving schools the ability to adapt to local or particular needs. Forth, while following the mainstream curricula, the program also offers an intercultural education modality that incorporates local wisdom as well.

Today, however, the survival of the SNSP is being challenged by two facts. First, the increasing difficulties in attracting funding support to sustain the program, especially since the world economic crisis of 2008. And second, the implementation of India's

This Act is a revolutionary normativity that aims to ensure the quality of education for all children by regulating the standards of both private and public education services. Unfortunately, the RTE has the serious flaw of lacking sensitivity to the particular conditions that govern the diverse cultural, political, and socio-economic contexts of the country’s different schools and therefore, their capacity to comply with its quality standards:

In the first place, educational initiatives like the Night Schools frequently lack the financial resources to satisfy the RTE’s quality criteria. But, more importantly, many times most of their success in guaranteeing access to quality education to the most disadvantaged of the children comes from taking measures that challenge the Act’s conception of quality. To mention a simple example, the Night Schools operate only at night time and their schedule is subject to local agricultural cycles, because children cannot comply with the Act's minimum number of instructional hours per academic year due to their families’ nomadic and herder activities. If the program changes its schedule, children would simply stop attending school, which was initially the case with the public alternatives.

The dilemma brought upon by the RTE’s sanctioning scheme is that it forces them to choose: either they accommodate to the quality prescriptions of the Act at the cost of losing their effectiveness or they don’t, with the probable consequence of getting shut down – as has happened already with many such schools since the implementation of the law.

Contrary to its very spirit, the Act has placed educational initiatives like the SNSP in a paradoxical situation that might result in leaving a significant amount of children without any schooling at all. How is it possible that even when in theory they share the same goals, in practice the very development stakeholders happen to be the biggest obstacles to each other?
The frequency with which this kind of situation occurs in the field of education – and development in general – is of even greater concern and is, in fact, the problem that the present thesis addresses, because of the way it is hindering the achievement of the agreements that the international community has finally made on promoting a model of development that is sustainable.

According to the main document that popularized the term, The Brundtland Report (World Commission on Environment and Development [WCED], 1987), a “sustainable development” is expected to respond to the challenges posed by the limitedness of our planet’s resources in an integrated manner that recognizes the multidimensional causes and effects of human actions and the diversity of interests, needs, priorities, and aspirations that guide them. Despite its vagueness, the concept also embraces the idea that for all stakeholders to be able to contribute to it, both political and financial resources have to be well distributed among them.

In this context, education has been recognized as a means with cross-cutting effects that can help in the building of such a model of development. However, while in the last few decades important improvements have been made in regards to the extension of its coverage, it has been agreed that the new challenge is to ensure that access is more equal to all populations, and that the quality of education improves, so that it can effectively contribute to the purpose and more overarching goal of sustainability. But there are serious and complex debates on both the meaning of these objectives and the means for their achievement.

From a political economy perspective, these mismatches are unavoidable due to the vast diversity of the stakeholders’ interests, needs, priorities, contexts, working criteria, and the different dimensions of their responsibilities. The problem rather rests in the current distribution of political and financial resources (power) among stakeholders to negotiate and settle on those contested issues.
This distribution is typically unfair and ineffective: most of the time, when mismatches among actors’ priorities and working methods or criteria occur (as with the case of the Barefoot College and the RTE’s criteria for quality), the power to make final decisions is frequently concentrated in the hands of those who have the required financial resources; of those with the greatest political power and authority; of those with greater level of representativeness; or, of those that hold more lobbying visibility and power to affect legislation. In the name of national interest, for example, the national government has more power to decide on things related to the implementation of educational policies than the parents of the children towards whom these policies are addressed. Donors, despite claiming to work in partnership with the recipients of their support, have greater power in defining which criteria are to be used for evaluating a program for developing school infrastructure than the communities in which these schools are to be built. Universally defined learning standards have more to say about what teachers should teach than the teachers themselves, who are aware of their students’ capacities and the needs of their parents and communities. The markets’ needs for a certain kind of human capital tends to influence governments’ decisions on higher education supply more than the comprehensive development plans that take into account social needs other than economic growth. Political and financial incentives impinge over negotiations among teacher unions and governments in deterring the very objectives of the policies and the consequences for the students and their families, who are, mostly, not even consulted.

The decision about sustaining the SNSP or shutting it down should emerge from a discussion about the extent to which its model in particular is being more or less cost-effective than the public alternative in guaranteeing children their right to quality education.

But the RTE’s sanctioning scheme fails to provide a space for that discussion, and those implementing the SNSP are subordinated to this national law. Ironically, the ultimate victims are the very children that the Act intended to benefit, because the program was, so far, the only alternative that worked for them. That is, negotiations
are usually not held on an equal basis, sometimes coming at the cost of ignoring the perspectives of the very beneficiaries, or those that have the closest relationship with them, and thus might be more capable to address their particular conditions and needs and provide more accurate data. Such data is key for the design and implementation of more appropriate (and effective) policies.

In addition to that, the increasing scarcity of funding support obliges development practitioners to compete with one other. It also challenges the effective implementation of their programs. Frequently, there are few opportunities to choose the more appropriate funding partner – and consequently the high reliance that most of them have on the external resources they manage to secure thus threatens their capacity to deal with their social objectives in what they deem to be the more pertinent and relevant way, when that way doesn’t fit the working standards or interests of those that provide them with the political or financial support on which they rely.

In short, whether for legitimate or illegitimate reasons, the fact is that some groups are more capable than others in imposing their priorities, working methods, and criteria, while some are more dependent, and therefore their views are subordinated when deciding contesting issues. Consequently, many a time they end up merely becoming executors of other actors’ wills, perpetuating models that, ironically, reinforce their dependency.

All interests contested might be important for different development purposes and sometimes the issues at stake are immensely controversial (e.g. when the national interests confront those of a particular group or community, or when local interests challenge efforts to promote human rights for the sake of “cultural values”).

While that situation is unavoidable, what matters is the consequences of the unequal advocacy capacity that different educational stakeholders hold to negotiate on the decisions to be taken in regards to policies’ objectives and means – decisions that influence education’s potential contribution to sustainable development because of
their impact on what this thesis calls the sustainability factors of ownership, integration, and relevance.

The relevance factor refers to the extent to which policies, programs, and/or initiatives are relevant to the (many times contested) needs, interests, conditions, priorities, philosophies, and working approaches of the different actors that either in the present or in the future are affected by them.

The integration factor, on the other hand, refers to the extent to which policies, programs, and/or initiatives are designed, implemented, and evaluated in accordance to the characteristics of their global and local developmental contexts – political, environmental, social, economic, cultural.

The ownership factor, finally, refers to the extent to which the distribution of political and financial resources ensures egalitarian advocacy capacities (power) for the different stakeholders to get involved in the design, implementation, and evaluation of policies, programs, and/or initiatives, and decide on contesting issues. That is, an egalitarian recognition of the different actors’ right, capacity and responsibility to own and control these processes.

To explain: this thesis uses the concepts of ownership, relevance, and integration to understand these consequences because they represent the variables that, according to the most agreed definition of “sustainable development” (that of the Brundtland Report), differentiate a model of development that is sustainable from one that is not (as will be explained in detail in Chapter 2). Moreover, a review of the literature from a political economy perspective also makes it clear that these topics, albeit not unique and under different connotations, are the ones leading the main debates in the field of educational development, especially in terms of the problem that this thesis addresses.

The concern of this thesis is not only the legitimacy of the current conditions of ownership, but also the consequences that this situation is having on the attainment of our common and urgent goals of sustainability. Since the decisions taken among
stakeholders in contesting issues shape the implementation process, the extent to which the policies can bring out effective outcomes for sustainable development is influenced by the kind of power relationships that exist among educational stakeholders. These relationships, in turn, result from the current availability and distribution of political and financial resources, in which some actors have greater advocacy capacity than others to enforce their views.

In fact, there is a growing concern on the importance of designing mechanisms to redistribute these resources among the different stakeholders so that policies can be more effectively designed, adjusted, implemented, and evaluated in terms of the sustainability factors. Analyses from all sides of the spectrum and a wide variety of approaches are plagued with calls for more egalitarian negotiations and trade-offs among stakeholders to allow policies to be accountable to different interests and needs – not only at a global but at a local level as well.

Furthermore, many non-governmental organizations are now working on strengthening their self-sustainability, researchers are calling for exploring the possibilities embedded in self-regulatory models, and donors are concerned about recipients’ levels of dependency to their support and the extent to which the programs they fund will be sustained once they withdraw their financial support.

However, while awareness has grown about the harmful consequences that the prevailing distribution of political and financial resources has had for the negotiation of conflicting approaches during the design or implementation of educational policies, there is a strong trend to promote policy schemes that end up reinforcing these power dynamics and even accentuating dependency relations.

The huge array of vested interests playing in the field, the commonality of corruption practices, the unequal expertise of those in charge of providing education services, the urgency to extend social justice and promote a model of development that is sustainable over other powerful agendas, and the limitedness of funding, all push the
trend to homogenize, standardize, and develop top-down and narrow-focused control mechanisms (see an interesting reflection in these regards in Burnett [2012]).

But these mechanisms, albeit aimed at ensuring (or increasing) the effectiveness of policies’ outcomes, ironically, like the RTE, frequently end up becoming the first obstacles for that effectiveness. This is partly because they unsuccessfully try to simplify what is complex (which has important practical and ethical consequences), and partly because the unequal power relationships on which these mechanisms are built and sustained – albeit their good intentions – subordinate the views, priorities, and working criteria of those who are more familiar with the socio-economic and geographical development environment in which policies have to integrate in order to effectively address the specificities of the local needs (the integration factor). By trying to avoid cases of abuse and to ensure greater effectiveness, these mechanisms privilege the greater advocacy capacity of some actors over that of others for deciding on the setting of priorities, the selection of working methods and criteria, and the allocation of resources. But, paradoxically, that dynamic not only undermines peoples’ agency reinforcing the current distribution of power (like a self-fuelling cycle) but also affects the extent to which the varied needs and interests being contested in educational contexts are addressed (the relevance factor).

It is, indeed, a vicious cycle, and the present thesis seeks to contribute to the debate by proposing new elements for the understanding of its significance, and also to explore the means through which alternatives can be built.

For that reason, the thesis not only gathers insights -from the empirical evidence of the SNSP mentioned above and six other relevant case studies – as described in more detail in the next section of this chapter –it also explores the contributions to the debate provided by the complexity and capability theories that share most of the ethical and methodological implications of the concept of sustainability – as per its definition in the Brundtland Report – and directly addresses the significance of development and education’s power relationships.
Complexity thinking – specifically the school developed by French philosopher Edgar Morin (upon which this thesis concentrates) – questions the metacognition processes deeply rooted in our knowledge about the world and their impact in our interaction with it. As Mason (2009) suggests, complexity offers “a dynamic and system-wide perspective on how sustainable change, characterized by new properties and behaviours in the education system, emerges from the interaction of a myriad factors in the economic, political, social and cultural environments in which education is situated” (p.117). The comprehensiveness with which this approach understands educational initiatives’ relationship with their environment unavoidably points at the importance of perfecting the means for the regulation of interests and needs at different systemic levels in a simultaneous manner, for building enough flexibility within the system to allow for contextualization and, yet, ensure that our common objectives and challenges are protected as well. That is, it calls for enabling our global sustainability while fostering the means for supporting the different components of the system in creating their own paths of change.

In line with the complexity theory, and adding up concepts of social justice and choice, the capability approach claims that development can be assessed in terms of its capacity for creating "freedoms" and removing "unfreedoms" to enhance people's capabilities (choices) "to live the lives they have reason to value" (Sen, 2000). As with complexity, this implies creating the conditions for people to construct their own path towards development.

The capability approach, emerging from the works of Indian economist Amartya Sen in the 80s, argues that the prevailing conceptual framework utilized for the design, analysis, and evaluation of development policies tends to rely on aggregative or economic-only data which, while important, is insufficient, because it excludes information that would enable a better understanding of: how people are actually doing in their lives; what people are actually capable of being and doing; and, what are the opportunities that society has provided them with to choose and lead the lives they have reason to value.
Both the complexity and capability theories address the issue of the coexistence of different levels of autonomy that represent and regulate the interests, needs, and perspectives of the diverse stakeholders in the field of education (from the individual agent to the schools, the communities, the national governments, the international organizations, etc.) according to different contexts and purposes. That is, they address sustainability's concern with the differences and connections between universalism and diversity (the relevance factor).

The two theories also converge in their emphasis on addressing the interactions among the different developmental dimensions of educational initiatives, and between them and their environment (the integration factor).

Additionally, they both argue for systemic change but warn against simplistic-standard solutions. Together they offer propositions to navigate the complexities of development – its many interests, dimensions, contextual challenges, causes and effects – by being aware of the moral consequences of their systemic perspectives on sustainability. These include the distribution of resources among the constituents of the system in order to respect and empower their agency to effect change – both as a matter of justice and of practicality – so that the momentum can be built as a catalyst of a new trend of development (the ownership factor).

Consequently, besides the fact that both theories capture the basic premises of the concept of sustainability used in this study, they also offer key insights for the significance and implications of an alternative scheme of ownership that helps in breaking the aforementioned vicious cycle.

There is not a consolidated line of research that converges both the capability and the complexity theory's approaches. This research integrates the theoretical foundations and the concepts of both because it considers them complementary in their recognition of the complexity of human nature and in their acknowledgement of the lack of predictability of social development – a consequence of which is their
emphasis on the importance of democracy, freedom, agency, and the dignity of people.

The thesis revises these insights in comparative perspective with the empirical evidence collected for this study in an abductive analysis modality (as drawn out more explicitly in the following sections) with aims to not only further operationalize these approaches but also to find out some of their punctual implications for the stakeholders of educational development.

1.2 Objective, Hypothesis, and Research Questions

The purpose of this thesis is to explore further the significance of the ownership factor on the effectiveness of the outcomes of educational initiatives for sustainable development, which, it argues, are key for education’s quality. It also aims at exploring the considerations that should be taken into account for building an alternative scheme of ownership.

The research questions, therefore, were framed this way: the first one with an evaluative purpose and the second one with an interpretative one:

RQ 1: To what extent is increasing the self-sustainability of educational initiatives significant for improving the effectiveness of their outcomes in regards to the agreed objectives on sustainable development?

RQ 2: What facilitates or hinders the self-sustainability of educational initiatives?

The concept of educational initiatives refers to the programs, policies, or projects that emanate from the different organized social units that work in education at different levels. The concept can apply both to a civil organization’s education program (like the Barefoot College’s SNSP) or to a national authority’s education legislation (such as India’s RTE). The concept, as used in this thesis, is systemic in that it refers not only to the program designed by a given organized social unit but to
the other components of the social unit as well, which includes the infrastructure, the resources, and also the actors directly involved in the design and implementation of that program (the Barefoot College and the Parliament of India in our examples), and those directly affected by it (e.g. the children and their families).

As open systems, educational initiatives have a mutually nurturing relationship with their environment (integration factor), and are affected by the decisions made by different actors to whom they, in turn, are relevant (relevance factor). These actors can be those that are part of the educational initiatives (mentioned before) or others that are external to them.

The **concept of self-sustainability** incorporates that of sustainability (detailed definition in Chapter 2) but complements it as commonly understood because it addresses the matches and mismatches among the educational initiatives' different internal and external stakeholders to whom they are relevant, and emphasizes the nature of their power relationships in terms of: 1) the internal stakeholders' status and influence within these relationships, to determine what is relevant and effective in order to accomplish the initiative's social objective; and, 2) the initiative's level of dependence on external factors and actors in order to survive – that is, to be sustainable.

The **thesis’ hypothesis** is that redistributing the political and financial resources among educational initiatives’ internal and external stakeholders will actually help in improving their outcomes, decreasing their level of dependency, and increasing their sustainability and, consequently, that of the broader field of development. The sustainability of educational initiatives themselves is directly affected by the relevance, ownership, and integration factors. If the ownership of educational initiatives’ internal actors is increased, their capacity to effectively address the relevance and integration factors will also grow, and, consecutively, the potential sustainability of the educational initiative itself. Therefore, considering the current conditions of unbalanced ownership, the study suggests that reducing educational initiatives’ level of dependency to external sources of financial and/or political
support (increasing their self-sustainability) is crucial for their effective outcomes, in terms of sustainable development.

1.3 Thesis Methodology and Analytical Framework

To explore the abovementioned questions, this thesis opted to use an abductive inference analysis which is a research method formulated by Charles Sanders Peirce in the 19th century, and that, according to Reichertz (2010), greatly reassembles Anselm Strauss and Juliet Corbin’s version of the grounded theory.

Although the vast diversity of interpretations of the meaning of *abduction* suggest that “no strict definitions are admissible, especially not in relation to Peirce’s own conception” (Khachab, 2013, p.158), there is consensus in that the method basically recognizes the existence of both deductive and inductive analyses during the course of any research process and warns against the exclusive use of any of them.

Deduction aims at testing the theories understood as “logical propositions about the interrelationships of constructed concepts” (Stern & Porr, 2011) on empirical data, to either confirm or modify their claims. That is, at describing the implications of prescribed hypotheses.

From the perspective of abductive reasoning, this research method hinders the discovery of new explanatory tools, because it subordinates the uniqueness of data to already known patterns of expectation, underestimating the constant changes and diversities in demographics that prevent theories to remain valid throughout different contexts and moments in time.

Induction, on the other side, aims at validating empirical evidence. It proposes that theories can be constructed through our observation and interpretation of data without the help of previous theoretical knowledge (which is what the original version of grounded theory would argue. See: Reichertz [2010] and Russell & Gery [2010]).
From the perspective of abductive reasoning, that is not possible; what allow us to identify the novelty of our observation and interpret it are, precisely, the knowledge and patterns of thought that we already have. These pre-existing patterns of expectation are, in other words, the lens through which we see and understand reality; but, at the same time, they can be enriched by the evidence discovered in its interpretation. Additionally, abduction distinguishes from induction in that it doesn’t aim at determining a value, that is, it doesn’t intend to establish a new and irrevocable truth to be tested a-critically over time and circumstances. Rather, it aims at impacting the way phenomena are understood, that is, for introducing new ideas (Pierce Cp [1903] cited by Hoffman [2010]).

So what Pierce’s Abduction and Strauss and Corbin’s version of grounded theory propose, is to conjugate both processes, by:

a) Keeping an open attitude of wonder about how and why do phenomena work in one way or another, empowering the validity of the evidence that empirical data can bring for the reconstruction of the theory, instead of limiting ourselves to the restrictions of the already existing explanatory tools.

b) When devising “accidents”, identifying the extent to which the available explanatory models are or not appropriate to explain them.

c) Recognizing the theoretical pre-knowledge that influences our observation and interpretation of phenomena.

d) Avoiding interpreting the data until a process of continuous questioning, formulation and re-formulation of codes, categories and hypotheses has been undertaken throughout the whole research process. That is, a constant process of induction and deduction that permits the interplay of intuitive thoughts and ideas to see which information can be organized with the use of existing codes and which requires the creation of new means of linguistic interpretation that can best fit to the “discoveries” encountered (Reichertz, 2010).
The purpose of an abductive inference process, thus, is to form an explanatory hypothesis taking insights from both the already existing theoretical explanations, and the novelties that can come out from the interpretation of the feedback experience of empirical data. As a consequence of that explanatory hypothesis, a "proof of concept", also named an "abductive insight", should emerge. The last nomenclature comes from Hoffman (2010) that describes it as:

An insight resulting from the creation of an explanatory hypothesis is the experience that what someone created in abductive reasoning fits into a system of beliefs—or provides such a system—that fulfills three conditions: (1) each one of the beliefs in the system is acceptable to the person experiencing the insight; (2) the system as a whole satisfies for this person the need of understanding either a particular phenomenon or a general regularity so that the phenomenon or the regularity can be perceived as plausibly connected to this system of beliefs; and (3), in order to show that this connection between the system of beliefs and the phenomenon or regularity is indeed plausible, it must be possible to represent this connection in the form of an acceptable argument whose conclusion is a proposition describing the phenomenon or regularity. (p.572)

This means that the abductive process aims at building on what is already known (and explained) by linking the insights “discovered” from the fresh data to the explanations of the already existing systems of belief. The objective being: to come up with a proof of concept (abductive insight) that contributes to the existing discussion on the problem addressed (the phenomena that is being studied), and is supported by a solid explanatory hypothesis created by the dialogue between the feedforward of the theories and the feedback of the evidence.
Hoffman’s definition of the abductive inference process agrees with Evers and Wu (2006)’s scheme presented in Figure 1 and would, consequently, go through 4 steps:

- Selection of the explanatory theories and elucidation of their feedforward patterns of expectation: The selection of the appropriate system of belief mentioned by Hoffman is what Evers and Wu call the process of *iterated theory revision and competition*, in which the researcher explores the different explanations available, compares, and selects one or a compound of them. The latter means that it is possible that the researcher finds a theory whose generalization hypothesis fits, more than any other, the patterns of expectation that he has for the purpose of explaining the phenomena (T1), but that he also finds a second most favoured theory (T*) that complements the explanations offered by the first one. This process is known as the
process of coherent theory adjustment and theory choice. It doesn't intend to address the theories' different proponents' interpretations of a particular problematic or their key debates (as an ordinary literature review would do in deductive studies). In abductive analysis, the process of selecting the theories basically represents a justification for the patterns of expectation chosen to observe the phenomena (the problem addressed).

- Observation and elucidation of the feedback patterns that emerge from the interpretation of the empirical data (case studies): This step requires that, as above suggested by Reichertz, 2010, the researcher keeps an attitude of wonder to identify “new” patterns of interpretation that require a new means of linguistic interpretation.

As with the theoretical propositions, the feedback experience needs to describe the constitutive and regulative evidence that allows for the generalization of its findings, that is, to justify them. Although the aim of this generalization is to reduce confirmation bias over time and validate the evidence in the understanding of different local contexts – which is the typical objective of an induction research – for abduction, the character of this generalization is only provisional and doesn’t intend to be valid across all contexts and at all times. For their generalization, the authors argue, case studies have to:

a. Cohere with constitutive evidence (social practices are defined by social rules);
b. cohere with regulative evidence (social practices exist the way they do only because they follow social rules); and/or
c. respond accordingly with a theory that is better than others by virtue of its inclusion of this evidence.

- Analysis of the matches and mismatches between feedforward patterns of expectation and those of the feedback experience.
• Conclusions, which include elaborating a new explanatory hypothesis that serves as an abductive insight (a proof of concept) that builds on the original explanatory hypotheses and enriches them.

Figure 2 Analytical Framework of the Thesis

The adaptation of this scheme for the purposes of the present thesis is shown in Figure 2. The Figure includes the moment of the Statement of the Problem that the thesis addresses as a first step. Next, the selected theories serve as feedforward patterns to study the significance of increasing the self-sustainability of educational initiatives for effective outcomes in sustainable development, and the implications that should be considered for the design of an alternative scheme of action. As a subsequent step, in the next chapter the thesis presents the feedback experience offered by the fresh data collected from the case studies which provide additional insights in regards to the research questions (Note: insights from the comparative case
studies are presented here briefly; their detailed description can be found in the Appendix of the thesis).

As is also evident in Figure 2, the explanation of the methodology followed for the research is spread in different parts of the thesis: Having shown (in the previous section) the objective, hypothesis, research questions, and some of the core concepts that are used throughout the thesis (educational initiatives and self-sustainability), Chapter 2 describes the three thematic categories around which the analysis of the matches and mismatches between the interpretations of the theoretical and the empirical data is structured: relevance, ownership, and integration. As noted above, these analytical themes are consistent with the implications of the concept of sustainability as stated in the iconic Brundtland Report, and were identified during Chapter 2’s review of the literature made from a political economy perspective as the main factors that are guiding the debate on the problem that the thesis addresses. Finally, the methodology followed by the empirical study (including research methods) is described in depth in Chapter 4.

1.4 Overview of the Thesis Organization

Hence, the main body of the thesis is organized as follows:

“Chapter 2 Statement of the Problem” elaborates on the problem addressed by the thesis: that the current distribution of political and financial resources among stakeholders to negotiate and settle on contested issues is having negative consequences on the attainment of our common and urgent goals of sustainability.

It starts by describing how – as evident in the many agreements made during the last decades and with greater emphasis during the setting of the upcoming post-2015 agenda – finding an appropriate and viable model of sustainable development that is responsive to the common and the diverse, the spatial, and the temporal, challenges and aspirations of humanity, has become one of the central goals of the international community. It also explains how, within this framework, education’s role has gained
increasing attention – especially since Agenda 21 and now with the soon-to-be post-2015 sustainable development's goals – as a catalyzer of such a process.

It continues by explaining how, from a political economy perspective – even with the existence of shared objectives within the field of educational development – the diversity and complexity of its stakeholders carry a number of challenges for their achievement. Actors hold competing interests and frequently have different interpretations of the meaning of those agreements and the best means for their implementation, which forces them to permanently undertake activities of negotiation, cooperation, and conflict in which they all advocate for their different interests, needs, perspectives, working methodologies, etc.

During these activities, decisions are taken on the production, use, and distribution of political and financial resources that affect the extent to which educational initiatives effectively address the most agreed implications of the sustainability imperative (originally suggested by the Brundtland Report in 1987): their plural relevance to the different actors affected by them, their integrative scope, and their egalitarian (democratic) ownership.

Since the decisions that are made on those negotiations are deeply affected by the power distribution among stakeholders to advocate for their views in relation to the means and objectives of educational initiatives, this power distribution has a key role in enabling education’s effective contribution to the sustainability goals.

Accordingly, the next sections of the chapter elaborate on the main interests competing in the field and on some of the negative effects that the current distribution of power among development stakeholders is having on educational initiatives’ outcomes in terms of the sustainability factors of relevance, integration, and ownership mentioned above. Since these factors not only constitute the analytical themes used to state this problem but also the ones that give coherence to the line of argument followed during the whole study and that permit its abductive inference analysis, this chapter describes and justifies their use.
Having shown the main ethical and pragmatic considerations that guide the debates around this problem, the chapter concludes with the line of inquiry of the thesis: the exploration of the significance and implications of redistributing the financial and political resources among stakeholders by increasing educational initiatives’ degree of self-sustainability as a means for addressing those shortcomings and achieving, more effectively, the overarching goal of sustainable development.

Following the methodology of the abductive inference process, "Chapter 3 Theoretical Responses and Patterns of Expectation” presents the propositions (feedforward patterns of expectation) made in this regard by the complexity theory and the capability approach.

The chapter first explains that the selection of the theories (as described in the previous section) was made on the basis of four considerations. First, they both share the core assumptions of the Brundtland Report about the implications of the concept of “Sustainable Development” in terms of ownership, integration, and relevance. Second, both address education’s substantial role for its attainment. Third, they both elaborate on the significance of the distribution of power for the handling of the sustainability factors. And fourth, they both provide key insights about the implications of an alternative scheme of ownership that helps in achieving our diverse and common goals on sustainable development.

Later, the chapter presents the propositions of the complexity theory. In this section, it first describes the main metacognition patterns in its understanding of development and sustainability, and then the implications of such patterns for development praxis for the sake of sustainability. It then details the consequences of its insights for understanding the different roles of education for the system’s sustainability and, finally, it explores the consequences of this theory’s proposals for understanding the importance of increasing the self-sustainability of educational initiatives for sustainable development, and the implications of using this approach for efforts addressed towards increasing such self-sustainability.
The next part of the chapter presents the feedforward patterns of expectation that, in these regards, are offered by the capability approach. It starts by elaborating on the approach’s main premises about the means and ends of development, and the information that should be taken into account when understanding, defining, and evaluating them. This section describes both the pragmatic and ethical considerations that the approach advocates for claiming that development is a process for and by freedom, for which the following section suggests that among its implications for improving development practice in terms of sustainability is the distribution of agency power. The chapter later explains the special role that the capability approach sees on education within the process of development, and culminates by linking these appreciations for describing, as with complexity theory before, the approach’s patterns of expectation in regards to the significance and implications of increasing the self-sustainability of educational initiatives for sustainable development.

The theories selected – capability and complexity – are complementary as the discussion around which both approaches emerge and develop touches on the same ethical and pragmatic considerations that are being debated as relevant in the field of Education for Sustainable Development. They offer important arguments for justifying the need for a more effective scheme in which the redistribution of agency capacity is central for enhancing a more sustainable model of development, and provide insights into the factors that would be implied in building such an alternative. Consecutively, the last part of the chapter details the confluences and complementarities among their feedforward patterns of expectation for the exploration of the line of inquiry of the thesis: the significance of increasing education initiatives’ self-sustainability for improving the effectiveness of their outcomes in regards to the agreed objectives on sustainable development and the implications of making such an effort.

In “Chapter 4 Empirical Research Methods, Case Studies and Feedback Experience”, the empirical evidence of the Barefoot College’s SNSP is informed by the findings of six other relevant case studies with the same purpose of devising the
significance of building on the self-sustainability of educational initiatives, and the implications for policy making of considering the evidence brought by these cases.

The design of the present thesis research was deeply affected by the request made by the Barefoot College in 2012 – the year in which I was elaborating this research’s proposal – to gather insights from its own and other organizations in order to build recommendations to make its SNSP more self-sustainable and to scale-up its model. The problem that this educational initiative was facing, and that was prompting it to request such a study, gave me an opportunity to refine my already intended line of argument (see the “Personal Motivation and Positionality” section of this chapter), and clarify the design of an empirical study that could serve, simultaneously, the purpose of preparing the consultancy work for the Barefoot College and, primarily, that of accomplishing this thesis research’s main purpose: to contribute with the discussion on the elaboration of alternatives for making education's outcomes in sustainable development more effective.

Thus the chapter goes on detailing the Methodology followed for the empirical study, which included field research on some of the Night Schools, including: interviews of parents about household costs and opportunity costs of their children attending the school, interviews with teachers and students in the program, with community and school leaders, curriculum and materials developers, and with the initiators and leaders of the program. Financial and other documentary data about the Program in the Barefoot College were also gathered.

The Methodology section also explains that after the field research in India, another six case studies were explored in terms of their resourcing, organizational structure, financial sustainability, and scalability strategies:

Site visits were conducted in Mexico City to Amigos de Calakmul A.C. (hereafter referred as Amigos de Calakmul), and Red de Multitruque Tláloc, (hereafter referred as Tlacol Barters Group), and in the Mexican state of Veracruz to the Mercado Alternativo y Economía Solidaria, Tumin (hereafter referred as the Tumin Project).
Amigos de Calakmul was selected because, despite it being an environmental organization, it works in an integrated and comprehensive way; by addressing the different socio-economic conditions of the farmers and developing novel means for their participation in and ownership of the programs, it has proved very effective in not only improving the economic self-sufficiency of their initiatives but also the procurement of thousands of hectares of rainforest land for preservation.

Tlaloc Barters Group and the Tumin Project are both establishing alternative currency systems to reduce their communities’ dependency on the peso-based national economy, which is not guaranteeing that resources flow into their localities, pushing their inhabitants to migrate or live in poverty. By capitalizing on and promoting trust, the final aim of the project is to enhance social cohesion as the basis for improving the lives of the communities. The projects offered important insights about the significance and the means for self-sufficiency.

Documentary analysis and an interview were also made with ChildFund International (hereafter referred as ChildFund), a well-known organization that focuses on children's rights but utilizes a systemic approach to improve their situations by addressing their community’s needs as well. It works mainly through cooperation with local NGOs to ensure relevance and promotes cooperation schemes with the private sector as well. The organization offers particularly interesting insights into strategies for financial sustainability.

The study also included an interview with the creator of Fundación Escuela Nueva (hereafter referred as Escuela Nueva Foundation or FEN) in Colombia, which has been internationally recognized because of its pedagogic model for quality rural education that has attracted the attention of 40 countries’ governments (many of whom have adopted it, especially in Latin America, but also as far as Vietnam), and received many international awards for its contribution to improving the quality of education around the world.
And finally, the study included a visit to an organization in the Amazon region of Brazil called Centro de Estudos Avançados de Promoção Social e Ambiental (Centre for Advanced Study of Environmental and Social Promotion), better known as Projeto Saude e Alegria (Project Health and Happiness) (hereafter referred as Project Health and Happiness or PHH), which, similarly to the Barefoot College, has also been working with a scheme of *integrated service delivery* for the last 26 years with geographically and socially excluded populations, and has consciously developed reflections and strategies around the sustainability – and self-sustainability – of its programs.

After describing the methodology followed for the empirical study, the chapter describes the current context that is threatening the SNSP's survival, its model, and its inherent sources of sustainability that have allowed it to be cost-effective so far.

Later, it presents the main findings from the case studies that allowed the identification of possibilities for increasing the self-sustainability of the SNSP – findings that are only briefly presented since their detailed description is made in the Appendix at the end of the thesis.

And it concludes with the main practical and ethical considerations learnt from the empirical evidence (feedback patterns of interpreted experiences/observations) with regard to the importance of increasing the self-sustainability of educational initiatives and the means to do it. Within its conclusions, the chapter provides a brief review of the factors that allow for the provisional generalization of the findings, that is, the analytical themes which emerged from the statement of the problem from a political economy perspective in Chapter 2.

The aim of the thesis, when choosing an abductive inference research method, was to find an explanatory hypothesis for the significance of increasing the self-sustainability of educational initiatives and for the implications that such an action would carry for them.
Therefore, “Chapter 5 Analysis and Conclusions” triangulates and validates the theoretical and empirical findings by analyzing (in a comparative perspective) the matches and mismatches between the feedforward patterns of expectation of the complexity theory and the capability approach, and the feedback experience brought by the empirical evidence of the SNSP as well as the insights of the comparative case studies around the three thematic categories that have guided the thesis’ discourse: relevance, ownership, and integration.

The thesis concludes that due to the complexities of the context in which the education sector’s agreements intend to be implemented – the interests implied and the power relationships that affect the negotiations and decisions on contesting issues – education needs to be further connected to its developmental context, matching its ‘sustainability’ and ‘quality’ imperatives, as it has been proposed by some within the field of Education for Sustainable Development, so that it can strengthen its potential as a cost-effective means and socially just objective of a development model consistent with the characteristics of sustainability implied in the Brundtland Report; that such a matching depends upon itself addressing in a sustainable manner the factors of relevance, ownership, and integration – that is, upon its quality – and that the thesis provides a proof of concept that in order for that to happen, concentrating efforts on increasing the self-sustainability of educational initiatives (as development initiatives they are) at different levels and across sectors and promoting their solidarity-based cooperation are crucial.

Furthermore, recognizing that these changes are subject to complicated readjustments in the current balance of power, the thesis suggests that development initiatives may need to devise their own strategies to survive and become able to escalate their model, if effective. For that reason, the chapter presents some implications emerged from the research of building on schemes that focus on increasing the self-sustainability of development initiatives, which might guide those interested in defining specific strategies pertinent to their particular context.
The chapter finishes with the significance of the present study, its main limitations, and its insights for future research.

1.5 Personal Motivation and Positionality

Before deciding on using the case of the Barefoot College’s SNSP for my doctoral thesis research I was, actually, planning to continue the research line that I started with my Master’s Thesis for my degree in International Development, entitled “Overcoming inequality through Intercultural Bilingual Education: State policies in China and Mexico towards minority groups”.

From that study, I have concluded that addressing the inequalities that affect mostly the minority groups of these two countries, and promoting their equal empowerment within the mainstream of society, requires not only using a positive discrimination approach on the policies prepared for and with them, but, also, designing policies directed towards the rest of the society as well, in order to create the environment for this intercultural education model to succeed.

My purpose at the beginning of my doctoral studies was to explore the implications of this conclusion in the field of education, again, taking China and Mexico as case studies. What intrigued me at that moment was the tendency that policies have to oversimplify reality and marry “best” solutions that claim to be effective for all cases and contexts, and to overhear researchers’ frequent evidence that, as a consequence of this mentality – instead of solving the problems they aim to address – frequently end up worsening them, and committing social injustices.

I worked for three years teaching indigenous illiterate women living and working in Mexico city using Paulo Freire’s methodology, where I learnt of the importance of adapting the schooling practice to their already existing knowledge, values, interests, and idiosyncrasies as the basic starting point for any construction of new knowledge – in this case, in literacy skills. I later reinforced this learning when teaching Chinese to people from very diverse backgrounds.
This sensation that the richness of the compound of knowledge, and experiences to which we are exposed, influences our means to embrace or transform our reality, made me design and implement a project that resulted in the creation of 13 multimedia centres (libraries equipped with videos and music as well, with their corresponding infrastructure) in rural indigenous communities in Mexico that aimed at enriching the availability of learning resources in very marginalized minority groups of my country that only had access to, in the best cases, the public primary school textbooks.

In that, despite successfully creating the centres, I later realized the many mistakes I committed. The whole process I directed was, to say it in short, very unilateral. Despite the request for these multimedia centres coming from the communities themselves, their participation throughout the process was very limited and I didn’t manage to foster it. Consequently, only some of the centres are still in use and others have been abandoned.

All these experiences made me aware of the detrimental effects of ignoring the specificities of the contexts in which programs and policies are actually going to be implemented, and of the importance of letting people’s drive and involvement to lead any action aimed at "their benefit".

I therefore initiated, just before starting my PhD, a non-governmental organization that I intend to develop after I finish my studies, named Via Interaxion. It aims at disseminating the information of and strengthening the cooperative laces among different local and global development initiatives that, in the richness of their diversity, are creating a more participative, constructive, and sustainable development model together.

When starting my PhD studies, I found that, out of chance, my preferred author of complexity theory, Edgar Morin, just published a book entitled La vía: para el futuro de la humanidad [The Way] (2011), which contained exactly the same proposition
(and even used the same wording!) as my NGO project (see Chapter 3’s "Implications for Education’s Role as a Development Initiative" section). I got very enthusiastic about exploring this idea in depth, which also started to make sense with the weight that Amartya Sen’s capability approach, which I was reading, gave to freedom in the course of development, and to the empowerment of people’s participation during the process.

Studying these issues through the experiential lens of the Barefoot College’s SNSP was an appropriate decision, because of the philosophy and methodologies that guide this organization.

My background had a direct impact in the way I approached the endeavour for the Barefoot College. I was determined, as I am still, to find useful recommendations for their program to survive and keep on providing the children with more opportunities to choose their paths in life, and to demonstrate that things can be done differently without retracting from the common goals of equality and sustainability that, as humankind, we have so far agreed upon.

That is to say that from the beginning I took the side of the legitimacy of the Barefoot College’s complaint and need for strategies to survive. Of course, during the whole research process I also kept aware of the relativity of their own model when approaching the broader development field and its power and methodological conflicts.

Being a participant researcher I have to point out, as well, that I encountered some methodological limitations. I was, at the end, a foreign woman that didn’t speak the native language of those being interviewed and that needed, many times, the interpretation and translation support of the Barefoot College’s staff, who were also in charge of selecting which of the participants and schools to show me. While this didn’t happen in the case studies I explored in Mexico and Brazil, where I was able to communicate directly with the local people, my condition as an external observer of course resulted in some bias in my data collection. However, that didn’t affect the
findings much because, first, the data that emerged from the interviews was complemented by document analysis and observations; and, second, the thesis, as stated before, describes the constitutive and regulative evidence that I used for the, at least provisional, generalization of the findings (see Chapter 4’s "Conclusions").
CHAPTER 2

STATEMENT OF THE PROBLEM

2.1 Introduction to the Chapter

As evident in the many agreements made during the last few decades and with greater emphasis during the setting of the upcoming post-2015 agenda, finding a sustainable model of development has become one of the central goals of the international community. Within this framework, education’s role has gained increasing attention as a catalyst of such an objective. However, its effective contribution is being greatly hindered by the distribution of power that currently exists among its stakeholders to negotiate and settle on contested issues related to the design, implementation, and evaluation of educational policies. Acknowledging the urge of this common objective of sustainable development, this chapter elaborates on this problematic from a political economy perspective.

To do that, it first points out the main agreements that frame education’s agenda in terms of its development context, and describes the implications of the sustainability imperatives for its performance as a developmental initiative according to the broadly agreed Brundtland Report. From that widespread agreement on the implications of sustainability, education is expected to be integrative (respond to the developmental context within which it evolves), have pluralistic relevance (be relevant to the needs, views, interests, working approaches of the different actors affected by it both in the present and in the future), and be built by and for democratic ownership (recognize the right, capacity, and responsibility of the different actors involved to own and control its design, implementation, and evaluation processes).

Yet, as the chapter later explains, unequal ownership in education is propitiating the prevalence of vested interests over policies’ objectives and of less sustainable practices, which opens the line of inquiry of the thesis with which the chapter concludes: the exploration of the significance and implications of redistributing
financial and political resources among stakeholders by increasing educational initiatives’ degree of self-sustainability as a means for addressing those shortcomings and achieving, more effectively, the overarching goal of sustainable development.

2.2 Principal Agreements in Education for Sustainable Development

The international development agenda for the post-2015 period is about to be confirmed at the General Assembly of the United Nations in September 2015, and one of the most clear messages it carries comes with the renaming of the Millennium Development Goals to “Sustainable” Development Goals. The development agreements officially acquire an adjective.

The term 'Sustainability' has been increasingly popular within the field of development since the sixties, but it was with the World Commission on Environment and Development’s publication of Our Common Future (better known as The Brundtland Report) (WCED, 1987) that the argument deeply impacted the policy debate.

The report warns that “no single blueprint of sustainability will be found, as economic and social systems and ecological conditions differ widely among countries. Each nation will have to work out its own concrete policy implications. Yet irrespective of these differences, sustainable development should be seen as a global objective" (WCED, 1987, Chap 1 [51]). Additionally, it says that "interpretations will vary, but must share certain general features and must flow from a consensus on the basic concept of sustainable development and on a broad strategic framework for achieving it" (WCED, 1987, Chap 2 [2]).

In this respect, the report delimited a few basic features of the concept that can be summarized in the following arguments:

First,
Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

-the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and

-the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs (WCED, 1987, Chap 2 [1]).

Second,

The concept of sustainable development provides a framework for the integration of environment policies and development strategies - the term 'development' being used here in its broadest sense. The word is often taken to refer to the processes of economic and social change in the Third World. But the integration of environment and development is required in all countries, rich and poor. The pursuit of sustainable development requires changes in the domestic and international policies of every nation (WCED, 1987, Chap 1 [48])...Environmental protection is thus inherent in the concept of sustainable development, as is a focus on the sources of environmental problems rather than the symptoms" (WCED, 1987, Chap 1 [50]).

And third,

The satisfaction of human needs and aspirations is the major objective of development. The essential needs of vast numbers of people in developing countries for food, clothing, shelter, jobs - are not being met, and beyond their basic needs these people have legitimate aspirations for an improved quality of life. A world in which poverty and inequity are endemic will always be prone to ecological and other crises. Sustainable development requires meeting the basic needs of all and extending to all the opportunity to satisfy their aspirations for a better life (WCED, 1987, Chap 2 [4]).
Additionally, the report suggests that:

Meeting essential needs requires not only a new era of economic growth for nations in which the majority are poor, but an assurance that those poor get their fair *share of the resources required to sustain that* growth [emphasis added]. Such equity would be aided by political systems that secure effective citizen participation in decision making and by greater democracy in international decision making (WCED, 1987, From One Earth to One World [28]).

In 1992, the United Nations Conference on Environment and Development (UNCED) was held in Rio de Janeiro, Brazil, in which commitments were made on a multilateral framework for action for its promotion. The agreements made at the Conference catalysed the creation of many local institutions and legislations. By 1994, already 103 of the 178 nations represented at UNCED had established national sustainable development commissions (Trisoglio, 1996), and several international agreements, organizations, and corporations have been either set or re-oriented to promote sustainability as their main objective since then.

Within this context, education’s contribution to the implementation of all other areas of action for sustainable development was first captured in Chapter 36 of Agenda 21, that is UNCED’s conference’s non-binding sustainability plan (UNESCO, 2005a), as one of the few unanimous agreements among all participants (Ezechieli, 2003). The chapter reads:

*Education is critical for promoting sustainable development* [emphasis added] and improving the capacity of the people to address environment and development issues. While basic education provides the underpinning for any environmental and development education, the latter needs to be incorporated as an essential part of learning. Both formal and non-formal education are indispensable to changing people's attitudes so that they have the capacity to
assess and address their sustainable development concerns. It is also critical for achieving environmental and ethical awareness, values and attitudes, skills and behaviour consistent with sustainable development and for effective public participation in decision-making. To be effective, environment and development education should deal with the dynamics of both the physical/biological and socio-economic environment and human (which may include spiritual) development, should be integrated in all disciplines, and should employ formal and non-formal methods and effective means of communication (UNCED, 1992).

Education’s role in promoting sustainable development was again highlighted in 2000 within Dakar’s Framework for Action, in which the Education for All Scheme (EFA)\(^1\) was adopted and the same year education was incorporated within the international development agenda of the Millennium Development Goals (MDG):\(^2\)

Education is a fundamental human right. It is the key to sustainable development and peace and stability within and among countries, and thus an indispensable means for effective participation in the societies and economies of the twenty-first century, which are affected by rapid globalization. Achieving EFA goals should be postponed no longer. The basic learning needs of all can and must be met as a matter of urgency (UNESCO, 2000, p.8).

\(^1\) Education for All (EFA) is a scheme that was agreed in the year 2000, during the World Education Forum in Dakar, Senegal, to promote the commitments made in Jomtien’s World Declaration on Education for All in 1990, regarding the achievement of universal access to primary education for all children.
Six goals were then established with this purpose:
- Goal 1: Expand early childhood care and education
- Goal 2: Provide free and compulsory primary education for all.
- Goal 3: Promote learning and life skills for young people and adults.
- Goal 4: Increase adult literacy by 50 per cent.
- Goal 6: Improve the quality of education.

\(^2\) In the same line, the Millennium Development Goals (MDG), established as a consequence of the Millennium Summit of the United Nations Organization in 2000, crystalized the commitment of 189 member national states and 23 international organizations to, among others, achieve universal primary education and promote gender equality (goals 2 and 3) by 2015.
Its connection with the broader sustainability movement was emphasized in 2002 with the declaration of the Decade of Education for Sustainable Development (2005-2014) by the United Nations. The initiative for this Decade came out at Johannesburg’s World Summit on Sustainable Development. It intended to include education at the center of sustainable development plans, linking it with other schemes that focus on universal access to education – such as the EFA and the MDG initiatives (UNESCO, 2005b).

This – at least nominal – consensus should not be a surprise. Not only has education been recognized as a fundamental right by the United Nations Declaration of Human Rights and incorporated in most countries’ legislations as an important end in itself (see: UNESCO [2010]), its broad influence within the field of development has received increasing attention over the years mainly from a cost-benefit approach within which it is conceived as a tool with the potential, if of quality, of:

- developing capabilities, attitudes, and values on students to take on, interpret, and use the knowledge they will require throughout their social and economic lives; increasing their potential employability and improving their wages and other working conditions; giving them a way out of poverty and, consequently, reducing the possibilities of poverty being transmitted to the next generation;³
- containing diseases, improving the way students treat and prevent them, and improving students’ capacity to take care of theirs and their families’ physical well-being, nutrition, emotional growth, and fulfilment;
- learning to live and communicate with each other peacefully;
- reducing social inequalities;
- promoting students’ civic responsibilities and participation, providing the required knowledge to protect their rights (e.g. making use of the judicial system);
- enabling governance by reducing criminality and fostering political stability;

³ UNESCO, 2014a says that "globally, one year of school increases earnings by 10% on average". See also Burnett & Jarayam, 2011.
• training human resources capable of supporting the labour market and increasing productivity, talent, and economic growth;
• increasing environmental consciousness and changing consumption patterns; and
• closing gender gaps by empowering women: improving women's reproductive health, lessening early marriages, reducing fertility rates, and improving child survival rates.

What the above mentioned agreements suggest is that education has been increasingly connected to the broader development agenda and, now that such agenda has centered on sustainability, education has been commissioned to contribute to that overarching goal.

Accordingly, during the first years, the sector’s internal priority became its universalization. The results in this sense with both the EFA and MDG were enormous. From 2000 to 2012, the number of out of school children declined by almost 50% (UN, 2013a), and the global primary net enrolment rate reached 89% (UNESCO, 2013).

However, rates of enrolment notoriously slowed down since then, and by 2014 the United Nations already warned that none of the EFA or MDG objectives related to education were to be achieved globally by 2015, since about 50% of the signatory countries didn’t reach universal primary enrolment, and figures suggested that one in every ten children of primary school age (58 million in total) were still out of school around the world.

Moreover, while initial efforts (policies and budgets) were concentrated in universalizing access to education, later on it became clear that enrolment rates did not reflect the large amount of drop-outs during the course of primary schooling and the poor quality of the education that was being offered to most of the students enrolled (UNESCO, 2014b, p.1).
Because of these reasons, *inequality in access to quality education became the new pivotal concern within the field of education.*

Today, the Muscat Agreement made at the Global Education for All Meeting in 2014 makes it clear that the quest for equal access to quality education will be a central element in the Framework for Action on Education 2015-30 that will replace EFA once adopted at South Korea’s World Education Forum in May 2015, and the MDG once the Sustainable Development Goals are confirmed in September of the same year. The Muscat Agreement (UNESCO, 2014b, p.3) reads:

We support “Ensure equitable and inclusive quality education and lifelong learning for all by 2030” as the overarching goal of the post-2015 education agenda.

We further support the translation of this goal into the following global targets, for which minimum global benchmarks and relevant indicators will be identified/developed:

**Target 1:** By 2030, at least x% of girls and boys are ready for primary school through participation in quality early childhood care and education, including at least one year of free and compulsory pre-primary education, with particular attention to gender equality and the most marginalized.

**Target 2:** By 2030, all girls and boys complete free and compulsory quality basic education of at least 9 years and achieve relevant learning outcomes, with particular attention to gender equality and the most marginalized.

**Target 3:** By 2030, all youth and at least x% of adults reach a proficiency level in literacy and numeracy sufficient to fully participate in society, with particular attention to girls and women and the most marginalized.
Target 4: By 2030, at least x% of youth and y% of adults have the knowledge and skills for decent work and life through technical and vocational, upper secondary and tertiary education and training, with particular attention to gender equality and the most marginalized.

Target 5: By 2030, all learners acquire knowledge, skills, values and attitudes to establish sustainable and peaceful societies, including through global citizenship education and education for sustainable development.

Target 6: By 2030, all governments ensure that all learners are taught by qualified, professionally-trained, motivated and well-supported teachers.

Target 7: By 2030, all countries allocate at least 4-6% of their Gross Domestic Product (GDP) or at least 15-20% of their public expenditure to education, prioritizing groups most in need; and strengthen financial cooperation for education, prioritizing countries most in need.

All in all, the international community has gradually managed to refine its common development agenda: one in which the sustainability of the process of development is the most pressing objective. Within this framework, equal access to quality education has become a central piece of that definition as well as a key mean for its achievement. This is an assumed premise of the Education for Sustainable Development discourse: if education wants to contribute with the global quest for sustainable development, it has to be sustainable itself.

2.3 Unequal Ownership: A Key Challenge for the Effective Implementation of the Agreements

This thesis is built upon the premise that the international urgency on materializing a development model that is sustainable is, indeed, a priority. Because of that, it focuses on one phenomena that, from a political economy perspective, is hindering the effective achievement of such a goal, namely: the current distribution of political
and financial resources (power) among stakeholders to negotiate and settle on contested issues related to the design, implementation, and evaluation of educational policies. That is, the current conditions of unequal ownership.

Mismatches among the vast diversity of stakeholders involved in the field of educational development are certainly unavoidable. Not only do they hold different interests that make it difficult to gather enough consensus even for setting objectives, but even when objectives are shared, actors interpret them in very different ways and, accordingly, advocate for different means for their achievement. These differences are the result of their interests, but also of their diverse needs, priorities, roles, responsibilities, philosophies, and even working approaches.

This situation forces them to permanently undertake activities of negotiation, cooperation, and conflict in which decisions are taken on the production, use, and distribution of political and financial resources for the design and implementation of educational policies and initiatives (Leftwich [2006] cited by Kingdon et al. [2014, p.7]).

*The decisions emanated from negotiations among actors, thus, affect what are called in this thesis the sustainability factors of integration, relevance, and ownership and, consequently, influence the level of effectiveness of educational initiatives’ outcomes in terms of the international agreements on sustainable development.*

To elaborate:

While there are many variables that affect the outcomes of educational initiatives in terms of sustainability, this thesis focuses on (and it is structured around) three factors that are guiding the present debate on the objectives and means for sustainable development, and that are mirrored as well in the internal discussions being held within the field of education:
The **relevance factor** refers to the extent to which policies, programs, and/or initiatives are relevant to the (many times contested) needs, interests, conditions, priorities, philosophies, and working approaches of the different actors that either in the present or in the future are affected by them.

The **integration factor**, on the other hand, refers to the extent to which policies, programs, and/or initiatives are designed, implemented, and evaluated in accordance to the characteristics of their global and local developmental contexts – political, environmental, social, economic, cultural.

The **ownership factor**, finally, refers to the extent to which the distribution of political and financial resources ensures egalitarian advocacy capacities (power) for the different stakeholders to get involved in the design, implementation, and evaluation of policies, programs, and/or initiatives, and decide on contesting issues. That is, an egalitarian recognition of the different actors’ right, capacity and responsibility to own and control these processes.

The thesis uses the abovementioned terms (integration, relevance, and ownership) and calls them sustainability factors because of the way they reflect the most agreed implications of the concept of sustainable development emanating from the Brundtland Report. This document represented a watershed for the reflections among development stakeholders on the field’s objectives and means, because of its strong evidence-based arguments about the harmful effects of the prevailing model of development, and because of its capacity to define in a clear and concise way not only the symptoms but also some of the causes of those effects. More importantly, as detailed in the previous section, and as recognized by the report itself, it provided a quite concise definition of the term sustainability that, albeit is still open for diverse interpretations, delimits certain general features that are expected to “flow from a consensus on the basic concept of sustainable development and on a broad strategic framework for achieving it” (WCED, Chap 2 [2]).
Despite the main implications of the term have been agreed upon, history has shown – from the publication of the report onwards – that its operationalization still remains one of the greatest challenges within the field of development. In fact, numerous efforts have mushroomed since the publishing of the report to refine the concept of sustainability in all its complexity, and to develop *ad hoc* instruments to manage and audit the agreements.

For Stiglitz, Sen and Fitoussi (2009), who were commissioned in 2008 by then French president Nicolas Sarkozy to “identify the limits of GDP as an indicator of economic performance and social progress” (p.7), there are many factors that relate to development's sustainability, which has made it difficult to precise a clear definition of the concept. However, there is no doubt that its existing measurement instruments have become more comprehensive over the years, and with them, its conceptualization. Many of them keep falling into the mainstream discourse's trap of over-simplification by privileging an average income-related approach for designing and evaluating development policies. However, others have been successful in moving their focus beyond economic and ecological aspects, and have managed to gradually absorb the complexity of the task by incorporating a whole range of other aspects related to quality life.

This means that integration has been increasingly recognized as a key for the sustainability variable of the formula for development: Economic activity, it has been agreed, is not isolated from the biological, social, cultural, and political spheres within which it interacts and on which it has direct effects. Increasingly associated with quality of life, development is becoming a concept that refers to a process that affects human lives in multiple dimensions, as the relationship between these dimensions is further explored. What started as a “greening of the law”, as Sands’s edited book (1995) would suggest, has become, gradually, a much more complex concept, that has had implications throughout the whole policy process. These changes, Stiglitz et al (2009) consider, are very much in harmony with the original aims of the Brundtland Report, since which strategies have been explored to find “the
highest level of current development that is compatible with long run sustainability” (p.236).

The Brundtland Report insinuated another two factors as influential to the extent to which development initiatives, including educational ones, can be sustainable, and these factors are precisely the ones that are being heatedly discussed in the field:

The report’s mention of the need to extend to “all” people the opportunity to fulfil their aspirations for a better life (WCED, 1987, Chap 2 [4]), and to meet both “present and future needs” (WCED, 1987, Chap 2 [1]), recognizes the diversity of aspirations and perceptions of wellbeing and development itself that coexist not only among the members of the present but also of the future generations. Development’s relevance to all actors is thus also being acknowledged as key for its sustainability.

Additionally, the fact that our generation is questioning the extent to which our efforts to construct our well-being can affect that of the future generations and that is questioning itself about who bears responsibilities throughout the process, how are resources and benefits distributed, and who makes the decisions, shows the ethical dimension of the debate, one that concerns social justice. But it also shows a pragmatic approach: if citizen participation is not enabled and promoted to make the process more democratic, the disadvantaged populations would not get the resources to sustain or demand such a model of growth, and the ones they already have available (community knowledge, political will, etc.) will be wasted. Democratic ownership is, thus, being recognized as another key feature of development’s sustainability.

The importance of the democratic ownership and pluralistic relevance for development’s sustainability has been reaffirmed by subsequent agreements and frameworks for action, including those of education.

For example, Agenda 21, highlights the need for strengthening the democratic procedures that enable equal conditions for all groups to participate in decision-
making processes and for respecting ethical and cultural diversities during the implementation of any of the suggestions (UNCED, 1992).

All in all, and despite the space left for different interpretations, “sustainability”, as a concept, has been broadly agreed as one that relates with the factors of relevance, ownership, and integration: For a development model (initiative, policy) to acquire the “sustainable” adjective, it is expected to be integrative, have pluralistic relevance, and be built by and for democratic ownership.

Yet, while this statement appears conclusive, the fact is that the operationalization of these factors is not an obvious matter, and, as was being discussed in the beginning of this section, this situation forces development stakeholders to permanently undertake activities of negotiation to decide the way in which the three factors are to be addressed.

“Development” per se implies change, transformation: we identify situations as problems that we want to solve, we decide there is a need for making things different, and, therefore, we set strategies to achieve our objectives. But, which and whose problems are to be tackled? Why are they understood as problems and how should they be solved? More importantly, who has the financial and political resources to decide on these issues? Are their interests and/or opinions more legitimate than others for the sake of their greater advocacy capacity?

When mismatches among actors’ priorities and working methods or criteria occur, the power to make final decisions is frequently concentrated in the hands of those that have the required financial resources; of those with the greatest political authority; of those with greater level of representativeness; of those that dominate development’s discourse; or, of those that hold more lobbying visibility and power to affect legislation. That is, negotiations are usually not held on an equal basis.

Usually, thus, in the name of national interests, the national government has more power to decide on things related to the implementation of educational initiatives than
the parents of the children towards whom these initiatives are addressed. Donors, despite claiming to work in partnership with the recipients of their support, have greater power in defining which criteria are to be used for evaluating a program for developing school infrastructure than the communities in which these schools are to be built. Universally defined learning standards have more to say about what teachers should teach than the teachers themselves in the knowledge of their students’ capacities and the needs of their parents and communities. Markets’ needs for a certain kind of human capital tend to influence governments’ decisions on higher education supply more than comprehensive development plans that take into account other social needs besides economic growth. Political and financial incentives impinge over negotiations among teacher unions and governments in determent of the very objectives of the policies and the consequences for the students and their families, who are, most of the time, not even consulted.

This unequal ownership is not only the result of the current distribution of political and financial resources to affect policies’ objectives and means for implementation, but also of the limitedness of the economic resources available to make and implement education policies’ decisions (also consequence of such distribution).

Education is being significantly underfunded and aid is becoming increasingly difficult to secure. There are many reasons:

a) The global economic and financial crisis and euro zone turmoil: While the OECD (2009) claimed that total net official development assistance (ODA) reached its historical climax in 2008 and was, then, even expected to increase, the global economic crisis catalysed that same year, had notorious effects in the reduction of funding support for education, partly because, the organization suggests, the crisis reduced “the dollar value of commitments expressed as a percentage of national income”, which led many governments to reduce local expenditure and reduce aid budgets.
b) UNESCO (2013) complains that some – especially the largest – donors are failing to fulfil the commitments they made at Dakar's World Education Forum (UNESCO, 2000) that no country would thwart its commitment for education for all by a lack of resources and many of them are stopping to prioritize education for development, which is evident from the higher cuts that these countries made on education's investment as compared with those made on other development areas such as health (UNESCO, 2014c).

c) After 2 years of decline, ODA rebounded in 2014 but started shifting away from the poorest countries towards middle income countries, and mostly in the form of soft loans rather than grants (UNESCO, 2013 and 2014d; UN, 2014a).

d) Contributions to multilateral organizations have fallen in real terms, despite being partly compensated by a small rise in aid for bilateral projects and programs (UN, 2013a).

e) While official development assistance or debt cancellation were originally expected to cover for many countries’ lack of capacity to fund the MDGs, the former has been shifting away its responsibilities and placing them on national governments “through more effective resource mobilization” (EFA GMR Team, 2014, p.5), which, in turn, are not spending the recommended minimum of 20% of their budgets on education, which means they are not prioritizing it (UNESCO, 2014e).

The fact is that today, aid money to education has dropped out by 10% (UNESCO, 2014d) and the finance gap for basic education has increased by US$10 billion between 2010 and 2013 (UN, 2013a, p.4). This situation has mainly affected the poorer countries, because, as a result of the crisis, the role of assistance and hierarchy of traditional donor countries are changing, and some previously low-income-countries have gained a new status in the political and economic arena (UN, 2013a), which has signified a shift in priorities for ODA, because many of the latter still have huge responsibilities in ensuring the universalization of the coverage of compulsory education for their own citizens (UKFIET Conference, 2013).
The limited availability of funding resources in the field of education relates to political dynamics greater than the field, and the panorama, according to OECD, is not going to improve in the next years (UNESCO, 2014d).

A limited budget has always been one of the greater challenges for the translation of desired policy objectives into effective outcomes in any area of development. Reduced funding forces stakeholders (policy makers, funders, beneficiaries, etc.) to make drastic decisions and establish clear priorities on what to fund. This is not always unanimously agreed upon nor does it respond to the most urgent needs. What should and can be funded? And again, who decides and on what basis?

The problem that this thesis addresses is not the existence per se of mismatches among stakeholders but the unequal ownership they hold to advocate their views when contesting issues arise during the design, implementation, or evaluation of educational initiatives, which is not only illegitimate, but has negative consequences on the attainment of our common and urgent goals of sustainability.

The decisions emanating from the negotiations among stakeholders influence the way in which educational policies or initiatives address the sustainability factors and, as a consequence, their outcomes in that regard. These decisions are imprinted by power relationships in which some actors have more political and financial resources, and, therefore, more power than others to decide on contesting issues. And, as it is evident, this differentiated advocacy capacity is self-perpetuating: not only it results from the decisions made during these negotiations, but it also creates the conditions for the distribution of power for the future negotiations.

After a brief introduction of the main competing interests in the field of educational development, the next sections of the chapter will explain the effects that the current unequal ownership among stakeholders in education is having on the relevance and integration factors, and, therefore, on the achievement of the sustainability goals.
2.3.1 Competing Interests

Albeit sharing (at least allegedly) the same goals, it is frequent that different stakeholders' means for handling issues related to the relevance, ownership, and integration factors are not the same. This is because, depending on the educational context in which these policies are implemented, actors have distinct needs, philosophies, and/or render accountable to different interests that influence their roles, priorities, allocation of resources, responsibilities, and even working methods and criteria.

Which are the main actors who usually interact in educational contexts and which are their interests?

As human beings, stakeholders hold multidimensional interests according to the context and dynamic in which they are immersed. Funders, for example, can be, at the same time, parents of children that are attending school. Teachers are frequently, at the same time, government officials with public responsibilities. However, we can track a few group interests held by the different stakeholders according to their role:

a) Funders:

Funders might include individuals who through social networks, direct donations, sponsors, special events, etc. offer their financial support for a cause. It also includes the local, national, or international foundations that usually are non-profit and that can be independent, communitarian, familiar, religious, etc. Enterprises also operate as funders many a time, especially when they share common objectives with the beneficiaries of their donations. They usually provide cash, human resources, and/or help in organizing events for collecting funds. A funder can also be the government that, at a local, State, or federal level, allocates resources for the implementation of policies and programs. Finally, funders can be the international organizations like the World Bank or the United Nations. Some of them provide financial support because
they themselves are funded by the governments of the countries that they financially support.

Despite the different values that might guide their supporting role (which ranges from compassion to self-profit, social justice, historical responsibility, solidarity, etc.), each of these funders is accountable for the interests of the sources of their financial resources and, thus, care about the “multiplying effect” of their contributions (Guerrero, 2013) – them being either financial or political.

Since funding is crucial for the implementation of any initiative, it is unnecessary to emphasize the importance of these stakeholders and the amount of power they display when negotiating their priorities and working standards with other stakeholders that rely on their financial support.

b) Teachers:

Teachers have been recognized as among the most important actors in the field of education, especially because of their role as “brokers” during the implementation of pedagogical reforms. Teachers are one of the actors who are closer to the parents, the school managers, the children, and the communities, and possibly the more aware of their specific interests and needs (pedagogical, economic, political, cultural, etc.). Therefore, they have a great deal of influence on the management of the ownership, relevance, and integration factors during the implementation of educational policies and thus can deeply affect the effectiveness of educational initiatives. As a consequence, most of the international and national efforts on improving the quality of education revolve around their conditions, the resources they have available, their profile, and their responsibilities.

But besides protecting the interests of the students, the communities, and the schools for whom they work, it is evident that it is also in teachers’ interests to defend the security and the conditions of their own jobs and income. In many countries, they have formed strong organizations for protecting their rights. Like any other union,
these organizations have a bargaining power with government authorities promoting educational reforms. In the case of teachers, though, this power is even more evident than that of other professions. Despite it varies from country to country, it is frequent that due to their large number and capacity to mobilize and influence the electorate, the shape and reach of educational policies can be largely influenced by their support or rejection.

As with any other stakeholder, the issues at stake on deciding among these alternatives are not always about the righteousness of the policy but also about the group interests that such policy affects. In many countries the combination of the latter with the interests of the politicians on gaining their support have resulted in complex dynamics of corruption, clientelism, and patronage that clearly have not much to do with the policies’ discourse on quality and sustainability (Kingdon et al., 2014).

c) The children and their parents

It is actually quite imposing to put the children and their parents in the same category. Since parents are, most of the time, not organized and participate very little in school matters, it is difficult to envisage which particular collective interest they represent besides improving the future opportunities of their children. It is well known in the literature that a parent’s involvement can make education more in tune with the local culture and aspirations, and ad hoc to the particular needs of the students. Because of that, many policies have been enacted worldwide to promote their participation in the management of the schools and the education of their children.

Based on their interests, and of course on their financial capacity and the availability of diversified options, parents are key actors because they can decide on sending their children to school or not, the length during which they will be supporting their studies, and the type of school in which they want to enrol their children.
What is usually a little questioned is what the interests of the children themselves are. Douse's (2013) study on children’s perspectives suggests that seemingly what they tend to care about more is not exactly their future employment or the acquisition of diplomas but, rather, the environment of the schools, the non-educational benefits they receive on them (water and food, for example), and the enjoyable and stimulating learning experience. These interests, Douse argues, are usually not taken into account by those that actually implement educational programs or policies, even if it has been demonstrated that students’ motivation is key for their good learning.

d) Communities, civil organizations, and private entities

The interests of the communities that are directly or indirectly involved with the schools, and the policies that affect their educational development, are not only represented in the local governmental structures but also by non-governmental organizations or private schools that offer alternative education opportunities to their children.

Of course, these civil organizations are sometimes external to the communities but usually, they customize their educational initiatives to the particular needs and interests of the communities that they serve and who find in them an alternative (many times, actually, the only opportunity) to either advocate for their needs or, in case they provide the service, to get their children in school and to receive the type of education that they want.

Since these civil educational initiatives are sometimes financially sustained with public funds, others with private donations, and others with the fees charged to the benefited communities (or a combination of them), they are accountable to the sources of their financial or political sustainability and respond to different interests, including both altruistic and for-profit ones, even if regulations usually forbid education institutions to settle for-profit interests. Because of that, in many countries,
legislations have been set up to regulate these actors (which is the case of India’s Right to Education Act).

e) Intellectual community

Because of its potential to share research-based ideas and/or “solutions”, the intellectual community is another important stakeholder in the field of education. The priorities advocated by different sectors of the intellectual community are as diverse as the philosophical, moral, and political approaches, as well as the interests that they defend. As an important consequence, it is difficult for those in charge of operationalizing their research outputs to understand which of their proposals are “the best” (e.g. Which area should receive more support for children’s future employability opportunities? Compulsory or vocational education? Should small pupil-teacher ratios be privileged over extending access to compulsory schooling?).

What is important is to stress the fact that most of the time, the intellectual community provides a large informational basis for the decisions made by other stakeholders, and, by collecting the views of the other actors affected by those decisions, they frequently serve as catalysts for the setting of agendas and the shaping of their means of implementation.

f) School leaders (principals, managers, administrators)

School leaders, as the actors in charge of administering the schooling environment that children directly experience, are accountable to the donors that fund their schools, the State’s regulations for the schools’ infrastructure, curricula, teachers, the parents that send their children to spend the whole day under their surveillance, and the children themselves, who daily place their immediate demands to their solution.

School leaders frequently mediate between the interests of different educational stakeholders: the supervisors and the teachers, the authorities and the contractors.
g) Elite groups and markets and other powerful indirect actors

In the knowledge of education’s potential to develop skills and abilities in children that can render useful assets for the success of different types of development purposes (a competitive workforce, for example), markets tend to see it as a significant means for preparing the human capital they need for their enterprises. This interest might make them keen to lobby for particular educational curricula. Elite groups whose children have had access to basic education might also support a State’s budget allocation in higher levels of education instead of in universalizing the compulsory level (Kingdon et al., 2014).

h) International organizations

International organizations are also important stakeholders in the field of educational development. Those like the United Nations, are formed, funded, and promoted by the multilateral cooperation of various countries and, thus, have the power of promoting their agendas with considerable reach. Other international organizations are not, like in the case of the above mentioned, representative of the sovereign interests of multiple represented national states, but private institutions that aim at promoting their own political or economic agendas through technical, political, or financial support. That is the case both of the World Bank or Save the Children, for example.

International organizations frequently partner with governments or civil organizations and institutions. Their interests also vary depending on the nature of their constitution and the constituencies of their regulatory bodies, as well as the sources of their funding, which are not always the direct beneficiaries of their work.

i) Governments

Finally, one of the most important actors: governments. An actor that includes many actors, at different levels, and therefore with diverse administrative roles; an actor
that, because of its power to allocate political and financial resources and make crucial decisions for enacting and enforcing laws that affect the rest of the stakeholders, is of utmost relevance for the effectiveness of educational contexts; an actor that allegedly represents the interests of those who elected it (at least in democracies), that is economically and politically sustained by them, and, that, consequently, bears a particular responsibility towards the public; an actor, however, that tends to forget its role as responsible for the interests of the State and privileges its own interests as a government that needs to be supported by the electorate in order to stay in power in the next election, and that, consequently, frequently makes decisions based on the potential impact that they would have for these electoral ends and not really based on their alleged purposes.

As an actor at its national level, governments represent the biggest community of interests that humanity has created: the sovereign nation (Nussbaum, 2012). Therefore they have the potential to harmonize the myriad of (citizen) interests to which they are politically and financially accountable with those of their own employees (e.g. government officials, teachers, bureaucrats), the surrounding nations, and/or those other actors that can, in one way or another, influence its broader development agenda – like the markets.

2.3.2 Consequences of the Current Unequal Ownership for Sustainability Goals

The increasing difficulties in ensuring funding for education, together with the unequal conditions of ownership that the distribution of financial and political resources generates, are having a great role in preventing the accomplishment of the goals agreed by the international community in regards to education for sustainable development, as they are enabling the prevalence of vested interests over sustainability objectives and the prevalence of “less sustainable” practices.

In other words, the decisions taken among stakeholders in issues that shape the design and implementation of educational initiatives are being taken on the basis of unequal
negotiations (and many times even in the absence of them) that are rendering ineffective in addressing the sustainability factors:

- **Prevalence of vested interests over sustainability objectives**

While the interests of stakeholders are sometimes to effectively achieve the goals of the education policy being implemented, and efforts are made to find the best solutions for that purpose, other times (probably most of them) vested interests prevail over policy objectives. This argument does not need much elaboration. It is evident that stakeholders are sensitive to the extent to which a given reform affects their power, jobs, money, etc., and, consequently, it is frequent that their definition of priorities in education and resources’ allocation are influenced by vested interests that place the original purposes of the policies as a secondary matter.

Examples are many: the most notable is the United States’ cutting of funds to UNESCO because of its inclusion of Palestine as a full member State of the organization in 2011.

In some countries, public investment in expanding access has been privileged over improving the quality of education because the former provides more opportunities for the profit of influential actors (contracts for the construction of schools, teaching jobs, etc.) (Kingdon et al., 2014).

Douse (2013) also mentions that "those at 'headquarters' sometimes required, for instance, primary schools to be constructed within sight of main roads to ensure donor visibility, or for French to be taught (in Anglophone or Lusophone countries) as a key curriculum component" (p.3).

McGrath (2013) suggests that these same group interests are affecting the setting of education as a priority in the development agenda of governments. Interest groups that lobby for privileging economic growth over other development areas influence
the allocation of resources for policies, thereby isolating education from development plans.

This way, the current distribution of political and financial resources enables some actors’ agendas to prevail over the sustainability goals when these objectives or their implications come in the way of their interests.

➢ Prevalence of “less sustainable” practices

The complexity of the education sector, and the different contexts in which educational initiatives operate, make the existence of mismatches among the vast diversity of stakeholders unavoidable. Not only do they hold different interests that make it difficult to gather enough consensus for even setting objectives, but, even when objectives are shared, actors interpret them in very different ways and, accordingly, they advocate for different means for their achievement. What is important to note is that some of these means are more sustainable than others, and the current distribution of political and financial resources is allowing the prevalence of “less sustainable practices”, that is, practices that address the sustainability factors in a way that is not consistent with the implications of the concept of sustainable development emanating from the Brundtland Report (democratic ownership, plural relevance, and integrative responses).

The greatest example is the process of operationalization of the quality education imperative, that, as evident in the suggestions emanating from the Muscat Agreement for education’s post-2015 agenda, has been recognized as one of the main priorities in the field.

The UN’s Special Rapporteur on the right to education, Kishore Singh (2012), has identified that since the UNESCO Convention against Discrimination in Education (1960) – the first legally binding international instrument for the right to education – international legal frameworks have made more and more explicit the obligation of national states for ensuring quality education and, as a consequence, many countries
have made it a constitutional right and have, accordingly, enacted local regulations in this regard. However, the implications for the operationalization of such an obligation have been long debated.

As discussed in the preceding sections, education’s role in development has been increasingly recognized because of the cross-cutting potential effects that it can have if it is of quality for all. Thus, with the rise of the sustainability discourse, and especially within the field of what is known as Education for Sustainable Development (ESD), the connection between ‘quality education’ and ‘sustainable development’ was more emphasized than ever (UNESCO, 2012a). From that perspective, in order to contribute to the broader quest for sustainable development, education has to be sustainable itself. That is, just as the concept of ‘sustainable’ does to ‘development’, the ‘quality’ adjective gives education a mission, a shape, and a justification: A ‘quality’ education, in terms of sustainability, is expected to be integrative, have pluralistic relevance, and be built by and for democratic ownership (UNESCO, 2012b). Yet, that understanding of ‘quality’ didn’t gain much support in the rest of the field of education, most of the times detached from its development context or addressing it as a secondary factor (education for sustainable development is proposed as one target of the overarching goal of the post-2015 education agenda – see preceding section– and not as the overarching goal in itself!), and still confused on the term ‘sustainability’ that many continue relating to environmental aspects principally.

Rather, as Singh’s study points out, the concept of quality education is being more frequently limited to the learning level of children, which is considered a reflection of students’ acquisition of the “basic” knowledge and abilities required to take advantage of the broader schooling experience and a key condition for their retention in school.

UNESCO has recently revealed that in 21 out of 85 countries it surveyed only 50% of the children are learning the basics while dropout rates at primary level are still around 75%, which, key to note, has not changed much since the enactment of the
EFA, at least on a global level (UNESCO, 2014a). Moreover, significant gender, regional, ethnic, linguistic, and socio-economic inequities permeate most educational systems around the world – not only in terms of access to school but also in those of the learning levels of distinct populations. Data shows that children from poor households, with disabilities, children in conflict-affected areas, and girls from all socio-economic strata have radically lower learning levels as compared to boys (UN, 2014a). The same divide is obvious when comparing learning achievements among regions: North America and Western Europe have 96% of their children staying in school until grade 4 and achieving the minimum reading standards, while South and West Asia (together with sub-Saharan Africa) have more than 75% of their children not reaching the minimum reading threshold (UNESCO, 2014a).

These alarming figures not only have prompted the enactment of the mechanisms audited by Singh. At a global level, UNESCO, in partnership with the Brookings Institution, has formed a team – the Learning Metrics Task Force – that allegedly represents education stakeholders from all over the world, and that is developing recommendations on learning standards, metrics, and implementation practices to improve the measuring and implementation tools for learning outcomes (UN, 2013a). Similar efforts have been conducted by developing international standardized tests such as the OECD's Programme for International Student Assessment (PISA), the International Association for the Evaluation of Educational Achievement's Trends in International Mathematics and Science Study (TIMSS) and the Progress in International Reading Literacy Study (PIRLS), the International Adult Literacy Survey (IALS), the Adult Literacy and Life Skills survey (ALL), among others (Stiglitz et al., 2009). In fact, the focus on improving learning achievements can be tracked to, at least, UNESCO’s meeting at Jomtien, Thailand in 1990.

The idea on which these mechanisms are sustained is that learning standards are a reflection of broader aspects of the schooling experience, namely the school infrastructure and environment, the class size and pupil-teacher ratio, the normative framework for the teaching profession, the national curriculum content and standards, the evaluation of learning achievements, the funding, the participatory school
management and respect for human rights, and the monitoring and inspecting of the schools (Singh, 2012). Thus, establishing benchmarks and operationalizing the concept of quality education around them has been the increasingly favoured practice in the field. These monitoring mechanisms can, it is expected, not only demonstrate if children are taking advantage of their schooling experience, but also show to what extent stakeholders are – especially teachers – fulfilling their obligations and resources being effectively spent in education.

This trend to operationalize the concept of “quality” around learning outcomes has offered an important contribution to the debate on how to improve education’s performance, because the lack of improvement in retention rates due to children’s lack of skills to continue their studies means that, somehow, “access at the expense of learning is (being) unsustainable” (Jamil, Sahar, & Huma, 2013).

However, the predominance of these kind of mechanisms has also proved to be a limitation, not because of the mechanisms per se, but mostly because the way they are being used, and, consequently, the impact they are having on the operationalization of the sustainability factors:

Despite these tests highlighting the relevance of some learning capacities that are indeed key for developing students’ critical thinking skills and for building their capacity to make decisions, process information, and other crucial abilities to improve their lives, they are most frequently being taken as sufficient demonstration/proof of the quality of education, which overlooks many of its other developmental (socio-economic, cultural, political, etc.) roles, bearing direct and evident effects in the way educational initiatives are designed, implemented, and evaluated. This includes the linking of teacher's salaries to their students' performance in national evaluations, the distribution and redistribution of the public budget based on assessment results, and the adaptation of curricula to the contents of examinations, among others (for further examples and analyses on this, see: Barrett [2013]; Best et al. [2013]; Breakspear [2014]; Lockheed [2012]; Monroy [2010]; Montoya [2015]).
A quality education is one that realizes its potential to increase student’s skills to communicate with each other peacefully, to improve students’ capacities to take better care of both themselves and their families’ physical well-being, nutrition, emotional growth, and fulfilment, to increase environmental consciousness and change consumption patterns, to promote students’ civic responsibilities and participation, to create working skills, etc.

Yet, the reading of learning outcomes alone doesn’t say much about the extent to which education is accomplishing these social roles. Neither does it say much about the way in which education is resolving the necessities of the children and their families by fostering a whole development approach instead of a mere educational one – concentrated on tests and visible educational results and only on the school’s physical environment, instead of focusing on the one that surrounds the schools as well (all key for educational initiatives’ integration. See: Education International Early Childhood Education Task Force [2010]; Gammage [2006]; Haddad [2002]; Lowenstein [2011]; McGrath [2013]; Morrisey & Warner [2007]; Neugebahuer & Goodeve [2009]; Reynolds, Temple & White [2011]; Zigler [2011]).

Learning outcomes also say little about the extent to which educational initiatives are offering a system with diversified types of provision (schedules, center-based or home-based, skill oriented, health oriented, etc.), and/or more appropriate curricula and teaching learning materials that take advantage of foreign and local resources and are inclusive, instead of the predominant uniformity that characterizes public education services (all key for educational initiatives’ plural relevance. See: Batelaan [1992]; Haddad [2002]; Schmelkes [1997]; UNESCO [2014a]).

Moreover, learning outcomes per se don’t make evident the extent to which the parents and communities of the learners are being involved in the educational initiatives as partners, or the extent to which they are allowed to participate in the planning, implementation, and evaluation of their children's education, sharing the responsibilities and enabling the compliance with different cultural values about
children's education (key for democratic ownership. See: Haddad [2002]; Minato [2012]).

That is, the findings of learning outcomes per se say little about the way in which educational initiatives or policies are addressing the sustainability factors not only as means but as ends in themselves, and thus, the extent to which they are effectively contributing with the sustainable development goals, that is, being of quality.

In other words, as Stiglitz et al. (2009, pp.169-170) warn, learning outcomes are not enough for defining or representing the quality of education, because, despite becoming increasingly complex, the conclusions that emerge from most of these tests still tend to undermine the diversity of factors that relate education with quality of life at the individual level; as at the end, for comparative purposes, they end up focusing on aggregate indicators of school performance and educational achievement (enrolment rates, literacy and numeracy standardized measures, etc.) that say little about the real impact that education is having on students’ personal lives.

However, partly as a consequence of the scarcity of resources, especially since the global crisis of 2008, education has been immersed in what Barrett (2013) calls a logic of accountability. This means that education has faced increased pressure to demonstrate in tangible terms (we could say “scientifically”) its value for money in order to secure its financial sustainability, that is, its comparative advantage with other development areas (like health or economic growth) that have easier ways to prove the outcomes of the political and financial support they receive.

The United Kingdom’s Department for International Development explained the rationale of this approach:

Value for Money (VfM) in our programme is about maximising the impact of each pound spent to improve poor people’s lives….We need to understand what works - a judgement based on the strength of evidence supporting an intervention and making our assumptions explicit…We don’t just do the easiest
things to measure, but the agenda does mean we have to get better at measuring. …We need to be more innovative in how we assess value and we need to get better at articulating what results we are buying with UK taxpayer’s money. Where we work through partners we have to influence them to do the same. (Department for International Development [DFID], 2011)

This approach is not only held by UK’s aid agency but by most of the stakeholders with the greatest political and financial resources that want to prove that their investments on education are worth it – many times because of their own obligation to be financially and/or politically accountable (as DFID’s quote suggests).

This has reinforced the trend to opt for auditing tools that provide “reliable evidence” of the benefits of education, which might be useful for ensuring that the reduced amount of available funds are well spent, and for avoiding efforts made in education are limited to increasing the numbers of children attending school.

However, the consequence of the widely used practice of “abusing” the findings emanating from the learning outcomes tests, is that educational initiatives that inform the evaluation of their quality only on their basis are deaf to their performance in terms of the sustainability factors and, thus, are hindering their capacity to become a greater contributor to the more overarching goal of sustainable development.

Moreover, the abovementioned mechanisms have become a broadly standardized parameter (criteria) that is being used to determine, both nationally and internationally, the provision or removal of financial or political support. Educational initiatives have to adapt to these criteria and priorities (many times homogenizing their educational supply – curricula, materials, etc.), placing aside the exigencies, needs, and also priorities of their local contexts.

But the debate on learning outcomes is just an example of one of the many mismatches that exist in the field for operationalizing education’s quality imperative and for defining its role within the broader field of development. Many other
divergences exist among actors’ approaches, priorities, interests, and working methods.

What is important to note is that when decisions in this regard are to be taken, usually, a top-down approach tends to prevail in the field of education in which those with the greatest political and financial resources are the ones who decide on the rules of the game – even when those rules are contested by other affected actors or are proven to be inconsistent with the sustainability goals. This is a top-down approach that is also evident in the misuse of evidence-based strategies and monitoring, control, and evaluation tools that in order to guarantee efficiency frequently ignore bottom up responses. Much evidence of and discussions about these claims can be found in the literature on the political economy of education (see for example: Arnove [2003]; Barrett [2013]; Barrett, Crossley, & Dachi [2011]; Diouf [1997]; Engel and Keijzer [2006]; Novelli, Higgins, Valiente, & Ugur [2015]; Pearson [1969]; and Sack [1999]).

That is, as with the case of learning outcomes, the problem is not the search for evidence-based solutions or the use of auditing tools, but rather the lack of flexibility and adaptability with which they are frequently used, undermining the opinions and working methods and criteria of the very beneficiaries who, afraid of the consequences of their participation, end up adapting to the criteria imposed by their sources of political or financial support, instead of doing what they know is more effective for the policy’s success.

This is what Blaak (2013, p.9) calls the accountability paradox:

The donor usually integrates values related to cost-efficiency and others in terms of reference of evaluation...Hence success is measured in terms of following the script rather than making meaningful change. Moreover, due to the accountability pressure, different players are aware how their contribution to the evaluation affects their future. Program managers may provide desirable answers as to show they were capable of implementing a grant successfully.
Beneficiaries may provide desirable answers, hoping for a continuation of the project in their local area.

Today, education’s integration into a comprehensive development agenda is challenged by the tendency to search for “magic bullets” (Stiglitz, 2014) or “best solutions” that, most of the time, are also transferred a-critically over all sorts of contexts and usually without undertaking egalitarian negotiations with the different stakeholders affected by them, overlooking the cross-cutting and bidirectional relation of education with the cultural, social, health, economic, and political spheres of children's lives, and those of their families.

Jansen (2012) suggests that policy makers and funders tend to overlook the specific greater needs of the contexts in which these criteria are applied, and that when recipients get out of the box on the managing of the resources they receive, their actions are too rapidly interpreted as corruption. As an example, he mentions the conflict occurred between the South African government and some public schools to which it granted partial autonomy for the managing of the received public funds: While the former expected them to use these funds in buying textbooks and other educational resources, the schools decided to use them instead for feeding students and paying for the schools' electricity bills.

This way it is “normal” that when funders, for example, decide to support a particular educational initiative, they condition their contribution to the fulfilling of a set of criteria and working methods. These that aim at ensuring that resources are transparently and effectively managed, so that it is clear how their contributions are going to be utilized and if their outcomes align, or not, to their approach and interests in supporting them. However, when the beneficiaries’ approach to what is effective doesn’t fit funders’ working standards, their dependency on funders’ resources threatens their capacity to advocate what they deem to be more pertinent and relevant.

To avoid local actors’ misuse of resources or other corruptive practices, which are indeed common in the field, and/or with the aims of ensuring efficiency in terms of
the donors/authority’s perspective, educational initiatives are frequently designed and implemented on the basis of pre-set criteria (usually homogeneous and standardized) that claim to be value-neutral (Blaak, 2003), that tends to be reductionist – for the sake of efficiency – and that most of the time are only vaguely consulted with the beneficiaries to ensure contextualization to their particular needs, interests, and conditions, from which priorities for funding or working criteria might be quite different.

The scarcity of funding resources is not of any help, of course. Not only does it impede long-term strategizing but also forces educational practitioners at all levels to compete among each other, which has the negative consequence of making them adjust their social objectives based on what pleases their already existing funders or on what would help them attract new ones, because funds’ acquisition is usually conditioned by the thematics, geographical impact, and ideological standpoint that funders have (Guerrero, 2013). Frequently, the little opportunities available to choose the more appropriate funding partner, and, consequently, the high reliance that most educational initiatives have on the external resources they manage to secure, threatens their capacity to deal with their social objectives in what they deem to be the more pertinent and relevant way, when that way doesn’t fit the working standards or interests of those that provide them with the financial support on which they rely.

The dominance of this situation, it is argued here, is caused to a great extent by the current distribution of financial and political resources among educational stakeholders, which causes unbalanced ownership and, consecutively, hinders plural relevance and integrative responses, because those with the greater advocacy capacity tend to promote what they think is best, frequently overlooking the relevance it renders to different actors’ needs, priorities, working approaches, etc., and many times in little accordance with the developmental context in which initiatives are implemented.
2.4 The Vicious Cycle in the Debate and the Line of Inquiry for the Thesis

From a political economy perspective, the current distribution of political and financial resources (power) among stakeholders to negotiate and settle on contested issues is encouraging the prevalence of vested interests over policies’ objectives and the prevalence of top-down and “best”-solutions’ policy design and implementation. As detailed in the preceding section, these practices can be understood as “less sustainable” because of the way they hinder policies’ plural relevance, democratic ownership, and integrative responses, and consequently, the achievement of the agreements that the international community has finally made on promoting a model of development that is sustainable.

What, realistically, can be done about this?

In the literature on development aid and effectiveness and that of partnerships, there is an increasing debate on the importance of designing mechanisms to redistribute these resources among the different stakeholders – not only as a matter of moral and political legitimacy but also so that policies can be more effectively designed, adjusted, implemented, and evaluated in terms of the sustainability factors. Analyses from all sides of the spectrum and a wide variety of approaches are plagued with calls for more egalitarian negotiations and trade-offs among stakeholders to allow policies to be accountable to different interests and needs – not only at a global but at a local level as well. “Dialogue”, “citizen participation”, “cooperation”, “ownership”, and “partnerships” are the most common concepts used by international agencies, funders, governments, and local stakeholders (teachers, parents, civil organizations) as essential ingredients for policies’ effectiveness and sustainability (for more on this see: Barret et al [2011]; DFID [2011]; Diouf [1997]; Engel and Keijzer [2006]; Mason [2011]; Pearson [1969]; and Sack [1999]).

As Mason (2011) and Parfitt (2012) suggest, these changes are circumscribed within a paradigm shift started in the eighties in which the postmodern current of thought
erupted in the field with an "incredulity towards meta-narratives" (Lyotard cited by Parfitt [2012]), that is, a rejection of "absolutes, universals and foundations in theory" (Bauman [1993, p. 4] cited by Mason [2011]). This shift resulted, in the opinion of Mason (2011), from developments in technology, the increasing access to information and, perhaps more importantly, from humanity's experiences with totalitarianism in the last century. For both Mason and Parfitt, this skepticism grew alongside that of prescription and vertical power relationships in development, which have been questioned not only as a matter of power legitimacy but also in the nexus of the tensions that have arisen in development practice amid the global and the local.

Clearly, the new emphasis on power decentralization also has a lot to do with the fact that countries are ceasing to prioritize their investments in education for development (UNESCO, 2014c) for which the redistribution of their responsibilities in this area with the private sector is an evident consequence. It also has to do with the latest adjustments in the international structures of power mentioned before, where traditional donor countries have gradually changed their status and with them their responsibilities (UKFIET Conference, 2013 and UN, 2013a). These different explanations of the increasing emphasis given in the field of development to the problem of unequal ownership are, certainly, interrelated.

At their meetings in Paris (2005), Accra (2008), and Busan (2011), for example, guided by OECD's Working Party on Aid Effectiveness, many large donors have recognized the mistakes which they have repeatedly incurred by trying to over-control the whole process that they are supporting, and have stressed since then the importance of countries' ownership of development and aid (OECD, 2014a). Thus, aid strategies have lately focused on strengthening countries' ownership by requesting them clearer development strategies and operational frameworks, and greater accountability to their respective citizens and parliaments, reduced corruption, and increased transparency (OECD, 2012). There is a new interest among donors in sustainability based on country-led development that reduces dependency. Some donors have explicitly called attention to their partners in that ownership requires time to consolidate (a very interesting, complete, and reflexive study in this regard:
Gillies, 2010). The motivation behind this new emphasis on power distribution is
guided by the growing awareness about the harmful consequences that the current
unequal ownership has had for the negotiation of conflicting approaches. Evidently, it
also has to do with taking traditional donors’ responsibilities away, which is in itself
questionable.

But what is important to remark is that, despite the above mentioned changes, there is
a strong trend to keep on promoting policy schemes that end up reinforcing these
power dynamics and even accentuating dependency relations (see Mason [2011]). At
the end, the final say on what is to be supported and what is not is still held by those
who have the financial and/or political resources. Moreover, many of these same
actors that recognize the importance of egalitarian (democratic) ownership, plural
relevance, and integrative responses are also those that strongly promote the use of
standardized tests and control mechanisms to ensure value for money, that is, the
most effective outcomes in education. As mentioned before, arguments run from the
need for accountability to the need for a set of agreed criteria for effective outcomes,
to the control of vested interests and corruption practices, to the capacity building of
those in charge of providing education services, to the urgency of extending social
justice and promoting a model of development over other powerful agendas, to the
improved management of funding, etc. Yet, the general consequence is that
regardless of their supportive argument, these kinds of practices tend to leave aside
the complexity of factors that affect the process and overlook the long-term impact of
the projects and their need to consolidate over time.

It is certainly promising the fact that the concept note for the next few Global
Monitoring Reports (EFA GMR Team, 2014) places much more emphasis on the
relationship between the quality education imperative of the post-2015 agenda and
the three sustainability factors as key variables to monitor the development goal and
its targets. However, it is still not clear the kind of impact that the report will have in
the times to come.
It is, indeed, a vicious circle, where public and private funding institutions, although interested in successful cases that show them the way to operationalize the international education agreements to which they have agreed, are trapped within a set of criteria and working methods that, at the same time, don’t allow them to resolve the particular needs of the populations to which the policies are addressed in a way that is consistent with long-run sustainability.

In this regard, Novelli et al., (2013) suggest the need for finding a legitimate alternative that permits going “beyond extreme methodological” poles to ensure that the global agenda sensitizes to the local contexts and that local contexts respond to the broader society within which they are embedded.

But, how to do it? When we aim at improving, for example, learning outcomes, which is still debated if they should be measured in terms of global expectations or local life conditions, “there is no feasible strategy yet for ensuring that the tests both generate data at global accountability processes and permit useful feedback down to the levels of classrooms and learners” (McGrath, 2013). Who should decide this? The international organizations? The school managers? The governments? Under whose criteria are learning outcomes to be tackled?

It might be true that expanding the available assessment and operational methodologies through public participation on the process of their definition can make them more appropriate to the particular needs of distinct populations (Jamil et al., 2013). However, to what extent can they concurrently reflect the diversity of needs and interests that condition education’s effectiveness in different contexts? Which particular arrangement can ensure that all voices are heard and that the global and the local agendas are coordinated instead of in constant conflict?

Is it feasible instead, in this context, to think on building means that ensure that endogenous – local – accountability gains importance compared to donor accountability, as suggested by Blaak (2013), making change more meaningful not only to educational initiatives’ external but also internal purposes and needs?
Does it make sense to suggest the need for putting more emphasis on the building of structures that can operate as brokers to facilitate more equal negotiations among the different agents in play? Would this facilitate that both global and local needs and interests are addressed and that the dependency on external (conditioned) support stops being the main factor defining the possibilities for educational initiatives to contribute effectively to the quest for sustainable development?

Given the diversities on demographics, interests, priorities, advocacy, power, etc., it is certain that no “best” solution for education or development is likely to 1) ever become appropriate for all contexts and moments in time, and 2) overcome the conflicts derived from diversity and power relationships. Is it possible to think of a scheme that facilitates the collective building of the meaning of the sustainability goals and the means for their achievement instead of trying to find a unified vision that can be implemented a-contextually and homogeneously? An ownership scheme that empowers the educational initiatives that operate and interact at different levels of the system to ensure plural relevance and education’s integration to the greatest development landscape?

Since education is a tool with the potential to contribute to the global quest for sustainable development, could we assume that focusing on building on the self-sustainability of educational initiatives at different levels can help in redistributing the economic and political resources among stakeholders and, thus, in the building of such a model?

Burnett and Jarayam (2011) argue that since the prospects for increased aid for education are not good, it seems imperative to find innovative financing mechanisms and increase the efficacy of current spending.

Could we explore more in depth the significance and implications of the possibility, already addressed in the debate, that a more effective and sustainable use of the available resources could be related to the need for concentrating efforts in reducing
dependency on foreign aid? That is, rather than focusing only on delegating (getting rid of, and sometimes imposing) responsibilities without enabling structures for that ownership to emerge and consolidate over time (as Gillies [2010] criticizes), would it make sense to support instead a scheme of ownership that increases the self-sustainability of educational initiatives at different levels, instead of reproducing schemes that reinforce their dependency?

This idea in fact is not new. Many non-governmental organizations are now working on strengthening their self-sustainability (see for example, Educate Girls Globally [2014]; Pratham [2014a]; and the very Barefoot College mentioned in the Introduction), researchers calling for exploring the possibilities embedded in self-regulatory models (Dixon, 2010), and donors concerned about recipients’ levels of dependency to their support and the extent to which the programs they fund will be sustained once they withdraw their financial support (Forbes, 2013; Gillies, 2010; OECD, 2012 and 2014b; Stanfield, 2010).

However, much of these explorations are being made as a means to justify the argument that the State should allow and incentivize the privatization of education (see: Stanfield [2010]), which is not the case made here because the public-sector has a central role and responsibility in ensuring the positive enjoyment of the right to education.

The vicious cycle mentioned before, and the dangers of misunderstanding this claim for increased empowerment from the bottom to the top as a defence of privatization, demands a more elaborate justification on the need for balancing power in education for effective outcomes in sustainable development, by increasing the self-sustainability of educational initiatives at all levels and across sectors, and in exploring the means to do it.

The purpose of this thesis is precisely that: to support the argument that a quality education is one that contributes effectively with the (urgently needed) building of a sustainable development path, as proposed at the UN’s Decade of Education for
Sustainable Development (UNESCO, 2012b) (but without much success); to show how and why the sustainability of educational initiatives is directly affected by the relevance, ownership, and integration factors which are, themselves, interrelated, and; to demonstrate that if the ownership of educational initiatives’ internal actors is increased (that is, their self-sustainability), their overall ownership will democratize and, thus, their capacity to address effectively the relevance and integration factors will also grow, and consecutively, the potential sustainability of the educational initiative. Therefore, considering the current conditions of unbalanced ownership, the study suggests that reducing educational initiatives’ level of dependency to external sources of financial and/or political support (increasing their self-sustainability) is crucial for their effective outcomes in terms of sustainable development, that is, for improving the quality of the education they provide.

Further investigating the significance and implications of increasing the level of self-sustainability of educational initiatives has the potential to produce insights useful to bridge the efforts of researchers, policy makers, practitioners, and beneficiaries in education and development – to help in reconciling the local and the global, the common and the diverse, the agreed and the debated, the purely educational with the broader developmental concerns.

As detailed in the Introduction, this thesis uses an abductive inference process to contribute to the debate by giving new elements to the formation of an explanatory hypothesis about the significance of increasing the self-sustainability of educational initiatives for improving the effectiveness of their outcomes with regard to the agreed objectives on sustainable development (their quality), and the means through which this self-sustainability can be built.

Taking insights from the complexity theory and the capability approach on one side, and the evidence provided by the Barefoot College’s Solar Night Schools Program experience informed by other six case studies on the other, will help in accomplishing this objective.
The next chapter, accordingly, presents the patterns of expectation of the complexity theory and the capability approach – two theories that, in line with the postmodern paradigm shift in which this problematic circumscribes, question any attempt at absolutism in the understanding and interpretation of the means and ends of development for which they incorporate diversity and uncertainty within their informational basis. And yet, two theories that recognize the importance of dealing simultaneously with interests and needs at different levels and dimensions, because of which, both share most of the ethical and methodological implications of the concept of sustainability, as per its definition in the Brundtland Report. More importantly, these two theories directly (and complementarily) address the significance for development of education’s power relationships and claim that it is essential to work on the distribution of power among development stakeholders, which is significant for building a more sustainable model of development and can be done - which is the hypothesis of the present study, the implications of which it will explore.
CHAPTER 3

THEORETICAL RESPONSES AND PATTERNS OF EXPECTATION

3.1 Introduction to Chapter 3

As detailed in the previous chapter, there are two main questions that guide the line of inquiry in this thesis: Why can the redistributing power in education improve its effective outcomes in terms of sustainable development? And, what considerations should be taken into account for building an alternative scheme of ownership?

This chapter presents the theoretical responses and patterns of expectation of the complexity theory and the capability approach in regards to these questions – which, as per the abductive inference research method selected for this study, will be further analysed in Chapter 5, in the face of the feedback brought by the empirical evidence of the SNSP and the insights of some comparative case studies. The two theories share most of the ethical and methodological implications of the concept of sustainability – as per its definition in the Brundtland Report in terms of the relevance, integration, and ownership factors. Moreover, both define the substantial role of education for its attainment, and claim it is needed to work on the distribution of power among development (including educational) stakeholders – which is significant for building a model of development in which these factors are sustainably addressed and can be done, for which they provide relevant insights.

The chapter starts with an overview of complexity theory, especially the ideas developed by French philosopher Edgar Morin (on which this thesis concentrates). The comprehensiveness with which this approach understands educational initiatives’ relationship with their environment unavoidably points at the importance of perfecting the means for the regulation of interests and needs at different levels of autonomy in a simultaneous manner; for building enough flexibility within the system to allow for contextualization and, yet, ensure that our common objectives and challenges are protected as well. That is, it calls for enabling our global sustainability
while fostering the means for supporting the different components of the system in creating their own paths of change. In order to facilitate the explanation of these propositions, this section first describes the main patterns of cognition used by complexity theory to understand development and sustainability. The section then goes on to explore the implications of such patterns for development practice. A final subsection on complexity theory exposes how all these insights apply to the understanding of the roles of education for sustainable development, and of the importance and implications of power distribution for its effective exercise of such roles.

Following very much the same logic, the next section of the chapter presents the propositions that in these regards are offered by the capability approach, which, in line with the complexity theory, and using concepts of social justice, claims that development can be assessed in terms of its capacity for creating freedoms and removing unfreedoms to enhance people's capabilities (choices) "to live the lives they have reason to value" (Sen, 2000). As with complexity theory, this implies creating the conditions for people to construct their own path to development. The capability approach emerged from the works of Indian economist Amartya Sen in the 80s, who argued that the prevailing conceptual framework utilized for the design, analysis, and evaluation of development policies tended to rely on aggregative or economic-only data which, while important, is insufficient. This is because it excludes information that would enable a better understanding of how are people actually doing in their lives, about what people are actually capable of being and doing, and what are the opportunities that society has provided them to choose and lead the lives they have reason to value. The first part of this section, thus, elaborates on this informational basis that differentiates the capability approach from other mainstream approaches in development, that is, the areas on which it focuses to understand its praxis in terms of the sustainability factors and the concepts it utilizes to address these issues. Next, this section describes the implications of the approach’s premises for development praxis which, as will be detailed, suggest that the approach attaches a great deal of importance to the problem of power distribution. Finally (as with the section on
complexity theory), the section elaborates on the approach’s propositions for understanding the role and challenges for education.

Finally, the last section of the chapter explores the confluences and complementarities among the two approaches in terms of the problem of the thesis stated in Chapter 2, that is, the significance and implications of increasing the self-sustainability of educational initiatives for improving the effectiveness of their outcomes and contribute, with it, to the sustainable development goal.

3.2 Complexity Theory

Complexity is a theory emerged in the field of natural sciences and it has spread into the field of social sciences since the nineties, where it has been incorporated in the analysis of education, economics, and other fields of policy and humanities’ studies. According to Horgan (1996, cited by Geyer, 2012, pp.31-32), there are more than 31 definitions of “complexity” and Kurt Richardson and Paul Cilliers (2012, cited by Geyer, 2012) have divided the field into 3 main schools: the reductionist complexity science (that tries to adjust the available methodological tools to better respond to the principles of complexity), the soft complexity science (used by social sciences to change the patterns of understanding of social policy), and complexity thinking, which basically covers both. This thesis’ presents the propositions of this last school, and specifically those posed by French philosopher Edgar Morin, who has not only suggested that the principles of intelligibility that help to understand natural phenomena are also useful for understanding how the anthropo-social world operates, but also that the patterns that govern our understanding of those principles (of their shortcomings and possibilities) have been and will remain crucial to the way we face the challenge of development's sustainability. This section first explores complexity’s understanding of the development process in terms of sustainability, and then it draws main implications in the face of current development practice in general. Finally, the section describes how these insights, when applied to the case of education in particular, suggest the need for power redistribution to improve its outcomes for
sustainable development, and presents some of the implications of these propositions for educational policy.

### 3.2.1 Meta-cognitive Basis for Understanding Development and Sustainability

For complexity theory, the universe is formed by systems that share the need to develop their level of complexity to avoid the natural disintegration and decay trend, inescapable to any phenomena in life and ensure, instead, their survival. In natural sciences this means that living organisms constantly modify their processes of organization to adapt to the ever-changing and rather random challenges that they find in the way of their survival. To do that, they take advantage of their inherent learning and creative abilities and use them to increase the quantity and quality of the interactions among their constituents – and between them and their environment – with aims of propitiating the momentum for the emergence, from those interactions, of new properties and behaviours that enable them to successfully deal with such challenges (see Figure 3). These are properties and behaviours whose degree of complexity increases alongside the quantity and quality of these interactions, and, that despite not representing, *per se*, neither the part nor the whole of the systems play an important role in their process of organization, sometimes challenging the systems' stability and order, and others enabling them to adapt, transform, re-organize, change – develop: “All development is the fruit of successful deviation that flourishes, and changes the system within which it arose” (Morin, 1999, p.42). For Morin, this development process that, in the case of living organisms is known as “evolution”, is also applicable to human systems in their individual or collective dimensions (their development initiatives, the society) – a process to which he most frequently refers to as “social change”.4

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4 When referring to the organization of social systems and their sustainability, Morin doesn’t always use the concept of “development”, which he most of the time associates with the mainstream definition that relates it with economic growth whose sustainability, quoting Boulding, he considers impossible in a world with limited resources (cited by Morin, 2011). He does say, however, that the notion of development should be richer and consider the different dimensions of human lives (Morin, 1999). It is indeed a question of wording, because, as we will see in the next sections of this chapter, others, like the capability approach, do propose the re-conceptualization of the very term “development” on the basis of moral and methodological grounds that are remarkably consistent with
This organizational process of change (development) – that from complexity theory’s perspective is held by all systems with aims at ensuring their own sustainability – has two important characteristics: it has a hologramatic and multidimensional value, and it is uncertain.

- The hologramatic and multidimensional value of systems’ development process:

For Morin,

In human beings as in other living creatures, the whole is present within the parts; every cell of a multicellular organism contains the totality of its genetic patrimony, and society inasmuch as a whole is present within every individual in his language, knowledge, obligations, and standards. Just as each singular point of a hologram contains the totality of information of that which it complexity’s ideas. Thus, Morin would rather use the notions of “evolution”, “metamorphosis” or in the case of social systems: “social change”.

Source: Adapted from Jeldtoft (2014)
represents, each singular cell, each singular individual contains hologrammatically the whole of which he is part and which is at the same time part of him (1999, p.14).

This means that all systems operate, concurrently, as organized and organizer wholes, as constituent parts of the whole and as a whole that organizes its constituent parts in order to survive. That is, while each system has its own reflexivity (it self-organizes), at the same time, this subjectivity is built in cooperation with the ecosystem within which it exists (eco-organizes). An ecosystem that, itself, forms part of a wider self-organized ecosystem (see Figure 4). This principle of self-eco-organization has, thus, a hologramatic value, which means that the organizational dynamics that define the limits of each of the systems are not immune to those of both their environments and the subsystems that constitute them. While each system organizes its constituent parts in a way that enables it to adapt to the eventualities that challenge its sustainability, at the same time, it is determined by the dynamics of the processes that, with the same purpose, are held both by the systems that constitute it and those that surround it. This way, the social system retroacts to shape the individuals that conform it (through education, values, norms), and those individuals, whose diversity is shaped as well by biological and other determinisms, through their interactions, concurrently organize themselves within the society in which they operate, to transform it, or preserve it. This recursive principle, says Morin, questions the idea of linear causality, in which everything is produced and caused. Instead, systems and subsystems are conceived as productive and causative as well or, as Morin puts it, “products and effects are, simultaneously, causes and producers of what produces them” (1990, p.106, own translation). Thus, the recursive principle, not only questions but also redefines the roles of the constituents of the systems: the individual, for example, is not only a result of the reproductive system but also its cause and means for sustainability; society is the producer of the individuals that, in turn, produce it. And the school, in the same way, operates as the shaper of the individuals that, in turn, shape it (Morin, 1990).
Figure 4 Hologramatic Principle

Source: Adapted from Requardt (n.d.)

The above suggests that systems’ process of change not only occur simultaneously at multiple levels but also with multiple dimensions (see Figure 5).

Figure 5 Multidimensionality
Let us use Morin's (1990) example of humans that operate concurrently as individuals, as members of their society, and as constituents of a species. Each of these natures places a different programming upon humans (through the genetic code, the ecological environment, social norms, etc.) that “negotiates” with the others to create and reproduce humans as a resource for their own regeneration and survival. And at the same time, humans' own subjectivity is nurtured by the particular way in which all of these determinisms interact with and within each of them. Thus humans, as systems seeking a regeneration themselves, make use of their internal properties to deal with such inputs in their own behalf. One of these properties, and of utmost importance, is the quality of autonomy, which, by operating as an internal conveyor of the human system’s self-knowledge and self-reference (that is, its subjectivity), enables the human system to discern what it needs and what it does not. Thus, while a human autonomy depends, on the one side, on his own brain, determination, and will (to observe, define, think, act), it also relies on the richness of the genetic information, environmental incentives or challenges, language, culture, and knowledge he acquires from his environment to self-define, exist, and freely make choices. Now, given that disintegration and decay, and not sustainability, are the natural trends to all phenomena in life, social systems’ (like humans’) capacity to survive also depends on their ability to constantly regenerate and adapt by generating the products, effects, and all the elements that they need to self-produce and self-sustain themselves, while adopting or confronting the ones that they receive from their environment. In this sense, it is again their quality of autonomy that helps their sustainability by distinguishing what is useful for it and what is not. This way, a system's sustainability depends on both the richness of their interactions with the environment (their learning aptitudes), and also on their inherent inventive and creativity to propitiate the momentum for the emergence of the properties that bring upon the conditions for their change, and thus adaptation and survival.

History does not flow majestically like a wide river; it meanders around innovations, internal creations, external events, accidents. Internal transformation begins with creations arising within a small circle as tiny local events which are considered deviant. If the deviation is not snuffed out it may
under favourable conditions, often a state of crisis, paralyze the regulations that block or repress it, and proliferate like an epidemic; it develops, propagates, gains momentum, becomes a strong trend and finally produces a new normality (Morin, 1999, p.42).

In other words, the universe is formed by self-organized systems that operate concurrently at multiple levels and at coordinated or conflicting biological, sociological, cultural, and physical dimensions (Morin, 1996). Each of these systems creates its own processes and objectives, in relation to those created by the other levels of organizational autonomy, with which (or within which) it coexists: the globe, the society, the community, the individual, the cells, etc. Thus, unity and diversity are both realities of the systems (which is what Morin calls the principle of *unitas multiplex*) – realities that impact their behaviours and that impose upon them challenges such as that of their self-eco-regulation, which synchronizes systems’ self-organizational processes with those that they make in coordination with their environment. Thereby, no system can be absolutely self-sufficient. Autonomy and dependency complement each other: each system’s capacity to define its own constitutive, regulative, and organizational principles, that is, its autonomy, is crucial for its survival. It is this autonomy capacity which allows it to use in its favour the eventualities and deviant events that emerge from the interactions among the internal and external phenomena with which it interacts. This autonomy, however, is nurtured by dependencies – the determinisms imposed by their physical, biological, social, etc., programmings, all of them negotiating forces that from within or from outside the system interact to shape its uniqueness, and for whose necessities the system exists. This way the environment plays a co-organizational role by giving the system elements from which it can learn and that it can incorporate (or not) in its aims at ensuring its sustainability (survival).

• **The uncertainty of systems’ development process:**

The systems’ process of organizational change is framed by what Morin calls the principle of *ecology of action* (Morin, 2011, p.149), according to which the moment
an action commences, it immediately starts a series of interactions that cause it escape the original intention of its initiator and can even go in the opposite direction to that originally envisaged. Thus, complexity theory’s focus on the relationships that occur between and beyond the constituent parts of the systems brings attention not only to the way in which systems at different levels and dimensions mutually signify and affect each other, but also to whatever happens in the course of such interactions, including the rather random and uncertain emergence of new properties and behaviours mentioned above. This focus on the properties and behaviours that randomly emerge from the interactions occurring within the systems' complex network of constituents has been increasingly used in science to explore complex phenomena, such as the origin of life where it has been observed that while “the brain is… a complex arrangement of billions of neurons functioning according to the laws of cell biology… the phenomenon of mind emerges as much more than a biological agglomeration of nerve cells” ([Stuart Kauffman, 1992], cited by Mason, 2009, p.40).

In the field of social sciences, it has also been used to understand the dynamics that influence the phenomena of social change and development both at individual and community level. Thereby, it has been observed that social systems’ processes of organization are largely influenced by the random and uncertain events – properties and behaviours – that emerge (in an organized although incomprehensible way) in the course of the complex network of interactions occurring both within and beyond their boundaries. A good example is the process that followed the launching of the agreement on Education for All Scheme (EFA) in 2000. With aims at ensuring equal access to education for all children EFA triggered a series of interactions among educational development actors and factors both within and beyond the field of education – i.e. the availability of infrastructural resources, conflicting interests, economic crises, etc. Although many of them could not be foreseen at the time of the launching of the scheme, they still brought upon not only new challenges but also new means for the combat of educational inequality. That is, while the need to ensure that education is of equal quality for all emerged as a new priority for participating States, there is no doubt that at the same time, countries’ capacity to facilitate access to education improved, and that the education system as a whole acquired more
awareness and experience not only to identify these new challenges but also to confront them.

The reliance that systems have on the emergence of new properties and behaviours that enable them to deal with the challenges for their survival, that is, to adapt, suggests that systems’ need to operate through a dialogic process that enables enough disorder during the organization among their constituents, so that such deviations can emerge and enough order as well to prevent that those deviations become a treat for the system’s sustainability. Order and disorder, certainty and uncertainty, thus, are both key for the systems’ process of organizational change, and, thus, for their survival.

Because of the above, for Morin (1990) talking in complexity theory’s terms, is considering the intertwining of “events, actions, interactions, retroactions, determinations, chance of our phenomenal world” (p.32, own translation). While the theory doesn’t intend to present a final truth about reality, it aims at exploring its regulatory principles, making knowledge about it more multidimensional without getting into an absolute confusion, and consequently enriching the way in which knowledge is made, interpreted and put into practice. As Alhadeff-Jones (2009) adds, it “invites us to question the way one conceives changes and transformations brought by the use of the notion of complexity itself”. Thus, this section's brief description of the meta-cognitive patterns proposed by complexity theory and its consequent understanding of development and sustainability serve as a background to explore, in the following section, the implications of the approach for development practice, and the reasons why the former attaches importance to power distribution for sustainability.

3.2.2 Implications for Development Practice: The Importance of Power Distribution

The above section suggests that, for Morin, sustainability requires understanding of and facilitating the regulatory dynamic that is needed to organize and take advantage
of the chaotic behaviours that are causing disintegration, to trigger the necessary changes that shift the trend of decay enabling the system’s survival. In this sense, the author considers that development’s current practice (its regulatory dynamics) are rendering unsustainable because they are being governed by meta-cognitive patterns that seem to underestimate both the hologramatic and multidimensional value of the social systems’ development process (i.e. the interconnections existing both among and beyond the system’s constituents), and the latter’s uncertain character. Morin argues that policies tend to follow a principle of linear causality in which it is assumed that processes follow predictable paths that can therefore, be controlled. This tendency to over control – to ignore or underestimate the ever-present possibility that cause doesn’t lead to a particular effect – neglects humans’ limited capacity for fully predicting the impact that minor events or constituents of the system can have to influence the latter’s behaviour. Therefore it not only hinders the possibility that development practice reacts and adapts in accordance to the eventualities that arise challenging the system’s sustainability, but also suffocates the possibility of undertaking a development practice that creates the conditions that enable the properties and behaviours needed for its adaptation to emerge (i.e. purposely enabling enough disorder within the system’s boundaries).

Moreover, the determinism that, according to Morin, characterizes the principle of linear causality also tends to ignore the possibility that products and effects not only emerge from but also turn back upon their causes and producers like retroactive loops (Morin, 1995). This not only prevents the understanding of the different roles held by the diverse systems and subsystems for the sustainability objective but also, when applied in development praxis, hinders their effective performance of such roles. The prevailing mind-set that governs policy design and practice, thus, for the sake of intelligibility and efficiency, underestimates the relationships between the parts and the whole, and the way they mutually signify and affect each other either by: 1) decontextualizing information underestimating its relationship with the whole – e.g. knowledge is fragmented and partitioned in different disciplines that rarely communicate with each other and, conversely, keep on hyper-specializing, reducing the knowledge of complex realities to that of the supposedly simple elements that
constitute them, separating what is linked, eliminating whatever disturbs knowledge’s intelligibility; or by 2) globalizing information underestimating what makes it unique – e.g. top-down, homogeneous, or standardized policies are privileged, ignoring the particular specificities that govern the diverse components of the system’s capacity to take advantage of the chaotic behaviours that are causing disintegration to trigger the necessary changes that shift the trend of decay, enabling both the system’s and their own survival.

Thus, for Morin, the sustainability challenge requires a change of mind-set in development practice that both recognizes uncertainty and unites “the simplification processes that imply selection, prioritization, separation, reduction, with the other counter-processes that imply communication, articulation of what is dissociated and distinguished...escaping from the alternative between reductionist though, that cannot see but the elements, and globalist thought, that only sees the whole” (1990, p.144, own translation).

Regarding uncertainty, Morin suggests that the awareness of the ecology of action implies recognizing the need of setting strategies that permit constant adaptation and flexibility, embracing what is certain while recognizing what is not, permitting the navigation in what Morin calls "a sea of uncertainties" through "islets of certainties" (1999, p.45, own translation). This means that, contrary to the rigid (top-down, homogeneous, etc.) planning that characterizes the mainstream trend for policy making, the capacity of the system to modify its actions in accordance to “the emerging phenomena or to the information that is gathered along the way” (Morin, 2011, p.149, own translation) needs to be developed. This is what Morin calls “strategy”, so that the system is able to respond to (and take advantage of) the unpredicted emergence of random events that challenge its sustainability. Developing this capacity – that is, this strategy – requires propitiating the conditions for the emergence of properties and behaviours that enable the system to design and undertake it. Among them and of crucial importance, as mentioned in the previous section, is the quality of autonomy which would enable both the system as a whole and the subsystems that compose it to discern what is useful from what is not so that
they can adapt and sustain. In this sense, the hologramatic and multidimensional nature of systems suggest that this quality of autonomy needs to be fostered simultaneously at multiple levels and dimensions, so that all components of the system (subsystems) become able to address their own sustainability needs and, at the same time, that the greater system becomes able to negotiate their diverse and many a time conflicting programmings to ensure its own capacity to adapt and survive. This also suggests that, in order for that autonomy to develop at multiple levels and dimensions without compromising the greater system’s sustainability, order and disorder need to be combined and organized, both with the same priority.

On the one hand, flexibility is crucial for enhancing the system’s autonomous capacity to effectively adapt to the uncertain, taking what enables and abandoning what challenges its survival: flexibility to the emergence of initiatives (behaviours) from any given part of the system (from any strata, area, individual, etc.) that contribute to the negotiation among conflicting or cooperating programmings; flexibility as a “breeding ground” for innovations that help in the regeneration of the system, transforming it; flexibility as freedom, that is, as a “possibility of choice” (Morin, 2000, p.1, own translation), as a recognition of individuals’ capacity and agency to effect change, as a key strategy to enable the social system to increase its complexity.

On the other hand, the complementary (and not oppositional) role of determinism and order, of control, of a cohesive process that prevents freedom’s trend to disorganize and disintegrate (Morin 1990, p.115). Because, on the opposite side of the spectrum, given that humans are self-ego-eco-organized beings, too much freedom can cause disintegration: that humans are self-eco-organized beings means that individualism (self) is key for each person’s autonomy because it conjugates his or her freedom and responsibilities with regards to his or her environment, and places each individual immediate community (ego) as subjects in the centre of the world (eco), permitting him or her to deal with it and with her/himself (Morin, 1990). This “whole” through which he/she approaches the world, known as egocentricity, gives him/her meaning in an infinite universe in which he/she represents almost nothing. However, without a
conscience of the reliance he/she has on the other species that inhabit this planet and on the planet itself – of the common destiny that he/she shares with the rest of the humanity – an individual's egocentricity can break with social cohesion. For that reason, Morin (2011) considers it is key to count with a solidarity base that enables humans to make a responsible use of their freedoms and autonomy. Solidarity has the potential to limit egocentricity, that is, to impede fragmentation and promote cohesion, which gives it a vital role as a cohesive resource that enables enough order in the system, without strangling it, and prevents it from total chaos (and therefore disintegration). In other words, the complementarity of freedom (disorder) and solidarity (order) is important because, like autonomy, freedom is a quality whose emergence depends on the conditions created from within and beyond the system, but that also has the potential to retroact towards those conditions, enabling the ever-increasing complexity of the system:

What is freedom? An incomplete approach defines it as the recognition of necessity. Another poor approach as what avoids the need for something… To have freedom there must be a universe with determinisms and regularities, on which action can support itself, but it is also needed to have potential choices in game and uncertainties so that action can develop itself ... It is necessary, in short, that the possibility of choice exists, that is, the external conditions that allow the selection and the internal conditions that enable its conception (Morin, 1981, pp.227-228, own translation).

This means that “on the top there are rigid orders but under that there is space for a spontaneous anarchy” (Morin, 1990, p.129, own translation). While general cohering rules enable the operation of the system’s organization, rigid planning that lacks a strategy to prevent and deal with unforeseen emerging “noise” in the system, contrarily, blocks its effectiveness. Concurrently promoting centrism/polycentrism/de-centrism and hierarchy/polyarchy/anarchy around a liaison centre, conversely, enables both order and spontaneity at the same time. Social systems’ sustainability thereby requires both the recognition of humans as autonomous, intelligent, and affective (and not only mechanistic) beings that
individually or collectively (through their organizations and initiatives) hold different interests, needs, and aspirations, and, at the same time, a base of solidarity that gives coherence to the whole process and enables its increasing complexity.

*Morin claims that current development practice’s trend for over-controlling strangulates freedom, which undermines the autonomy of the subsystems (the individuals, their organizations) – a quality that enables them to co-regulate, together with their environment, their and their subsystems’ interests, and needs according to their particular context, preventing as well their contribution to the greater system’s sustainability.*

Moreover, Morin argues that today, systems like the welfare state are sustained by an “anonymous” and quite imposed kind of solidarity, and that a more direct and spontaneous solidarity is needed between people and between groups and persons. He remarks that it is not about promoting solidarity but about liberating the potential of our altruist will and care for others (the one that complements our egocentricity), and favouring solidarity actions: actions that today are such a rich resource for most of poor societies that make use of them to confront misery, solidarities that are based on deep convivial relationships that the present trend of development tends to break. In other words, the remedy that Morin (2011, p.28) sees for the current “parasitic” feature of contemporary hyper-centralized bureaucracy that “ignores concrete beings” (by privileging top-down, homogenous and/or standardized inflexible policies) is allowing the initiative and feedback of the different strata to the decisions taken by the leaders, creating a horizontal communication between the different members and hierarchies of the organization, and procuring, at the same time, their solidarity and responsibility that is more likely to emerge if they are treated as a part of a community that is sharing a destiny.

Thus, in these terms, development and sustainability’s imperatives imply that “at the very high complexity, disorder becomes freedom, and order is more about regulation than about restriction” (Morin, 1995). Freedom and solidarity are thus two complimentary strategies that function as a “breeding ground” for autonomy and its
innovations. Development, thus, is the process for setting the strategies to form and deal with such breeding ground, to conjugate chaos and order, to adapt the system, to impede its decay. Development understood as a process in which humanitarian, communitarian, and individual autonomies are developed together (Morin, 1999, p. 25) and regulated to ensure the system’s sustainability.

As a consequence of this reasoning, and very much in line with the capability approach as we will see in the next sections, Morin’s complex thinking doesn’t see poverty as a lack of economic means but as a weakening of opportunities to choose and act, that is, the lack of control of one’s own situation and destiny (2011, p.113-114). Politics cannot create happiness. It cannot merge the diverse needs and interests of the multiple member of the social system. It can only eliminate the public causes of unhappiness (wars, famines, and prosecutions), and facilitate opportunities for all individuals to choose and enjoy the qualities of life, which relate to various (biological, psychological, economic, political) determinisms. What is essential and consistent in all of Morin’s work is the conception of politics’ mission: to ensure the system’s sustainability through the permanent reorganization of its regulatory dynamics. Politics’ development praxis is, therefore, an art, because of the creativity and ability it demands to deal with the ecology of its actions, that is, to create strategies that make it effective in dealing with the unforeseen (Morin, 2011).

3.2.3 The Case for Education

In discussing the motivations behind complexity theory's and education's theorizing, Kuhn (2008) argued that the difference between them is “that complexity merely describes whereas education aims to make a difference”, that “complexity per se does not have an ethical intent” and that “it is the researcher who is committed to human betterment” (p.187). In Morin’s work, however, this distinction is more subtle, because even if he has said that complexity is the challenge and not the response (Morin, 1990), his later works (see especially Morin [1999] and [2011]) have also suggested that the researcher’s understanding of the sustainability imperative through complexity theory’s composites of order-disorder-organization, autonomy-
dependency and unitas multiplex – as well as the recursive, hologramatic, and ecology of action principles – carries, implicitly, a series of moral and methodological consequences for education and development’s conceptualization and praxis. Having explored the main patterns of cognition that govern complexity theory's approach on sustainable development, as well as some of the implications of such patterns for development practice, this last section exposes how all these insights apply to the case of education in particular. With that purpose, it first describes the different roles held by education from a complexity theory’s perspective, the consequential significance of power distribution for the effective exercise of its roles, and the implications of these propositions for educational policy with the aim of improving its outcomes for sustainable development.

Morin’s works suggest that focusing on the recursive relationship between education and the development context within which it evolves – instead of dissociating this relationship, as it is commonly done – enables the perception of the multiple roles it holds (both as a property and as a system in itself) to mediate, like a “broker”, the needs for sustainability of the individuals and those of their environment.

To elaborate complexity theory suggests that sustainable development is prevented, party, by the cognitive patterns that dominate humanity’s mind-sets and, therefore, its practices. Therefore, creating the learning aptitudes of the social system to be able to sustain itself requires a reformulation of its constituents’ thinking patterns, which would be reflected in their actions – a reform of knowledge⁵ that enables sustainable change. Education, as a property or behaviour of the social system, can enable the development of a more complex thought that changes the way humans understand the problems that concurrently affect them at different levels (individual, communitarian, global) and in multiple dimensions (emotional, biological, psychological, social, cultural, political). Thus, education can impact the way humans interact with and

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⁵ In 1999, Morin presented a document to UNESCO entitled “Seven complex lessons in education for the future” in which he exposes the consequences that a complexity perspective would have on the education for the future generations. A must read.
shape their reality in ways that are more consistent with the systems’ needs for sustainability. The importance of developing this autonomy capacity is valid, of course, for social systems at all levels, because of the way they rely on each other. At a personal level, education influences the way individuals react to new circumstances, adapting or changing them, and helps in developing their innate autonomy capacity – not only because of the knowledge that they acquire from it but, more importantly, because of the abilities they develop to learn in differentiated and flexible ways what is relevant for the reality in which they live. This recursive principle is also present in Morin’s mediating position within the Piaget vs. Chomsky’s debate, in which while the latter emphasizes the existence of internal perception structures that influence the way we construct our knowledge, the former considers that those innate learning aptitudes are shaped by the interaction with the outside world (Morin, 1990). Education, Morin (2011) argues, cannot teach anybody to live, and neither can it provide all the available knowledge to people to live better. What it can do is to contribute in the building of people’s aptitudes to live in their individual, social, and species’ dimensions, and to learn to learn in a pertinent way (that is, consistent with reality’s complexity). Therefore, a crucial implication of complexity thinking for understanding education’s role is acknowledging the way it can, if pertinent, enhance individuals’ autonomy, by providing them the language, knowledge, and skills they need to define their selves within their society, and solve their needs while, concurrently, contribute to their society’s needs for transformation (or preservation), on which they themselves rely (Morin, 1999). This gives education both a constitutive and an instrumental role as a property or behaviour produced by the social system and its members, and producer of the members of the society and their system (another coincidence with the capability approach that will be further explained in the next sections of the chapter).

But at the same time, education is a system in itself. And it is in this capacity that education holds additional political, social, cultural, environmental, and economic roles to ensure the conditions for its own sustainability and with it, improve its contribution to that of the greater system. An example of that is the way that an educational initiative – by including activities that bring together the different
members of a given community affected by it (e.g. the meetings of the Children’s Parliament of the Barefoot College with their communities, teachers, and authorities, see Chapter 4) – has the potential to modify not only their learning aptitudes but also their power relationships and, thus, enable the decisions taken locally to become more relevant to the diversity of needs and interests of their members. This would help in their individual and communitarian empowerment; an empowerment that will serve to improve the conditions of the educational initiative itself and, consequently, its capacity to contribute more effectively to the broader development process in which it is immersed in terms of sustainability. In this sense, education has its own mission and needs, while being the result of other systems’ missions and needs – a condition mirrored “hologrammatically” in each educational initiative (system),⁶ at all levels. Thus, as Mason (2009) argues, what complexity offers by conceptualizing education as a system in itself is "a dynamic and system-wide perspective on how sustainable change, characterized by new properties and behaviours in the education system, emerges from the interaction of a myriad factors in the economic, political, social, and cultural environments in which education is situated" (p.117). This suggests that, in order to become effective in propitiating that change, education requires developing its own complexity to ensure its own sustainability – designing strategies that deal with the uncertain events (properties, behaviours) that emerge from its interactions not only with its environment, but also among its internal constituents. As shown in the section above, this makes it necessary that educational initiatives (like all other systems) enjoy the conditions for the enhancement of their quality of autonomy, so that they can discern what is pertinent for their particular situation. Yet,

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⁶ This idea is consistent with the concept of educational initiative used in this thesis (see Chapter 1), which I recall here: The concept of educational initiatives refers to the programs, policies, or projects that emanate from the different organized social units that work in education at different levels. The concept can apply both to a civil organization’s education program (like the Barefoot College’s SNSP) or to a national authority’s education legislation (such as India’s RTE). The concept, as used in this thesis, is systemic in that it refers not only to the program designed by a given organized social unit but to the other components of the social unit as well, which includes the infrastructure, the resources, and also the actors directly involved in the design and implementation of that program (the Barefoot College and the Parliament of India in our examples), and those directly affected by it (e.g. the children and their families). As open systems, educational initiatives have a mutually nurturing relationship with their environment (integration factor), and are affected by the decisions made by different actors to whom they, in turn, are relevant (relevance factor). These actors can be those that are part of the educational initiatives (mentioned before) or others that are external to them.
as also mentioned in the previous section, development practice’s current trend to over-control and to address educational initiatives as if they were separated from their developmental context prevents them from developing and exercising this autonomy capacity.

In the face of this scenario, the implications of complexity’s insights for development praxis suggest the possibility of an alternative scheme of ownership in development that enables education – both as a property or behaviour and as a system in itself – to become more effective in addressing its own and its environment’s sustainability needs. Some of these implications have been explored both by Morin and by a few other researchers:

In the first place, according to Morin (1999 and 2011), improving education's contribution as a property or behaviour of the social system to the latter's development capacity requires it to make the knowledge it teaches more pertinent. This doesn't mean adding more information, but situating it within its context, relating its abstract facet to its concrete reference, showing the multiple dimensions of reality, rather than only one. It means teaching things that respond to our questions, curiosities, and needs, recovering our charm for learning; implies the teaching of metacognition, that is the knowledge of knowledge (what is knowledge, where are its limits, how do we learn); implies teaching the ecology of action, so that we can improve our developmental strategies maturing our agency capacity. In other words, for Morin, the possibility of questioning and reformulating the current trend of development requires a reform in knowledge, which in turn is reliant of a reform in education. The latter, he says, needs to integrate an ethical dimension that develops the ethics of solidarity, creating awareness of our common planetary challenges, which is “the minimal rational demand of a shrunken interdependent world” (Morin, 1999, p.38).

On the other hand, strengthening education's capacity as a system (as an educational initiative) will be helped by creating (and not only expecting) the conditions for change to emerge. For Mason (2008a, 2008b, and 2009), this might require strategies
such as undertaking massive (and still conscious) interventions at all levels of educational systems that can multiply exponentially the number and quality of interactions among their constituents. Reinforcing each other, these actions can reach the critical mass and momentum needed to precipitate and sustain the desired change:

What it might take to change a system’s inertial momentum from an ethos of failure to one of sustained development is massive and sustained intervention at every possible level (including even those factors that, from a knowledge of initial conditions, appear trivial) until the desired change emerges from this new set of interactions among these new factors and sustains itself auto-catalytically. And despite complexity theory’s relative inability to predict the direction or nature of change, we are, by implementing at each constituent level changes whose outcome we can predict with reasonable confidence, at least influencing change in the appropriate direction and thus stand a better chance of effecting the desired changes across the complex system as a whole (Mason, 2009, p.123).

Additionally, he mentions Nordtveit’s concept of “integrated service delivery” (2008, p.45, cited by Mason, 2009) as another practical consequence of complexity’s approach, in which substantial interventions are required not only at all levels of the education system but of the developmental context within which education is situated, so that the integrated factors leading to change are taken into advantage to create this snowball effect, while connecting development efforts to the local stakeholders’ sense of their own development (Nordtveit, 2010). Massive and sustained interventions – in other words, if addressed strategically through constant adaptation and flexibility to the variety of responses that the constituents of the systems demonstrate to those interventions – can create a snowball effect (which Morin, 2011, calls “creative effervescence”) that builds enough momentum to modify the dynamics of the social system and get it into a new sustainable pattern. This, for education, implies the need to be managed in accordance to the needs of both the internal and external systems and subsystems that affect it and to which it responds (the students, the communities, the country, the region, the planet), addressing the
learners’ different dimensions (social, cultural, economic, emotional, ecological, etc.) – each of them unique and, at the same time, co-producers and produced by a common system to which they all pertain.

Moreover, and as suggested in the previous section, in order to address sustainability needs at different levels and dimensions simultaneously, the design and implementation of regulatory dynamics with the potential to prompt the emergence of behaviours compatible with long run sustainability – such as the ones mentioned above – requires strategies that combine freedom (disorder) and solidarity (order), relinquishing from the temptation to keep on promoting top-down and standardized "solutions" for educational initiatives that strangle their autonomy capacity and de-contextualize their sustainability needs. It requires, thus, promoting the sharing of unifying common goals, purposes, and principles, while concurrently empowering the autonomy capacity of the constituent parts of the system, fostering their diversity, adapting, and innovating: a *chaordic system*⁷ that by combining chaos and order overcomes the trend to over-control (Chaordic Commons, 2003, cited by Ezechiel, 2003). These strategies that, combining planning and flexibility, resemble what Geyer (2012) calls a *complexity cascade* – “a visual metaphor which combines an ability to see the direction of policy travel with an aspect of continual openness” to the responses of both adaptation and emergence that arise during the process of implementation and that, consequently, undermine “the extrapolation tendency, crisis–success policy response and targeting/auditing trend” (p.20) of today’s developmental dynamics.⁸ Geyer also suggests that a possible answer to the

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⁷ The term *chaordic organization* was coined by VISA’s International Founder and CEO Dee Hock, and basically proposes that human organizations adopt the natural behavior of other creatures and phenomena in nature which is neither fully anarchical nor centrally controlled. Hock said that in their growth, organizations become increasingly complex and their employees – less and less aware of the importance of their role in them and unable to see clearly (let’s not say participating in the definition of) the priorities of the organization – become increasingly detached and, therefore, ineffectiveness grows. So, he argues that while it is important to establish patterns and common goals to enable effectiveness, at the same time is crucial to allow for more initiative and decentralization (Ezechiel, 2003, p.39-40).

⁸ The world-wide used *Evidence based policy making* mentioned in the introduction of the thesis, for example, uses linear casualty to calculate supposedly predictable outcomes from policy interventions that designed are later evaluated in terms of rigid pre-conceived ideas of success or failure. (Geyer, 2012, pp.40-41). However, society’s complexity makes it difficult for it to respond to rigid strategies in exactly the way it is expected. That is, up to a certain point, society’s processes and responses cannot
limitations of over-controlling without resigning from seeking good performance is not interfering with the particular actor/institution “as long as the system stays within the general boundaries of good performance” (Geyer, 2012, pp.29-30). Continual openness means to adapt strategies to modify the original targets (which Morin [1990] calls the torpedoing of action) and constantly create new ones within the aforementioned “general good” performance of the system, keeping flexible and open to the unavoidable emergence of new phenomena that can shift the patterns of stability that govern the system, and prevent its natural trend to decay and disintegration.

In relation to the above, Morin (2011) argues that the mutual reliance that humans’ different social systems of organization have on each other to secure their sustainability requires a global governance based on dialogue, in which the socio, eco, and ego dimensions (see section 3.2.2) are concurrently regulated through the joint action of the State, the local public administrations, the private associations, and the citizens; a global governance that is based on the principles of solidarity and responsibility (not only to link autonomy and community but also to make everyone held accountable), plurality (economic rationality has to stop being hegemonic), and participation (beneficiaries of public programs should always be present in the institutions that represent them and participate in all decision-making instances). However, Morin recognizes that a universal policy would require a universal agreement and a universal agency that held the necessary powers for its implementation, which is just not feasible today. Moreover, he argues, the idea of a universal governance could be misunderstood as a moral imposition, which is not the intention (remember the dialogic autonomy-dependency), because the implementation of a global policy at local levels cannot disregard the local cultural and relational dynamics in the name of efficiency. Actually, he criticizes that despite their seducing charm, poverty reduction programs backed up with the hot-topic of governance (responsibility, democratic management, transparency) tend to fail because they rarely manage to adjust to the specificities of local contexts: “that
dialogue of the deaf between those who help and those that are helped derives in inefficacy” (2011, p.120, own translation).

What is, then, his proposal? Morin suggests that with a transdisciplinary approach, politics can create the conditions, within and beyond the field of education, to limit the submissions and foster the autonomies, promoting their healthy co-regulation (based on solidarity) for the sustainability of the human systems at their different levels and dimensions (Morin, 2000). This is what he concretely proposes in his book *La vía: para el futuro de la humanidad* [The Way] (2011) and that I call from now on the “Via Proposal” (See Chapter 1’s Personal Motivation and Positionality). This is a proposal that, as will be seen in the next sections, also coheres with the weight that the capability approach gives to freedom and solidarity in the course of development, and to the empowerment of people’s participation during the process. Morin argues that despite the apparent fatality of the world’s concurrent crises that make it seem like its disintegration is the only possible result, there is a chance for a metamorphosis – which has the same innovative radicalism of a revolution but that combines the latter with preservation, when required. It is a metamorphosis (change, development) that can emerge from the momentum created by the interactions among the very diversified proposals (initiatives) for development that exist throughout the world, which might not clash but complement each other if specific efforts are undertaken for that to happen for the sake of sustainability – because "the ties, developments and convergences of those countless initiatives might allow the opening of vias (paths) that can converge to form the via (the path)" to humanity (2011, p.39, own translation) (hence the Via Proposal). It is a “third way” that links (instead of confronting) contradictory thoughts. In other words, it is a development that recognizes (rather than denies) complexity should focus on promoting a humanity policy that operates by empowering the self-sustainability of the local initiatives, so that they can respond to the diversity of local problems with a global perspective. This conception implies that change (development) can emerge from any constituent of the social system, and enhanced by strengthening its relationships with the other factors and actors (internal or external) that relate to it. That is, by empowering each
of them, and leading, at the same time, their smooth growth and interaction to create a momentum for them to emancipate a new trend of power.

I find that the abovementioned proposal mirrors, at a global dimension, Mason's and Nordtveit’s proposals for implementation mentioned before: Their arguments would imply that massive interventions at all levels of the system in an integrated service delivery modality – that takes into account the different developmental dimensions in which a given educational initiative is situated – would trigger the momentum for desirable sustainable change to emerge from it. In the Via Proposal, this is translated as a set of interventions in as many levels as possible – not only within a particular educational initiative but also on the millions of educational and other development initiatives that are emerging around the world and on their interactions. The Via Proposal is basically Morin’s proposed strategy to deal with the ecology of action and the consequent unpredictability of any given policy action; a strategy that is founded on the recognition of the diversity and integration among the different constituents of the social system, all of which are relevant for its overall sustainability and yet, are unequally empowered; a strategy that makes the constructive participation of each development initiative (educational initiatives included) an “islet of certainty”, that together with the rest, and in the extent in which its autonomy capacity is empowered, can help us to navigate within development’s “sea of uncertainties” (2011); a strategy that with adaptation and flexibility overcomes alternatives (globalization/de-globalization, growth/de-growth, development/involution) and makes a clever use of all of them to catalyse the creative effervescence/momentum needed to shift the disintegration trend to one that has, at least, more chances for enabling the system’s sustainability. The Via Proposal, in short, is to give up on homogenizing and top-down solutions, and foster instead the joint development of “a plurality of reforming paths” (2011, p.34, own translation) by strengthening the autonomy capacity of the different education and development initiatives, and promoting their laces of cooperation and convergences. Empowering them and increasing the quantity and quality of their interactions, it is suggested, would precipitate the emergence of a new trend of development that, through a snowball effect, disrupts the prevailing one and
improves the chances for sustainability. This proposed alternative scheme of ownership is based, thus, on solidarity (common interest of survival) and freedom.

Having elaborated on the significance that complexity theory attaches to the distribution of power in education for sustainable development, and on the alternative scheme of ownership that it proposes, the following section explores the insights provided by the capability approach in these regards.

3.3 Capability Approach

On the basis of moral and methodological grounds that are remarkably consistent with complexity theory’s ideas, the capability approach also offers important insights into the issue of power distribution in education and development as an important pre-condition for improving outcomes in terms of sustainability. With aims of exploring such propositions, this section of the chapter describes first the informational basis on which the approach is sustained, that is, the areas on which it focuses to understand development praxis in terms of the sustainability factors and the concepts it utilizes to address these issues. Secondly, it reviews the importance that the approach attaches to power distribution and, consequently, the implications of its premises for development praxis. Finally, the section elaborates on the implications of the approach’s propositions for understanding the role and challenges for education's contribution to sustainable development.

3.3.1 Meta-cognitive Basis for Understanding Development and Sustainability

Answering any question in regards to development’s sustainability requires us to address, first, other questions: What do we mean when we talk about development, and whose development are we talking about?

This section explores the answers given to these questions by using the capability approach, which emerged from the works of Indian economist Amartya Sen in the 80s, and has been further developed by many authors – particularly by American
philosopher Martha Nussbaum. The propositions of both are the centre of this section\(^9\), and in particular their works *Development as Freedom* (Sen, 2000) and *Creating Capabilities: The Human Development Approach* (Nussbaum, 2012).

The approach emerged when the mainstream debate on economic development was (as it still is) dominated by libertarian and utilitarian currents of thought. It came up within this context arguing that the prevailing conceptual framework utilized for the design, analysis, and evaluation of development policies tended to rely on aggregative or economic-only data which, while important, was insufficient, because it excluded information that would enable a better understanding of how people are actually doing in their lives – about what people are actually capable of being and doing, and what are the opportunities that society has provided them to choose and lead the lives they have reason to value.

The capability approach acknowledged the important contributions of all approaches for different policy purposes. However, it claimed that none of them were addressing many crucial concerns for the understanding of development in a comprehensive way – i.e. the complexity and diversity of development's stakeholders and their respective aspirations, the influence of societal arrangements on their opportunities to achieve diverse functionings, their differentiated capacity to convert their achieved commodities and utilities into what they consider being *ad hoc* to their own well being, the distribution of functionings and/or more importantly, the freedom achieved and the extent of freedom available for these outcomes to be pursued.

In fact, the capability approach received a great deal of influence from political liberalism, particularly that elaborated by John Rawls, in that it pursues social justice and builds upon the idea of the importance of a social contract as appropriate capital to ensure people’s diverse rights and liberties. It also builds upon its concepts of “self-respect” and access to primary goods. Yet, it doesn’t agree with its disregard for

\(^9\) Sen and Nussbaum’s versions of the capability approach (also known as the capabilities approach) are not fully confluent in their purpose, concepts, emphasis, and some of their reflections. However, they share the core of its principles, which are the ones exposed here, unless specified.
the outcomes emanating from the political process. In this aspect, the capability approach coincides with utilitarianism's approach concern for evaluating the results of social arrangements (and not only the inputs they make) in terms of people’s achieved wellbeing. However, the capability approach does care about the distribution of those outcomes, and claims that utilitarians’ “aggregate” evaluations, in which a focus is given mainly to economic growth (especially in terms of income and GDP, growth, and industrialization), fail to shed light upon the impacts that these results have on different people at an individual level and in their certainly diverse circumstances.

One of the questions that lie behind which aspects we consider when talking about development and how do we define it: development of whom? In line with Kant’s philosophy and the human rights’ approach, the capability approach sees people as an end of development in themselves, whose rights are rooted on their being humans and not reliant on their race, ethnicity, gender, or other socially defined taxonomy. That is, it sees people not only as means to achieve a social objective – especially economic development. Therefore, while a utilitarian approach, for example, would value substantive freedoms (such as education or political rights) only in terms of their contribution to development, the capability approach sees them also as ends of development in themselves. Conversely, utilitarianism doesn’t give particular value to the process through which those outcomes are achieved, if they were democratically decided with full respect to human rights or imposed in the name of some prevailing power actor or discourse. Sen, 2000, elaborates on this through a deep and today still pertinent comparison between China and India’s political systems. Similar reasons differentiate the capability approach from Paul Streeten and Frances Stewart’s basic needs approach (BNA), which, according to Clark (2005), obviates the values that choice and participation have for development but doesn’t make them explicit as the capability approach does.

While we might all be fond of happiness, “we do not necessarily want to be happy slaves or delirious vassals” claimed Sen (2000, p.62). That is to say, for the capability approach, policies’ outcomes and the process through which those results are achieved are both crucial for the exercise of development. From its perspective,
freedoms seen "in the form of individual capabilities to do things that a person has reason to value" (Sen, 2000, p.56) are both the means and the goal of development. That is, freedoms have both a constitutive and an instrumental role. They hold an intrinsic value for enriching human life, and for allowing people to lead it in the way each person finds valuable. At the same time, freedoms are central for development’s effectiveness because it is people who should ultimately be held responsible for defining which freedoms are relevant for their own development and which are not, through a constant process of democratic public discussion based on people’s exercise of their free agency – not on what Sen calls their “psychological adjustment to persistent deprivation” (2000, p.67). This term refers to the influence that systematic poverty, for example, has on people’s expectations, the possibilities they can imagine for themselves, and the ones they cannot possibly imagine because they have adapted to a reality that has persistently neglected them.

All of this implies that for the capability approach, (and similarly with complexity theory, as exposed before), development is an integrated process, that, in seeking social justice, should aim at expanding human substantive freedoms and eliminating what impedes people to lead the life they want (unfreedoms) through, precisely, freedoms, that, connected with one another, draw the path that society choses for its development. Being an approach to human development that concerns social justice and well-being, its focus on the extent to which people enjoy these freedoms as (not the only but) key information to design, analyse, and evaluate development policies is mostly what distances the capability approach from other approaches that exclude that information. This perspective is also what makes the capability approach centre its focus on both human capabilities and societal arrangements, as well as the way in which they mutually influence each other.

The aforementioned are the overall characteristics that differentiate the informational basis of the capability approach from development’s mainstream approaches. To understand the approach’s position merely in terms of development’s sustainability, the following is a list of its core concepts and theses which, as will be evident, are consistent with the main ethical and methodological implications of the concept of
sustainability, implied not only by complexity theory but also by the Brundtland Report.

- Human Capabilities and Societal Arrangements

Income distribution and commodity holdings are certainly important variables that need to be taken into account when analysing peoples’ life conditions and the impact of development’s poverty reduction policies. But these are also not enough, as they, alone, cannot explain the extent to which each person can convert them into things that really matter for her.

Being concerned with poverty and inequality, the capability approach is relevant for both the rich and the poor, simply because, implicit in its conception of people as ends in themselves (and not as means for a greater social agenda), it is the recognition of their diversity. A myriad of contextual factors influence people’s conditions, needs, priorities, values, aspirations, and choices, as well as their differentiated agency capacity to convert primary goods into their aimed ends. That is, while informative, income alone doesn’t say much about the particular conditions that influence the real opportunities that people enjoy to achieve what they value being or doing in dignity. Income is a means, not a goal, and therefore assessing development’s success based on interpersonal comparisons only in terms of income “does not solve the problem but only evades it” (Sen, 2000, p.77). Depending on their conditions, two different people might have the same income and, still, differ in their real opportunities to achieve their ends. That is, for Sen, personal heterogeneities in regards to physical characteristics (e.g. illness, disability, age, gender, etc.), environmental conditions (e.g. climatic circumstances, pollution, etc.), social conditions (e.g. educational arrangements, public facilities, etc.), relational perspectives (e.g. cultural norms, traditions, etc.), and the way income is distributed within the family (e.g. who receives more money or who decides how to use it), are some of the most important sources of variation that can affect the extent to which each person can convert his/her income into the things he/she has reason to value. Yet, the same way that analysing people’s capacity to convert commodities provides
more relevant information about their well being than their income alone, so does recognizing and respecting the diversity existing among their aspirations and the freedoms through which those aspirations are fulfilled.

The concept of capabilities refers to the alternative combinations of functionings that people can enjoy. Considering what a person has achieved to be or to do (his or her functionings) is not enough to understand the freedom (or lack of) he or she had to achieve it. Recognizing the importance of people’s real and distinct living conditions (instead of average group considerations), and the intrinsic value of their substantive freedoms within the process of development, implies analysing, as well, *the actual alternatives (opportunities) that people have for freely and genuinely deciding what to be or what to do* – which is what is called their capabilities. It is indeed a concept that (its proponents have acknowledged) portrays a great deal of influence from Aristotle’s’ ideas of “political distribution” and eudemonia (“human flourishing”) (Clark, 2005). The capability approach argues that all humans have innate capabilities that can be further developed through the enhancement of other capabilities. For that reason, it advocates for the universal value of freedom as a principle. Yet, it recognizes that not all capabilities are relevant to all people. It is people who, through freedom and for freedom, should decide their own path, which might include taking decisions that appear to be in their own well-being’s disadvantage, or not taking advantage of all of the freedoms that are for them available (Sen, 2000, p.76). This genuine freedom of choice (people’s ownership) and the availability of substantial relevant and integrative options for making those decisions are the key factors that the measurement of capabilities adds to that of functionings and, consequently, the capability approach’s contribution to the selection of information that is relevant for the design and evaluation of development policies. This shares the core sustainability principles of the Brundtland Report.

This means that for the capability approach societal arrangements – influenced to a great extent by institutions of all kinds (e.g. markets, states, media, etc.) and by people’s participation – have a crucial role in permitting and promoting people’s capabilities by enabling or hindering the public debate, offering opportunities to
people, and influencing social values and shared norms. The understanding of development as a “process of expanding human freedoms” (Sen, 2000, p.36) requires a comprehensive analysis of the mutual influence between people’s capabilities and the social context within which they exist. How are the distinct societal arrangements enhancing or hindering individual freedoms? What is the stake of each of the public actors (including both the institutions and the beneficiaries)? How and to what extent are people, conceived as agentic (instead of passive) beneficiaries of social policies, supporting (or not) and shaping those social arrangements? The design, analysis, and evaluation of public policies have to take into account this bilateral relationship, its characteristics, impact, and possibilities in the integrated conception of the political, the economic, and the social arenas.

• **Agency**

According to the capability approach, for development to be legitimate and effective it has to be achieved through the exercise of people’s agency. As freedom is not only the aim but the guiding principle in our development process, people cannot be seen and treated as if they were only passive recipients of capabilities. People are also active agents that have interests, opportunities, initiatives, and responsibilities in pursuing and safeguarding them. This agentic capability is indeed built upon the values appropriated by people from their cultural context and exercised in accordance to their material and other personal conditions – conditions greatly influenced by the societal arrangements in which people live. Concurrently, this agentic capability also serves for changing the shape of those arrangements, and for defining the particular use that each person makes of his or her capabilities. Here again is the mutual influence and reliance that individuals and institutions or social arrangements have to each other (the recursive principle mentioned by complexity theory), and therefore the importance of political freedoms in setting the pace for their relationship’s procedures and objectives.

The capability approach argues that there would be no consistency concerning achieving peoples’ freedoms if the opportunities to discuss and decide on which of
them are important and how should they be pursued are not available to people. Just like freedom, agency has both a constitutive and an instrumental role in development: on the one hand, people’s participation in public discussions allow them to make explicit their conceptualization of what is important for their diverse needs and interests, and, on the other hand, it enables their understanding of the actual feasibility of their fulfilment and that of where emphasis should be placed (the selection of weights and trade-offs). Negotiation might not be necessary for each individual’s definition of his own personal priorities and choices, yet it is both important and effective for the valuation of priorities among people’s agendas and those of the other members of their society.

By enhancing people’s agency for the construction of their own and their collective lives, a democratic process of development opens Pandora’s box: everything can come out from it. Since people’s needs and aspirations are diverse, there is no way we can expect that even a consensus-driven development process will be effective in attaining people’s goals at a collective or an individual level. Although the capability approach does worry about the achievements of development as a process that has the concrete objective of enhancing people’s freedoms (choices) and removing their unfreedoms, it also highlights the importance (as already said many times) of being people who actually decide what they want and need, because that is what gives legitimacy to the process and it is the only way to respect their dignity. People’s political freedoms also permit the society to select and keep control over the appropriate agents and processes for the consecution of their aspirations, making the whole process more effective. This reliance on the public’s support serves as an incentive for those in power not only to encourage people’s agency to define the

10 Although the emphasis on “agency” (and the use of the concept itself) is much more remarked upon in Sen’s than in Nussbaum’s work, it is an essential premise of the approach because of its focus on both the intrinsic and the instrumental values of freedoms and choice. This has implicit the recognition of the importance of the process through which this discernment and procurement of choices and freedoms is made. Here it is important to note that while Sen mainly elaborates on this reflections through the weight he puts on legitimacy, Nussbaum does it by stressing the relevance of respecting people’s dignity and ensuring their readiness and responsibility to take advantage of their capabilities (See section 3.3.2 Implications for Development Practice: The Importance of Power Distribution).
content and relative weights of their demands, but also to give appropriate attention to them, to gain their favourable scrutiny, and avoid their rejection (Sen, 2000).

• **Multidimensional Aspects of Quality of Life**

Like other approaches, the capability approach highlights the influence that poverty has on people’s quality on life. However, by acknowledging that people’s lives are not only influenced by economic factors and that their aspirations and real opportunities (freedom) to fulfil them are diverse, it conceives poverty (as with complexity theory before) as a deprivation of capabilities (alternatives, choices), rather than income. That is, as people’s interests, values, conditions, and needs are so diverse, their quality of life cannot but rely on a complex and mutually dependent network of social, economic, and political activities, arranged by diverse institutions. For that, the approach gives particular attention to the interconnections existing between different spheres of life and, consequently, of people’s capabilities.

However, the mainstream development discourse not only privileges economic gains over other aspects of people’s situations, but also, and frequently, suggests the existence of a dichotomy between different capabilities – especially that among political and economic freedoms – without noticing that being overlapped, those aspects influence one another. In his book *Development as Freedom*, Sen (2000, pp.146-150) discusses the claim, frequently defended in international forums, that political freedoms hinder economic development. This proposition is known as the Lee Thesis, after Singapore’s former Prime Minister Lee Kwan Yew. It reads that the so-called developing countries’ economic needs are so urgent that they cannot afford to allow political rights to compromise their efficient resolution. Sen argues that posing the question in terms of which is more urgent (political or economic needs) to improve people’s quality of life, underestimates the deep influence that both spheres have on one another. The debate also goes on to say that some propose that democracy is a western concept, and that in poor countries people would always prefer to fulfil their economic needs rather than hampering them by the chaotic
consequences of accommodating people’s diverse political interests over those of “the State”.

Sen gives 3 answers to these arguments: first, he signals the obvious contradiction of the claim of people’s alleged preference for not being taken into account, stating that people would have to be consulted to confirm the claim itself. Second, he shows that the first argument is based on the false perception of the dichotomy between economic growth and political freedoms proposed by the Lee Thesis, and argues that the empirical evidence used to demonstrate the greater benefits of privileging economic development over political freedoms (that is, authoritarianism) is based on a narrow analysis of the factors that affect people’s quality of life (as previously discussed). Conversely, he refers to systematic empirical studies that demonstrate that the economic growth of most countries has not been inconsistent with their democratic frameworks. Third, Sen discusses the presumption that democracy is a western concept that privileges individual over collective gains. The safeguarding of people’s political freedoms bears consequences not only for the individual but also for the community as a whole. If well exercised, they enable the formation of people’s values, the public discussion of their priorities for social policy (including the conceptualization of their economic needs, that are not of simple nature either), and the selection of the appropriate agents and processes for their consecution. But it all, of course, depends on the extent to which people take advantage of the political opportunities opened up by democracy, that is, on their exercising of their agency capacity. Consecutively, as mentioned before, political freedoms also serve as an incentive for those in power to attend people’s demands and gain their political support, making the process more effective. Moreover, Sen contests the existing manipulation involved in this argument’s cultural interpretation, and argues that there are many traditional non-western narratives and philosophies that support political freedoms but that are misrepresented.

In short, the capability approach offers an integrated conception of quality of life that overcomes the prevailing dichotomies and addresses, instead, the mutual influence among life’s different spheres.
The above-discussed relationship between different spheres of people’s lives implies the conception of humans as systems that operate within, and are in constant interaction with, the whole of the society and the environment they inhabit. This relates to development’s sustainability insofar as this mutual influence derives from the legacy of the choices made by the generations that preceded us and, concurrently, affects the way and extent to which our decisions today, that is, the use that we make of our capabilities, will impact the reality with which the future generations will have to deal (Nussbaum, 2012, p.107).

The capability approach conceives the theme of environmental sustainability as an integral problem. Since people’s enjoyment of a capability set doesn’t obviously translate into one particular attitude towards the environment they inhabit (and as a consequence, the one that is going to be left for the future generations), people’s awareness of this relationship – that is, of their reliance on and impact over their natural environment – is of crucial importance. Nussbaum suggests that beyond our position if nature has an intrinsic value in herself or if it has only as much as it permits our individual existences (as she proposes), as organic beings that we are, we cannot but rely on the quality of the air we breathe, the food we eat, and the climatic conditions in which we operate. In the end, our health and survival rely on them. In weighing and exercising our different capabilities (economic, political, or others), it is unavoidable to consider the impact that they have on our natural environment, which, at the same time, is the one that has us here, living, making those choices.

The same happens with the two-way relationship between our cultural context and us. While the latter (that is the result of our appropriation of what was bequeathed to us by the previous generations) shapes our capabilities by setting norms, values, and patterns of behaviour, our present exercise of those capabilities (shaped by our judgements, our values) will have an impact on the cultural context within which future generations are going to enjoy and exercise their own capabilities. Thus,
people’s culture (customs, worldview, values) influences the way they construct their health, education, and other social arrangements. It affects the weighting they put on each capability and the choices they make among them (for some communities, for example, the education of girls might be more valued than in others). It also conditions people’s minds to adapt to (or challenge) their attitudes towards the choices they actually have to lead the lives they have reason to value. What people learn at home, at school, and from their interactions with the people that surround them has a great influence on the things they value, the way they work, their confidence in their institutions, their morals, and their conversion of commodities into functionings. That is, people’s background has an effect on their agency capacity for taking decisions in terms of their capabilities. But at the same time, those capabilities are the ones that, through the exercise of people’s agency in their participation and public discussions, shape their cultural background. Culture has a dynamic nature. As complex as it is, it not only transforms from within with the pace of people’s decisions and participation and the legacy from the past, but also it adapts to the constant inputs from other spheres of life (the economic, the political) and the influences of other cultural contexts, either national or international.

• **Capability Set**

The integrated nature of human lives implies that different capabilities influence each other and that, in some cases, taking advantage of one capability “may involve huge opportunity costs” for other capabilities (Clark, 2005, p.9) – which is what causes what Martha Nussbaum (2012) calls *tragic choices*. The best example to illustrate what this means (in terms of the purposes of this thesis) is the case of parents whose precarious economic conditions force them to choose between sending their children to school or ensuring their livelihood by asking them to contribute to household activities instead; both are obviously imperative capabilities. The "capability set" consists of the alternative combinations of functionings among which people can really choose and, therefore, a capability set that puts into contest different capabilities is definitely poorer than one that allows for their concurrent enjoyment.
Nussbaum (2012) argues that the capability approach differentiates from traditional human rights approaches, in its stress on the need for positive actions to turn rights into actual capabilities, that is, free choices that are actually available to the people. This implies that the ideal set of capabilities would be that composed by co-realizable choices. In other words, "offering a right" to people to receive education is not enough. Ensuring the conditions for people to take advantage of that right in the exercising of their agentic capacity is also part of the job. A capability set, thus, can be assessed in terms of the quantity, quality, and diversity of the capabilities it boosts (Sen, cited by Clark, 2005), and in the extent to which these capabilities are interconnected;

- avoiding capability failure, that is, addressing the specificities that impact the variation in the capacity that different persons or groups have to take advantage of a particular capability; and

- enhancing people’s agency to decide and choose among different functionings and address their different essential needs without compromising any of them (that is, without having to make tragic choices).

**Fertile Capabilities and Corrosive Disadvantages**

Acknowledging the interrelations existing between different capabilities permits to understand the way in and extent to which they influence one another. Besides their intrinsic value, capabilities have an instrumental role on development, as they can catalyse or hinder the expansion of other capabilities. Fertile capabilities are those that have a larger impact on enhancing other capabilities, which for Sen is the (not exclusive but illustrative) case of economic opportunities, political freedoms, social facilities – which include education – transparency guarantees, and protective security. The same way that some capabilities have a greater impact on the enhancement of other capabilities, other factors, known as corrosive disadvantages, also have a huge potential for hindering freedoms, which might include slavery and systematic violation of human rights.
The above list of concepts and theses utilized by the capability approach to address the issue of development and its sustainability enables the following section’s exploration of the implications of its premises for development praxis which, as will be detailed, suggest that the approach attaches a great deal of importance to the problem of power distribution for sustainable development.

3.3.2 Implications for Development Practice: The Importance of Power Distribution

How does the approach’s propositions relate to the problem of the consequences of the current distribution of power for development’s sustainability presented in Chapter 2, and what would be the implications for its implementation? Understanding development as freedom, which is what the capability approach suggests, implies incorporating human capabilities within development’s informational basis. This proposition bears important consequences for policies’ design, implementation, and assessment in terms of sustainability:

It implies considering the impact that the cultural and material legacy of the previous generations have on the values and beliefs that influence the way people today promote and take advantage of their capabilities. And the same way, requires policies’ attention to the impacts that the setting of priorities and the exercise of people’s capabilities today can have on the context (cultural, environmental) in which the future generations are going to enjoy their own capabilities.

Additionally, Sen (2000) proposes that giving practical shape to the foundational concern can be done by partially or fully replacing the existing analytical/evaluative tools (that currently focus, principally, on income distributions), for an assessment and comparison of vectors of functionings or capabilities. He proposes adjusting the available information about incomes by incorporating information about their determinants (level of education, health conditions, etc.). It therefore requires making situated evaluations of those capabilities, that is, analysing not only the set of choices
available to people but also the context in which those choices exist and are (or not) taken by people on the basis of their agency and responsibilities (Alkire, 2005, pp.123-124).

On the other side, by demonstrating the interconnections that exist between the different capabilities and the influence that these interconnections have on people’s well-being, the capability approach highlights the effectiveness of concurrently 1) enhancing freedoms that support one another and removing unfreedoms for making the process of development more sustainable and, 2) prioritizing the promotion of fertile capabilities – the ones that have a greater and more lasting impact – and the removal of corrosive disadvantages. In terms of the latter, at the national level, Sen discusses two main paths that have been followed by national states to implement capabilities-related policies. The first one is a “growth-mediated” process in which fast economic growth is privileged and its fruits utilized to expand the social arrangements that enhance other kinds of capabilities (the education system and the health care services for example). The other one is the “support-led process” that privileges investment in proper social services even if it results slower economic growth. Although he considers that the “growth-mediated” process might be more viable and effective for poor countries because of the great deal of deprivations that, in terms of capabilities, they have and that they cannot address altogether without the proper amount of resources, he stresses that the choice among these approaches has to be done through public discussion, together with the setting of weights and definition of priorities for public investment (Sen, 2000, pp.46-48).

Putting into practice the capability approach also requires, Sen suggests, the need for a comprehensive analysis on the way in which societal arrangements are influencing (supporting or hindering) both human capabilities and each other, so that existing policies can be evaluated and new ones devised. It also requires the setting and development of a wide net of integrated private and public institutions that contribute to the construction of sets of co-realizable capabilities for the individuals that ensure that people have a positive access to those capabilities and prevent their need for making tragic choices. These include social welfare facilities, non-governmental
organizations, the markets, a consistent legal framework, an electoral system, etc. that interact with one another.

However, the approach warns that it is important to consider the role that not only the individuals but also the diverse institutions and agencies through which they organize have in the shaping of the landscape for the enhancement and exercise of different capabilities. It is, remember, an approach that aims at social justice, a motivation based on its diagnosis of development’s inequality in terms of capabilities and in terms of the distribution of power, that is, of the real opportunities that different individuals have to negotiate with others (by themselves or through their units of social organization – the individual, the family, the State, the NGO, the enterprise), the goals and means of development they aspire. Thus, it considers that the capacity of agency that each person has to decide and choose among its different capabilities and how to enhance them is a fundamental goal and means of development.

The proponents of the approach consider that currently there is not an egalitarian negotiation of agendas not only among people at an individual level but also among their different units of social organization. Developing countries, for example, have less of an impact in defining worldwide-impact policies than multinationals, financial markets, or richer countries. And the same happens with intergroup contrasts within national states, where national interests or development standards frequently contrast with those of smaller community organizations whose power to contest them is certainly smaller. This inequality challenges people’s agentic capacity, influencing the distribution of rights and responsibilities and thus hindering the possibility of dealing with diversity effectively.

While calling for the simultaneous consideration of the roles and weight of different institutions in regulating the social arrangements that affect people’s capabilities, the capability approach has a special interest on democratic national states, that, being systems of principles and laws emanating from the people, represent the ultimate expression of their autonomy and the greater existing level of autonomy that humanity has created (Nussbaum, 2012, pp.139-143). Consequently, for the
proponents of this approach, national states carry the principal responsibility to ensure that their people enjoy the freedom to do and be what they have reason to value. However, recognizing that national states are hyper-complex systems as well, Nussbaum suggests that, in addition to public participation through elections, public discussion forums, and scrutiny mechanisms, national states can procure plural relevance through the judiciary system. By gradually framing the legislation through the making of sentences for concrete exceptional cases, the judicial system of a country allows for the tuning of general regulations to the particular contexts in which they are implemented. Moreover, Nussbaum argues that while there is not enough available information with regards to which level and which type of decentralization would be necessary to enable an equal negotiation among the agendas of people’s different units of social organization (2012, p.148), it is important that development policies recognize their diversity and aim at the equal re-distribution of their power, obligations, and responsibilities, to revert the prevailing unbalance within and beyond the national states. She also advocates for differential measures to address the particular needs of, for example, minority groups, which could be shaped into what is known in the United States as “accommodation”, that is, exceptions given to minority groups in their responsibilities towards general regulations that directly affect their particular beliefs and values. In that, I consider, she contradicts herself and distances from the approach’ core values: taking into account the influence and importance of people’s agency for the promotion and use of their set of development choices (capability set) implies respecting their dignity, that is, their role as active rather than passive beneficiaries of social policies; their right, as adults that they are, to choose their own future – weighting and setting their own priorities. And that should apply to every individual regardless of his race, gender, class, ethnicity, and likewise, as Nussbaum herself has suggested.

What is important to note is that the approach recognizes the inequality that exists within the power relationships of the development agendas of different individual or collective units of organization (institutions, agencies) that, integrated, operate at different levels. It claims that those inequalities hinder the enhancement of freedoms,
that is, the process of development, because they restrict people’s equal agency capacity and therefore reduce the possibilities for development to be effective, legitimate, and relevant to different contexts. Correspondingly, the process of development requires both of enhancing such an agency and enabling proper participation mechanisms, so that contesting agendas are negotiated in an equal basis and in an effective and legitimate manner.

Another consideration that the implementation of the capability approach requires in terms of sustainability is what its proponents call “protective security”, that can serve as a social arrangement's tool to protect freedoms in different times and circumstances. In this regard, according to Clark (2005, p.9) there is a strand of research that criticizes the capability approach for underplaying the importance of negative freedom vis-à-vis positive freedom. But the truth is that, in its normative focus, the approach’s defendants have split in two main currents, which are closer to either Amartya Sen or Martha Nussbaum’s version.

Nussbaum (and others such as Alkire, Black, Clark, Desai, and Robeyns [Clark, 2005, p.7]) considers the approach useful to establish a threshold of capabilities that, like human rights but with information that is closer to people’s actual living conditions, can be promoted and demanded for the empowerment of all humans (and rational beings), so that they can enjoy a minimum degree of justice and develop other less fundamental capabilities regardless of the political environment where they happen to be born.

Capabilities are the set of real opportunities available to each person to be or do what she has reason to value, which means that they cannot be understood as isolated units but, rather, as a complex network of factors "that influence and shape each other and that should materialize, ultimately, as a complete block" (Nussbaum, 2012, p.115, own translation): for Nussbaum, every person has an innate set of skills, abilities and aspirations (called basic capabilities) that influence the extent to which he/she can be or do valuable things. These capabilities can be matured and developed with the support of societal arrangements to enrich his set of opportunities, becoming what
Nussbaum calls the internal capabilities – “‘developed states of the person’ or ‘mature states of readiness’ which ‘are, so far as the person herself is concerned, sufficient conditions for the exercise of requisite functions’” (Nussbaum [2000, pp.84-5], cited by Clark, 2005, p.9). However, the internal capabilities per se are not enough to ensure that the person can be or do what she has reason to value. Of equal importance is the environment that enhances or hinders the person's real opportunities to take advantage of such capabilities. A person can have the innate ability to identify what she needs to ensure good health and nutrition – an ability that can be further developed with the support, for example, of education, so that he knows what to do when the time comes to prevent diseases, plan a pregnancy, and so on. But if this same person, as Nussbaum suggests as an example (2012, p.59), is not allowed to exercise such ability due to, say, a local culture that forbids the decisions she wants to take, then this person does not enjoy a set of real opportunities to exercise his freedom. The combination of a person's internal capabilities to choose and do with such external conditions that enable or hinder their materialization are called the combined capabilities. While this suggests that society has the double task of enhancing the development of both – people's internal capabilities and the conditions for such capabilities to exercise with substantial freedom – Nussbaum suggests that as a matter of basic justice society should, at least, secure a threshold of internal capabilities for each person.

She considers that without a minimum of internal capabilities people cannot really be an agent of their own process and transform their context to further open and secure opportunities to lead the lives they want, and, since these internal capabilities require of the support of the surrounding social arrangements, society must ensure that, at least the majorly agreed fundamental internal capabilities are protected for everyone regardless of their personal and social circumstances. Moreover, she considers that although it is impossible to attach a global value to any given group of capabilities, an agreed threshold list of fundamental and therefore globally applicable capabilities can be established and continually revised through public debates. This list should contain everything that can secure democracy and all of the central tasks that justify the existence of governments, given the prime responsibility and capacity that the
author sees on them to procure those capabilities. With persuasive arguments, she has even made her own list, after years of research, of what she considers are the capabilities that everybody should have the right to hold.

However, while for Sen some capabilities have more importance than others due to their greater degree of influence in other capabilities, he abstains himself from establishing, and less so promoting, any given capabilities’ threshold. He considers that a legitimate development process is one in which people are, at all times and places, responsible and free/capable of setting and weighing the priorities among different capabilities, defining and deciding them through constant public debate and democratic exercises of human freedom, through agency. For Sen, achieving social justice lies in assuring all individuals have equal opportunities to define, enhance, and protect their capabilities. That is, the opportunity (choice) to define, at all times and places, how to achieve well-being is a constitutive part of the person’s well-being itself. Therefore, despite the fact that Sen’s version also has a normative motivation (that is, it doesn’t only intend to highlight certain information that has to be incorporated to the development debate but suggests that this information is used for comparative and evaluative purposes on the work of social institutions), he insists that development is an on-going process that, in seeking social justice and quality of life, has to aim for freedom through the permanent exercise of freedom.

Through Nussbaum-Sen’s mismatch, the capability approach addresses the international polemic that still tries to understand to what extent global agendas can/should be erected and sustained on people’s agency and how they can help/hinder individual/local’s development. But beyond this substantial difference, for both versions of the approach it is important that institutions positively enhance and ensure equal access to capabilities through and for the exercise of people’s agency. In doing so, a practical consequence of the capability approach (and like complexity theory) is privileging freedoms and agency vs. over-control because, despite the additional complications that a democratic selection and implementation of priorities might carry, the truth is that there is not a “wonderful formula” (Sen, 2000, p.78) that can provide perfect ready-made solutions for every single social problem, so we will have
to resign ourselves to the fact that, at the end, what matters is what we can collectively afford to aspire toward the future and how do we equally negotiate our different approaches on how to achieve it. Over-control, Sen argues, causes corruption, underplays people’s agency and freedoms, underestimates people’s dignity, and impedes development to being relevant at multiple levels and dimensions. The promotion of positive freedoms requires policy adaptation and flexibility, which implies decentralizing the decision making process and empowering the weakest of development’s stakeholders. This way the individuals who are directly affected by development policies are the ones who provide the information that is appropriate to their real circumstances so that policy design is adapted to them. Also, these are the same individuals who decide on the weights and priorities for the goals and means of the development policies that target them, rather than mechanical or standardized criteria and mechanisms.

For the capability approach, both people’s agency and spaces for public discussion are key to enable the egalitarian negotiation among contesting development agendas, which, in turn, contribute to the sustainability of development practices by allowing their customization to the contexts, needs, and interests of different levels of people’s social organization while legitimately respecting their dignity.

### 3.3.3 The Case for Education

The above sections of this chapter explained the main theses and concepts of the capability approach, as well as their main implications for policy praxis – which suggest the importance of power distribution for effective outcomes in sustainable development. With that background in mind, this section focuses on the capability approach’s positioning on the role of what it considers one of the most important capabilities – education – and on the implications of this approach on its particular policy design and evaluation.

For Sen (2000), the opportunity to receive education has a great instrumental value for the person that benefits from it, because it gives him/her the necessary skills to
become more productive and, hence, increases chances to earn a higher salary. Consequentially, education also serves as a public good that has the potential to contribute to society’s broader economic growth. But beyond this instrumental importance (that he complains is only one that utilitarianism recognizes), education also holds a substantive value for freedoms because it enhances people’s capacity for directly improving their quality of life. Since the conversion of incomes and other resources into the things that they really value is influenced by the appropriation they make of their social context, educational arrangements have a direct role in defining and shaping people’s opportunities and their choices among them. That is, as Clark (2005) suggests, education helps in tackling capability failure by addressing the specificities that affect the variation in the capacity that different persons or groups have to take advantage of a particular capability.

Sen claims that there is strong evidence that demonstrates, based on inter-country comparisons, that education has a direct bearing to the reduction of mortality and fertility rates, and holds a global value because of its potential to procure people equal opportunities to survive in the context of a world in which modern communications (which require basic educational skills) are so crucial. Education can also contribute to resolve – through empowerment and not coercion – the urgent problem of demographic control, which is, in turn, Nussbaum adds, related to that of our abuse of the environment. With regards to its supply, Sen considers that although growth-mediated development might be more effective than supporting-led development for enhancing people’s capabilities in general (especially in poor countries), the case of education's crucial role on promoting economic development makes it the more necessary that its provision is not circumscribed to economic growth (Sen, 2000, p.49). However, his personal position is not clear in regards to the debate about whether education is an inalienable right that the State has the obligation to fund it, or if that responsibility should lie on the recipients on the basis of their need for the service and their capacity to pay for it. What he does say is that, considering the serious limitation of funds that some national states have, no “pre-economic social principle” should be the criterion for making decisions in this regard. Yet Sen insists on the importance of supporting educational arrangements because of the particular
advantages of elementary education and literacy over other capabilities for nurturing participatory skills and opportunities (which require knowledge), and for giving people elements to exercise and inform their reasoning, so that they can calculate and pursue their own obligations and aspirations in regards to crucial decisions, for example, the extent to which they want to preserve the values and traditions (that is, the culture) of their society. Here it is obvious the mutual influence that (as mentioned in earlier parts of this chapter) educational (and other) social arrangements have with the empowerment of people’s agentic capability to transform or preserve them. That is, although Sen alleges that denying schooling opportunities to children is contrary to participatory freedom, he is careful not to be too specific about the shape that this supporting argument should have in its implementation (not only in terms of funding but also in regards to enforcement).

In line with the debate mentioned above, Nussbaum (2012, p.185), on the other side, claims that education is one of the few capabilities that can be legitimately enforced by the State, that is, that should be mandatory to all children without giving them the opportunity to choose. While it is not clear if this position assumes that the responsibility of its funding should lie with the State, regardless of people’s capacity to pay for the service, this deference in the particular case of elementary schooling opportunities and other measures related to children (such as prohibiting girls’ marriage) is sustained in the argument that children’s agency is still immature and, therefore, they are vulnerable to their parents’ pressure to, for example, work and support the family instead of attending school. Although she says it is understandable that these kind of situations mostly happen for children whose parents’ economic conditions are very weak, she insists that education is crucial for the enhancement of other types of freedom and its fertile potential to enhance a person’s future opportunities, makes legitimate its’ becoming not only a right but an obligation. Since a State’s responsibility is to procure the political (and other) capabilities of their future citizens, it is imperative that they promote aggressive positive measures that ensure that all children have the obligation to attend school at least until they turn 16 years old, even if that implies limiting parents’ autonomy to decide for the education of their children or going against their demand for their children to support them in
the fulfilment of the economic needs of the household. Yet, as it was also mentioned earlier, she also says that in such situations the State has to take differentiated measures so that both the economic and the educational capabilities are safeguarded and people don’t have to make tragic choices among them. That is, it has to ensure positive rights that will, in the longer term, reduce capability failure.

In this aspect, Sen fully agrees with Nussbaum, but not for the same reason. Although they converge in the view that education, like any other component of the capability set, should be defined through public participation, he does not directly address the particular situation of children where it is not clear if the freedoms to exercise their agency should lie with themselves, their parents, or with society as a whole (remember what was mentioned above about Sen’s lack of a final position in regards to the responsibilities for funding education). However, although Sen highlights the educational effects that outside employment has for women, for example, because of the exposure it gives to the world outside the household (Sen, 2000, p.192), he argues it is a social obligation to repudiate children’s labour, which he considers a “nasty issue” and “barbarity” (Sen, 2000, p.115), on the grounds that children should not be forced to perform exacting tasks. Yet, Sen also recognizes that it is adverse to the children themselves to abolish their force labour without first addressing the economic needs that force the families to require that labour and face these tragic choices.

Nussbaum considers education one of the few capabilities that represents a fertile capability all over the world and at any social time, because it is the internal capability that most prominently influences people’s capacity to exercise their combined capabilities (see the previous section of this chapter) enlarging, for example, employment opportunities and acquiring political skills – making each person more independent and agentic and, therefore, less reliant on the family or other people. Moreover, it has the potential to shape the psyche of people and create emotional tendencies (motivation) that either hinder or support the substantive and instrumental value of freedom within society (Nussbaum, 2012, p.212), as well as the formation of altruism and solidarity – what she considers the stabilizing factors that
influence the extent to which a capabilities-focused model can be effectively implemented (Nussbaum, 2012, pp.119-120). Because although the agency role of the individual is certainly not alien to its being a member of a community that participates in diverse social, political, cultural, and economic joint activities, people’s awareness and concern on this mutual reliance with their context is not a given. People’s willingness to participate in, and support a development process that is based on and prosecuted for and through freedom and equality, she says, depends on their sense of altruism and solidarity. Without altruism and solidarity as stabilizing factors, a capability approach to development simply has no chances to succeed. Therefore, the capacity of social arrangements for building on and promoting people’s altruism and solidarity is of crucial importance, and the school, in this respect, has a central role.

Sen also recognizes the potential that education has for influencing our mental conditioning and adaptive attitudes towards our real opportunities in life to live the lives we have reason to value and our equal value in society. Education can broaden our informational base, that allows us to understand what we really want, what of that is actually feasible, and what makes us equal to the rest of the society.

Nussbaum’s perspective on the potential that education has for enhancing people’s empowerment in fighting against inequalities is crucial in understanding the role that the capability approach has for education either in the procurement of social justice or the reinforcement of the current unequal status quo. I might conclude that for the capability approach, education is a crucial fertile capability because of its integrative function and its central role for safeguarding people’s dignity, equality, and opportunities. To take advantage of this potential, however, to contribute to human comprehensive development, Nussbaum argues, education has to be more than literacy and numeracy skills (that are the most widely valued because of their marketable character). The overall educational experience has to promote other abilities that are crucial for the enhancement of people’s different capabilities and empowerment. To do that, it has to be sensitive to (relevant to) the particular cultural,
social, political, and economic circumstances of its recipients. According to the exponents of the approach, the adaptation of the educational and other services to the particular contexts in which they are provided (their integration) requires egalitarian public participation, discussion, negotiations, and trade-offs among peoples’ diverse agendas.

The above confirms the clear consistency of the capability approach with the main implications for the concept of sustainability as per its definition in the Brundtland Report in terms of the sustainability factors. The following section will explore how these ideas converge as well with those of the complexity theory. This will serve to define the feedforward patterns of expectation on the significance and implications of increasing the self-sustainability of educational initiatives – which is the line of inquiry followed by this research.

3.4 Feedforward Patterns of Expectation on the Significance and Implications of Increasing the Self-sustainability of Educational Initiatives

How do the insights of these theories, by approaching education as a development initiative itself, enable the research questions of the thesis to be addressed, that is, the significance of increasing the self-sustainability of educational initiatives for effective outcomes in sustainable development, and the considerations that should be taken into account for building on that self-sustainability?

Complexity theory (in the version of Edgar Morin) and the capability approach (in the versions of Amartya Sen and Martha Nussbaum) offer a series of reflections that help to respond to these questions with an end-to-end consistency, both among themselves and with the sustainability imperatives of the Brundtland Report. This section presents such reflections in two stages. The first part describes the confluences and complementarities among the two approaches’ propositions in regards to the importance of power distribution in development as a pre-requisite for sustainability and some of their implications for policy practice in general, and the second for educational development in particular.
3.4.1 Confluences and Complementarities that make Self-sustainability
(Agency/Autonomy) a Factor of Particular Significance for Development’s
Sustainability Concerns

There are a number of meta-perspectives that make the complexity and capability
approaches perfectly consistent in their interpretation of development processes,
especially in terms of the theoretical and ethical considerations regarding
sustainability that, reflected in the Brundtland Report, mankind has brought to the
table. These meta-perspectives that built upon an informational base that makes them,
furthermore, deeply complementary in terms of the significance and implications that,
in the interests of sustainability, involves putting the factor of the distribution of
power among development actors at the centre of attention.

This informational basis is consistent for the following reasons:

First of all, it results in a systemic approach from which the organization of humans’
interests and needs is conceived as a set of concurrent processes that occur through
social systems which, operating at different levels (from the individual, his
community’s institutions, the State, the Globe), influence each other. This proposition
carries the notion of systems that are both closed and open, that is, that organize (and
reorganize) themselves through both their internal regulatory dynamics and those that
deal with the subsystems that constitute them, and the supra-systems of which they
are part. This condition, represented in a hologramatic fashion at all of the levels that
make up the greater social system (from the international community to the individual
and vice versa), calls for understanding the development of the former as a process
that converges its own organizational (and reorganizational) dynamics with those of
each of the subsystems that constitute it, and for which consequences are thus
reflected in (and therefore are relevant to) each of them. It is thus based on a recursive
principle. The whole influences the part and the part influences the whole, as Morin
says. The social arrangements influence each individual’s capacity to meet his
interests and needs, and he – in accordance with such needs and interests and with the
demands of his environment – transforms these societal arrangements, as for its part says the capability approach.

This bidirectional relationship suggests, in parallel, that social systems (including their interests and needs) are dependent on each other: the individual on his small-scale organized community (public or private organizations) and the small-scale organized community on the nation. Likewise, the nation, by cohabiting the greater Earth system with other nations, is dependent on them too, because the output of each of these systems represents an input for the others, that is, obstructs or enriches them, delimits and empowers them. Thereby, the individual is not immune to the interests of the rest of his community whom, in turn, cannot ignore the dynamics that at a national level negotiate his interests and needs with the rest of his countrymen and, through multilateral organizations, those of the citizens of other nations. Likewise, it is these individuals, their interests and needs, which give reason for such negotiations, which, in terms of their own agendas, adopt or reject their resolutions, modify them, give them meaning. This is delimited by larger and more complex systems of representation and organization. It is the unitas multiplex principle, mentioned by Morin, in which diversity and unity are both realities of the systems – realities that impact their behaviours and that impose challenges upon them, such as that of their self-eco-regulation, which synchronizes systems’ self-regulatory processes with those that they make in coordination with their environment.

This forces us to divert our attention to the relevance that policies render at different levels, as well as to the interests and needs that originate them. That is, to the causes and the impacts that society’s organizational processes have both at an aggregate and at an individual level, because they all interact and influence each other. It therefore suggests the need to observe the inputs that each one of the social systems, in each of its levels, receives from other systems whose organizing principles do not obey to social issues (their environment), and how do these inputs affect their own organization and force them to reorganize themselves. That is, to consider how the regulations that such systems make for their own interests and needs impact social systems – the clearest example of which is the way in which nature, through its
subsistence dynamics (the transformation of the genetic code for example), modifies humans’ conditions for satisfying its own interests and needs. At the same time, the concept of systems that are both closed and open brings our attention to the impact that the outputs of social systems have on their environments which, being part of a greater system, adopt them as their own properties to meet, again, their own needs. Following the same example, humans make use of this genetic code to transform their reality (e.g. changing the genetic code too!). Furthermore, it points to the effects that this bidirectional relationship between the individual and his environment has caused (and will continue to cause in the future) on the interests and needs of other individuals, and in their relationships with that environment. All this brings us to the recursive principle in which the human (and his organizational systems) is both a product and a producer of what produces him (as Morin says); the product of his culture and his environment and generator and those that will affect the future generations (as said, on its part, by the capability approach).

The attention to the interactions between systems and their environment calls for understanding the multiple dimensions in which social systems operate – all highly influential, simultaneously, in their own organizational processes. However, both approaches stress that each system operates in a context in which these dimensions are interposed differently. In the case of the individual, for example, cultural norms, environmental conditions, and genetic and psychological determinisms, as well as the mechanisms that each individual has at his disposal for coping with them, are different. This diversity imposes specific challenges for the procurement of his needs and interests that are different from those brought upon by other individuals, because the capacity each of them has to process inputs is unique. Sen elaborated on the influence that personal heterogeneities have as sources of variation in the ability of individuals to convert their income into functionings that he personally requires and to which he really aspires, that is, into what is relevant for him. Morin did so as well, through his analysis of individual’s subjectivity. Again, although this occurs differently for each individual, it is possible to generalize that multidimensional organization happens to all individuals, and in a hologramatic fashion to his upper organizational systems. Switzerland and Mexico are two nations who do not aspire to
the same; each of them has more or less demographic pressures, more or less economic impact worldwide, mechanisms for regulating their internal interests that are more or less decentralized, etc. Both educational initiatives, the Solar Night Schools Program of the Barefoot College does not serve the same population that Mumbai’s educational system does; it does not have the same amount of economic resources; it does not operate in the same type of geographical environment, etc.

On the other hand, although these conditions differ for each social system, they also bind them. The principle of unitas multiplex mentioned above then takes a multidimensional character. Not only are social systems united in their diversity by their organizationally hierarchical mutual dependence, but also by the common challenges imposed by the multidimensional context in which they operate – which requires them to think, organize, and reorganize their common and yet differentiated destiny in coordination. Both Switzerland and Mexico suffer the effects of the pollution generated by their diametrically different (quantitatively) populations, both design their economic policies in consideration of WTO rules. Thus, actions emanating from their mechanisms of regulation of domestic interests and needs interrelate and impact one another. The emergence of the knowledge society imposes on both the SNSP and the educational system of the city of Mumbai to incorporate into their curriculum the development of literacy skills; the reduced amount of financial resources available for education forces them both to search for strategies to ensure their financial sustainability; their belonging to the same nation state makes them both subjects of law to the national constitution.

The above gives an idea of the implications that this systemic conception of development has for the also systemic concept of sustainability – its relationship with the integration and relevance factors, and their mutual influence. But the confluence between the two theories in the hologramatic and recursive principles and their emphasis on the inter and intra systemic interactions results in another coincidence: the notion of what complexity calls autonomy and that, it is suggested here, corresponds to what the capability approach calls agency.
As mentioned before, there are several, multiple, diverse, and yet common determinisms (both intra and extra systemic) affecting the processes of organization, that is of development, of social systems (from the individual to humanity). Such determinisms (that obey to the agendas of the other systems) sometimes coordinate and others conflict with each other, sometimes behave as planned and sometimes surprise us by their unexpected appearance. Therefore, the capacity that each system (at all levels) has to deal with (convert them) in the benefit of its interests and needs (in their various dimensions) is crucial for its survival. Simultaneously, as a subsystem component of larger and more complex social systems, each system requires that the latter’s needs are effectively met hand in hand with its own. This demands a range of skills and knowledge (about itself and about its environment) that allow it to develop and exercise the abovementioned capacity. It is precisely the quality (capacity) that complexity calls *autonomy* and the capability approach *agency* which enables systems their effective discernment between what serves them and what does not, what they (and the other systems that regulate their interests) require and what they don’t. That is, the concept of agency/autonomy is linked to the capacity of systems to make their own choices and reorganize while setting the conditions for this agency/autonomy to further develop. For the same reason, enhancing systems’ agency/autonomy capacity is not only relevant for themselves. Since it is in the interest of the greater system to ensure that its subsystems enjoy sufficient capacity to respond effectively to its own needs, it is clear that it is on its own interest as well that these subsystems are able to, in turn, resolve their own – and the other way around.

In fact, the capability approach (at least in the versions of Sen and Nussbaum) uses the concept of agency, directly, only at the individual level. They describe the role that agency has for his beneficial use of his capabilities (so that he can lead the life he has reason to value), and for their operationalization. However, the approach also explores (though indirectly) the role of agency in the negotiations that each individual does with the other individuals of his or her community. Specifically, Nussbaum (2012) moves the analysis of this role at the level of the democratic states (which she considers systems of principles and laws emanating from the people that represent the
ultimate expression of their autonomy and therefore depositories of responsibilities that deserve special attention – and pressure), the international agencies, the companies, and NGOs. Yet, the author questions these agencies' responsibilities and negotiating power in terms of the needs and interests that they represent. So, indirectly, the capability approach applies the hologramatic principle to the concept of agency (and her reflections on the role of agency give a hologramatic value to the principles of the approach). Agency as a resource for forging individual’s capabilities (that is, the options to them available to meet their interests and needs) and therefore custodian of responsibilities for their decisions; agency, concurrently, as an innate resource potentiated through the exercise of the same capabilities through the existing mechanisms for the organization and negotiation of interests, because it is these that shape the societal arrangements that define the possibilities of choice available (that is, the conditions) to consolidate that agency. Thereby agency, like freedom, has both a constitutive and an instrumental role in development. Ergo, the applicability of the concept of agency to other levels of social organization (which is immediate in the complexity theory due to its hologramatic principle), is justified by the emphasis that the approach puts on the importance of structures for the egalitarian trade-offs between the interests and needs of different social systems at different levels (to which capability refers as institutions, organizations, nations, enterprises, agencies), and on their responsibilities to those who they represent and to the others.

This emphasis on the importance of agency/autonomy, as a capacity that mediates between the different interests and needs that simultaneously affect and motivate systems, stresses the value of their own subsistence needs, but also delimits their borders in those of the others because, as Morin explicitly says, no system is (nor it can become) absolutely self-sufficient.

The above implies it is needed to improve the mechanisms through which different individuals negotiate to decide how best to meet their different needs at different levels and that it is important to create the conditions for such negotiations to be relevant to different interests. It also implies that the system helps its subsystems strengthen their innate capacity for agency/autonomy; and, implies that this capacity
is the one that modifies the conditions of its own emergence – including the social arrangements through which it will exercise– on the recognition of the dependence it has on the sustainability of the other systems. It does that by using its learning aptitudes and knowledge, which allow it to know what it needs and what it doesn’t.

From this perspective, the challenges that the global system is now facing for its sustainability are derived from the omission (with or without knowledge) of part or all of this information in the design and implementation of development policies. From the little consideration that is often made of the implications that human actions have at different levels of the system and outside it, of the various factors that influence how each of them is affected by these and/or determine them; from the constant disregard of the importance of agency/autonomy, as quality of individuals, their organizations, their governments, to regulate in a balanced way the multiple interests and needs that affect them and on which they have an impact. This exacerbates, as a result, a condition of inequality in which the interests and needs of those who have greater power to effect their agency or autonomy prevail over those with less. It also exacerbates the tendency to over-control leading to the a-critical transfer of policies, that hinders the chances that the particular needs for sustainability at local and/or individual level are met, and hence, that those at a global level can be favourably resolved on the basis of egalitarian negotiations. It restricts, thus, the range of possibilities that are presented for both humanity and for each of its members to make changes, that is, to carry out the process of development, of organization, and of reorganization.

For this reason, both the capability and the complexity approaches make a call to change the conditions of the existing regulatory processes for the sake of a better negotiation between the interests and needs of the systems that respond simultaneously to both their diversity and common destiny. This involves expanding the range of choices, possibilities, capabilities, paths, so the agency/autonomy is developed and exercised. That is, extend the scope of freedom. But it implies, in turn, the need to consolidate a cohesive element that encourages the interest in this negotiation, in its egalitarian character, and its effective results – which for both is
embodied in the resources of solidarity and altruism;\textsuperscript{11} the imperative for global sustainability, as a pragmatic motivation for seeking more equitable mechanisms for negotiating interests and needs.

Clearly, interests and needs are multiple and diverse and thus, sometimes complement and others conflict with each other. This means that not all of them can be satisfied and, therefore, that not all systems and subsystems can be sustained, as the sustainability of some may involve the need for decay of the other. What both theories suggest in these regards is that the quality of the structures through which the negotiations are made, that is, the quality of the interactions between systems, is key in the extent and form to which the needs and interests of each of them are met both according to their own determinants and (due to the previously discussed interdependency) those of the global sustainability.

Since these structures function as brokers between inter-systemic interests and needs, it is evident that they require both inter and intra systemic qualities that produce and regulate them. As mentioned above, one of those qualities – and of crucial importance – is that of agency/autonomy, which needs to be also modulated (limited) by those structures of negotiation with other autonomies, so that the imperatives of sustainability of each one of the systems, including the global, are balanced. This means that the capacity of agency/autonomy of social systems at their individual or more complex level, encouraged and/or restricted by such structures, is key to the transformation of the latter, and therefore has a significant impact on the way through which systems limit each other, as well as on the way that each of them deal with their various internal and external determinants, and, thus, the extent and manner in which their needs and interests are met. It is, therefore, essential for the effective mediation between the needs of global and local, group and individual sustainability.

One of the questions that has directly or indirectly been raised by both approaches is why is it, after all, that the egalitarian mediation between interests and needs should

\textsuperscript{11} In the case of the capability approach, most specifically in Nussbaum’s version.
be encouraged. The first answer is given by the principle of unitas multiplex mentioned above, according to which interests simultaneously organize at various levels and therefore their regulation at one level directly or indirectly affects the others. Thereby, a common destiny requires us to negotiate, and the recognition of our interdependence requires us to be concerned about the others. As a question of pragmatism, therefore, equity is in the interest and benefit of each and every one of us. Moreover, this is where the complexity and capability approaches complement each other. There are more reasons to justify the need to improve the existing mechanisms for negotiation. Reasons that also justify the importance of promoting autonomy/agency by extending freedom while consolidating cohesive resources such as solidarity.

Complexity theory coined the term *ecology of action* to refer to the uncertainty that, frames social systems’ processes of organization. Partial causality forces us to give up on absolute truths. Greater social system’s sustainability is due to so many (and such complex) factors that to think that there is a single recipe for guaranteeing it is quite simply being blind to the principles of complexity. The ability of systems to survive the natural trend of decay that awaits all phenomena depends upon their ability to continually modify themselves, to expand their scope of freedom, to enhance their interactions, and improve their quality, favouring the emergence of new patterns of behaviour that allow them to adapt and survive, deciding what is it that should be sustained and what should not. This emergence is a product resulting from a set of uncertain processes connected to each other, which carries within its roots convergences and contradictions. These are, socially, consequences that democracy recognizes (Morin, 1990), because it knows that expanding the scope of freedom (the choices of individuals) can lead to decisions that may go against the good of the individuals themselves (which Sen also recognizes). However, it also knows that expanding freedoms is of crucial importance as well for the negotiated construction of the uncertainty-tainted development process and thus, represents a key strategy to promote the emergence of “islets of certainty” that, under the prevailing “sea of uncertainties” (Morin, 1999, p.45, own translation), lead to sustainability.
On the other hand, the capability approach also emphasizes the need to improve the existing mechanisms for negotiation. For Nussbaum (2012, p.195, own translation) “the intrinsic value of freedom itself should decant our choice for a model of empowerment” despite the setbacks that this distribution of power can bring. However, humans' quest for social justice is not a given. Because this quest carries with it the respect to human dignity, to the right granted to each individual to choose the kind of life he wants to live and take responsibility for it. It also puts on the table for discussion the issue of the legitimacy of the processes of development and its actors’ co-responsibilities. However, this ethical imperative depends on the ability of individuals to empathize with others.

3.4.2 Implications for Education

The foregoing confluences between the two approaches lead to a number of implications for understanding the importance that the factor of power distribution has for education based on the imperative of global sustainability.

First, one of the central coincidences between complexity thinking and the capability approach is their point of departure: the information that we select and the way we build its meaning has a key role in the understanding of social phenomena and, consecutively, in the way we interact with them. Our informational basis, Sen argues, defines the way that both society’s goals and the means to achieve them are defined. From both approaches' perspective, thus, the prevailing patterns of metacognition are impeding sustainable praxis. Because of that, education – as the process for the development of the learning aptitudes and creative skills of the social system’s constituents (for the maturation of their agency/autonomy) – is a key and fertile catalyst resource for the system’s sustainability. For the same reasons, both approaches recognize the potential of education to empower individuals and allow them to solve their own interests and needs (making a better exercise of their capabilities). Education has the potential to exert, thus, a predominant recursive role as a broker between the individual and the social processes of development, that is, as a broker for the mediation between the interests and needs for sustainability of both.
On the other side, both approaches also understand education as a system in itself. As a system that in its multiple expressions – as systems and/or subsystems – also creates and obeys multiple determinisms. In this sense the distribution of power and its relationship with sustainability has the same significance and implications for the educational systems. Educational initiatives are societal arrangements that regulate interests and address needs at individual, group, community, national, international levels, and all at once. Therefore, the relevance that education renders to each of these levels is important for this regulation to be consistent with the needs and interests of sustainability of each and every one of them. At the same time, the extent to which educational initiatives are organized according to their multidimensional development context towards which they, in turn, generate an impact has implications for the simultaneous (and positive, rather than normative) procurement of these multiple needs and interests. These two factors of relevance and integration (in the terms described in Chapter 2 of the thesis) are the result of the organizational processes hitherto created through the negotiations between the factors and actors, internal and external, that affect them and that, concurrently, generate the conditions for future dynamics. In other words, the relationship between educational initiatives and their environment can be seen not only in their pertaining to a certain level of collective organization of interests. This relationship is also reflected in the way they nurture from the temporal legacy (cultural, environmental) of the past and present generations, and the way they shape the one that will be left for the future generations to choose their own path to development. These simultaneously constitutive and instrumental roles of educational initiatives makes them require, thus, like all other systems, the conditions that enable the emergence of new patterns of development by which they become able to adapt and ensure their survival by responding to their own needs and interests and those of their environment. These conditions include the freedom-solidarity compound as a strategy for the promotion and delimitation of their autonomy/agency capacity.

The imperative of sustainability then affects educational initiatives at all levels, in their capacity as initiatives that respond both to themselves and to the development
needs of the different social and non-social systems with which they interact. It therefore brings a number of consequences for education’s praxis, in which (not surprisingly) the complexity and capability approaches are also consistent.

1. The first is the conscious decision to adopt an approach that pays attention to the different parts that make up the educational system and especially their interactions. That is, the adoption of an interdisciplinary systems approach that recognizes complexity and adopts its principles in the design and evaluation of its implementation strategies to favour their positive (and not just normative) impact; modulating the tendency to build actions from the fragmentation of information (separating it from its context) and favouring also, those departing from its linkage; recognizing the uncertainty in the process and hence the importance that for it have the freedom and the joint construction of certainties, as well as the flexibility for its constant readjustment by the torpedoing of the action when it deviates its planned course, as Morin (1990) suggests. This can be done by adopting a model that resembles, says Geyer (2012), a complexity cascade, in which planning anticipates moments and possibilities for its frequent re-planning.

The information we select, says Morin, "is the main ingredient of the strategy" (1990, p.113, own translation) and not recognizing (or avoiding) the consequences of its complexity "does not solve the problem but only evades it" (Sen, 2000, p.77).

2. Give priority to education as a strategic means to strengthen the capacity of agency/autonomy of individuals and each of their systems of organization and, thus, mediate more equitably and sustainably between their different interests and needs (changing, for example, the metacognitive patterns that inform practice, as mentioned in the point above). That is, allocate the necessary resources to maximize its potential as a fertile capability that has the capacity to foster that from anywhere in the system a snowball effect is generated – a snowball effect through which the conditions are created for the emergence of the changes required by the imperative of sustainability.

3. Design comprehensive policies. That is, the conscious expansion of the capability set, recognizing, enhancing, and capitalizing on the interconnections between the
different capabilities (their different dimensions), thus addressing capability failure and preventing (or solving when devised) tragic choices. On the one hand, putting education in its context of development benefiting the sustainability of its environment together with its own, which may be embodied in practical terms, as Nordtveit (2010) suggests, in a model of integrated service delivery. Or in the development and support of a wide net of integrated private and public institutions that contribute in the construction of sets of co-realizable capabilities, which starts from a comprehensive analysis on the way in which societal arrangements are influencing (supporting or hindering) both human capabilities and each other, so that existing policies can be evaluated and new ones devised, as suggested by Sen.

On the other hand, requiring concurrently (and as Mason [2009] suggests, massively) that the different levels and components of the educational system be addressed– not only through measures that impact the administrative (legislative, executive, and judicial) systems, as Nussbaum suggests, but also everything concerning the facilitators of education, its contents, its tools, and its resources. This will strengthen the system as a whole by addressing simultaneously its various internal needs, allowing it also to cope more effectively with those imposed from the outside, maturing its agency/autonomy capacity, and creating the conditions for necessary changes to emerge for the benefit of present and future generations.

4. The above also implies giving importance to the teaching of a relevant and pertinent education, in which the metacognition patterns that are developed as well as the contents that are transmitted respond to the imperatives of sustainability simultaneously at different levels for each and every one of them being empowered to negotiate in an atmosphere of fairness the conditions to satisfy their interests and needs – departing from an awareness of a common destiny that is based on solidarity and altruism towards the others. This can be encouraged through an education that renders relevant to the interests and needs of the different (present and future) systems simultaneously (of the individual, of his community, of his country, of the planet, of his environment, etc.).
5. The promotion of inter and intra systemic interactions and the improvement of their quality. That is, the enhancement and refinement of mechanisms for public participation, discussion, negotiation, and trade-offs among peoples' diverse agendas (interests and needs). Based on a principle of equity and co-responsibility these mechanisms can both encourage and limit the autonomy/agency of educational initiatives so that both their own sustainability needs and interests and that of the other levels are better addressed. This involves, on the one hand, widening the scope of freedom to foster the emergence (from either side of the system) of alternatives pertinent to the objective of global sustainability. On the other hand, it involves empowering the agency/autonomy of educational initiatives to exercise and create such alternatives; involves concentrating efforts (as the capability approach says) in removing what hinders that agency/autonomy (its corrosive disadvantages, which includes the current unequal distribution of power) and in enhancing, with priority, what favours and interconnects the conditions for its maturation (including especially the other fertile capabilities) – again, at all systemic levels of education; involves flexibility; involves, also, the simultaneous use (and promotion) of solidarity as a cohesive and delimiter of egos resource, thus favouring the conditions for negotiation, and therefore for sustainability, at different levels. That, says Morin (2011), is the mission of politics, which also implies the concurrent promotion of centrism/polycentrism/de-centrism and hierarchy/polyarchy/anarchy around a liaison centre, enabling both order and spontaneity at the same time.

In practical terms, this freedom-solidarity compounded strategy could be embodied perfectly with Morin’s Via Proposal, through which specific actions are performed for the multiplication of pilot experiences and the empowerment of the existing ones – together with the maturation (as also suggests the capability approach) of structures that enable their healthy negotiation and organization in terms of equality. That is, specific actions that capitalize (with emphasis) in their interactions. These are the chaordic principles (chaos + order) mentioned by Ezechieli (2003), which in practical terms have been adopted by some companies. The Via Proposal is also consistent with Sen's suggestion to focus efforts in developing and supporting a wide net that strengthens the cooperation among public and private institutions that enhances the
integrative character of the process of development. This author suggests that this convergence impregnates the hologramatic principle not only to the importance of agency but also to that of capabilities. A new global model, therefore, would have as an objective to enhance (and regulate in an equal basis) not only the capabilities of the individuals (the alternative combinations of functionings that they can enjoy) but also those of each of the systems through which they organize their interests and needs – including their educational initiatives. As a consequence, this would be helped by the empowerment of the agency/autonomy capacity of each of them and the promotion of their solidarity-based interaction and negotiation, which would, in turn, enable the construction of an overall development model that, through and for democratic ownership, renders integrative and plurally relevant and thus, more sustainable.

3.5 Conclusions to Chapter 3

There is not a consolidated line of research that brings together the capability approach and the complexity theory, which is surprising because the discussion around which both approaches emerge and develop touches on the same ethical and pragmatic considerations that are being debated as significant in the field of Education for Sustainable Development, and that are implied in the concept of sustainability – as per its definition in the Brundtland Report. They offer important arguments for justifying the need for a more effective scheme in which the redistribution of agency/autonomy capacity is central for enhancing a more sustainable model of development that is more plurally relevant and integrative. The other way around, they provide insights into the consequences that would be implied in building such an alternative, which include a more integrative and plurally relevant development praxis.

Education, with its recursive role as a broker between the processes of individual and social development – that is between the interests and needs for sustainability of both – is a system in itself, composed by a myriad of subsystems that are, concurrently, operating in multiple dimensions. Therefore, it requires the adoption of a new
approach in the design and evaluation of its policies – one that embraces uncertainty and complexity, and therefore focuses on being relevant and empowering for its different actors (and at different levels) and on developing the quality of their interactions, so that it can respond to its own sustainability imperative, as well as that of the systems and subsystems with which it interacts. In regards to the latter, such an approach would give education a strategic role for development, placing its policies in such a context so that they address its different dimensions in an integrative manner. It would also pursue a more egalitarian ownership, which would be helped by working on increasing the self-sustainability (the agency/autonomy capacity) of educational initiatives at different levels through a formula that combines freedom and solidarity. That is, a formula that both empowers and delimits them through the reinforcement and maturation of the mechanisms for negotiation among their different interests and needs for sustainability.

It is this focus on interactions that distances the complexity and capability approaches from the tendency in social policy to de-contextualize educational initiatives from their developmental environment. From the tendency to forget about their role to re-shape such context, causing, for example, the need for individuals to make tragic choices, not only depriving many from educational opportunities, but also impeding that the prevailing status quo is transformed according to different needs and interests on an equal basis. Educational initiatives don’t exist in a vacuum (as Stiglitz et al. [2009] say about vested interests), and their great potential to contribute to the global sustainability goals can be better fostered if these mutual relationships are acknowledged and positive measures are undertaken to capitalize on the existing interactions and to build new ones.

While this chapter presented the theoretical patterns of expectation in regards to the line of inquiry of the thesis, the following will explore the feedback provided by the empirical evidence of the Barefoot College’s Solar Night Schools Program, informed by the findings of six other relevant case studies.
CHAPTER 4

EMPIRICAL RESEARCH METHODS, CASE STUDIES, AND FEEDBACK EXPERIENCE

4.1 Introduction to Chapter 4

This thesis is built upon the premise that the international urgency on materializing a development model that is sustainable is a priority the achievement of which is being significantly hindered by the current distribution of political and financial resources (power) among stakeholders to negotiate and settle on contested issues related to the design, implementation, and evaluation of educational policies. That is, by the current conditions of unequal ownership that are causing the prevalence of vested interests over policies’ objectives and of less sustainable practices (in terms of the sustainability factors). Therefore, it proposes that reducing educational initiatives’ level of dependency upon external sources of financial and/or political support is crucial for their effective outcomes in terms of sustainable development, that is, for improving the quality of the education they provide. Consequently, the thesis follows an abductive inference process to search for elements that help explain the significance of increasing educational initiatives’ self-sustainability and the means through which this self-sustainability can be built.

For that purpose, this chapter presents empirical evidence from the current situation of the Barefoot College's Solar Night Schools Program (SNSP) that, informed by the findings of six other relevant case studies, provides important feedback experience to the previous chapter’s patterns of expectation in regards to the thesis’ line of inquiry.

The program was explored with the double purpose of attending a consultancy request made by its creators, the Barefoot College in India, and of exploring a case study that renders relevant for the purposes of the present thesis in that from its inception has proven cost-effective in guaranteeing the right to education to many of the most disadvantaged children by challenging the common understanding of quality
education by *concurrently* 1) stressing the need for its plural relevance, 2) linking education strongly with other areas of development in an integrated manner that is both informed by and influential to the local conditions and needs, and 3) empowering the local ownership. The case shows the mutual correlation among the sustainability factors themselves and between them, and the initiative’s self-sustainability. In other words, it shows that enabling the three factors to support each other has been effective in enhancing the self-sustainability of the program, protecting, consequently, its effective outcomes in terms of sustainable development for more than 30 years, reaching more than 75,000 children and their communities.

A case study that, as well, serves as a clear example of the political economy-related constraints that today (as detailed in Chapter 2) are hindering education’s effective contribution to the achievement of the international goals on sustainable development, because of the challenges that both the increasingly limited funding for education and the recent enactment of India’s Right to Education Act (RTE) have posed on its effective outcomes.

The chapter starts by describing the methodology of the study, including the aims that inspired it and the research methods that were used. Subsequently, it explains the context of India’s RTE that is threatening the SNSP’s survival, the model that the latter follows, its inherent sources of sustainability, and its contribution to the national and international goals of education for sustainable development.

Further on, the chapter briefly describes the other six case studies (their detailed description is made in the Appendix at the end of the thesis), the strategies that they utilize to ensure their sustainability, and promote their scalability and their insights into the SNSP’s potential for increasing its self-sustainability – all of which cover important considerations on the significance of the latter for the effective accomplishment of their objectives. The six case studies are: Amigos de Calakmul, Escuela Nueva Foundation, the Tumin Project, Tlaloc Barters Group, ChildFund, and the Project Health and Happiness.
The next section of the chapter elaborates on two areas: first, the insights that the SNSP’s case offers to India’s debate surrounding the implementation of the RTE. And second, the considerations emanated from both the Barefoot College’s initiative and the comparative case studies in terms of the significance of and means for increased self-sustainability for the accomplishment of their goals and those of the international community in sustainable development.

Finally, the conclusions explain the constitutive and regulative evidence that allow for at least the provisional generalization of the findings – all of it related to the political economy context in which the case studies operate, in which the problem of unequal ownership represents a general rule, making the need for increased self-sustainability a crucial requisite for the effective achievement of their developmental objectives. The conclusions also explain the mutual relationship between the sustainability factors, the level of self-sustainability of a development initiative (including educational ones), and its effective outcomes.

4.2 Methodology of the Empirical Study

4.2.1 Aims and Hypotheses of the Study

The design of the present thesis research was deeply affected by a request made by the Indian organization the Social Work and Research Centre (better known as the Barefoot College) in 2012 – the year in which I was elaborating this research’s proposal – to gather insights from its own and other organizations in order to build recommendations to make its SNSP more self-sustainable and to scale-up its model.

The Barefoot College’s Solar Night Schools Program (SNSP) ensures access to education for children whose families' particular socio-economic situation prevents them from attending the local private or public schools. However, the recent enactment of India's RTE – which imposes sanctions upon those who fail to comply with its quality standards – together with the increasing difficulties in ensuring funds
to support the program (especially since the world financial crisis of 2008), are threatening its mere survival.

The fact that the program, despite its effective contribution to education’s global agenda, lacks the political and financial resources to sustain itself, and that the organization recognizes this dependency on external means and actors as an important challenge for its sustainability, presented itself as an opportunity to refine the thesis’ already intended line of argument (the problem stated in Chapter 2). The case was, in fact, a finding in itself, in that it made clear that power distribution can be a critical impediment for education’s effective outcomes in sustainable development – the problem that inspired the writing of this thesis. I thus designed an empirical study that could serve, simultaneously, the purpose of preparing the consultancy work requested by the Barefoot College as well as accomplish the main goal of this thesis: to contribute to the discussion on the elaboration of alternatives for making education more effective in the building of a sustainable development.

Because of the characteristics of the SNSP, the opportunity to undertake the study for the Barefoot College also provided important insights in regards to the two theories that were being explored for the purpose of this research: the capability approach and the complexity theory. These approaches, in turn, provided the hypotheses for the study: 1) integration among development initiatives have a greater chance to sustainably impact the life of the community in which they work; and 2) enhancing the capabilities of the program's participants in an integrated service delivery modality contributes to their ownership of the programs and, thus, to the latter's self-sustainability. These hypotheses served as a guide during the process of data collection, shaping the open-ended interviews in a way that their outcomes could be related to what is managed in this thesis as the integration, ownership and relevance factors, and pointing at all kinds of sources for the exploration of the research questions and their evaluative and interpretative purposes (acknowledging the complex relationship between all factors composing and surrounding the educational initiative).
Thus self-sustainability was revealed as a crucial aspect of the program and the study sought ways of enhancing it by 1) identifying the model’s strengths and current sources of sustainability, and 2) comparing it with relevantly similar programs elsewhere.

Yet, while the design of the study responded to the aforementioned two purposes (the consultancy work and the thesis’ research), the presentation of the findings during this chapter and their analysis in the following chapter serve only to the purposes of this thesis research. Moreover, it conforms to the abductive inference analysis through which this thesis is addressing the research questions, that is, the overall methodology of the thesis detailed in the Introduction (Chapter 1).

4.2.2 Data Collection Methods and Procedures


Preparation stage (Sep-Oct 2012):

-Determination of the study's terms of reference based on the TOR sent by the Barefoot College:

-Documentary and web content analysis:

Documentary analysis, including the organization’s website (Social Work and Research Center [SWRC], 2012a; Tilonia, Artisans of India, 2012), official documents and reports about the region and India's RTE and other publications, annual reports (SWRC, 2009a, 2010, 2011a and 2012b), video (Sundance Movie Trailer, 2005), and other materials (Esperrance, 2010; Roy & Hartigan, 2008) of the Barefoot College were analyzed to determine the key characteristics of the organization and its SNSP, and to prepare contextual information about the research.
The analysis of the documents focused on the objectives, organization, and working approaches of the Barefoot College, the known outcomes of the SNSP, the opinions of visitors to the Program, and the characteristics of one of its current main threats – the RTE.

Field trip (Tilonia, Rajasthan, India, Nov 2012):

A field trip study of some of the Night Schools in the Rajasthan Indian region served by the SNSP was conducted to identify its current sources of financial self-sustainability. It included interviews of parents about household costs and opportunity costs of their children attending the school, interviews of teachers and students in the program, of community and school leaders, curriculum and materials developers, and of the initiators and leaders of the program in the Barefoot College. Financial and other documentary data about the SNSP were also gathered. The working hypotheses were based on both the complexity theory and the capability approach to development (see previous section of this chapter).

Research methods included:

- Formal and informal semi-structured interviews recorded in field notes and mp3 to discover elements that could become relevant for the issue of self-sustainability (while avoiding theoretical biases) with: parents, children and students, teachers, alumni, community and school authorities, curriculum and materials developers, and initiators and leaders of the program. Interviews included questions on parents’ motivations to send their children to school, their expectations, their challenges, and their livelihood. Included questions on leaders’ difficulties, working resources, and long-term vision, on children’s perspectives about their learning and their family obligations, of alumni reflections on the impact that the schooling experience has had on their life, on authorities funding strategies, etc.
Direct observation recorded in field notes of children at work, school lessons, community meetings, the local environment, the relationships among the members of the program, and a meeting of the Children’s Parliament.


During all the visits, we were accompanied by a translator so that we could engage in conversations with the local participants, most of whom only spoke the local language.

Systematization of the field trip outcomes (Dec 2012):

- Content Analysis
  Websites
  Internal documents
  Reports
- Data analysis (of the outcomes of the interviews)
- Elaboration of an internal report of the data collected (Mar-May 2013)
- Presentation to the Barefoot College of an Interim Report
- Definition of the axes of comparison for the selection and analysis of the other case studies: Thematic analysis after India allowed for the generation of initial codes (i.e. participation, health services, budgeting process, etc), and construction of categories (ownership, services' integration, etc), that served as the basis for the selection of the comparative sites.

Selection and investigation of the comparative case studies (Jan-Mar 2013):

i. Methods for the selection of the case studies
An important consequence for the field trip study in India was that, in order to gain a better understanding of the modality in which the Night Schools operate within the Barefoot College’s network of initiatives – and accordingly, get further insights in order to increase their programs’ sustainability – it was decided to study the program comparatively against other programs that are relevantly similar: principally, programs that 1) operate in a modality of what is known as "Integrated Service Delivery", 2) were suggested by the Barefoot College and 3) were accessible for the researcher in terms of language, budget, and availability to receive visitants.

After the field research, relevantly similar initiatives were located in other parts of the world and their models investigated, specifically to do with resourcing, organizational structure, financial sustainability, and scalability. To select the comparative case studies, document and web content analysis were undertaken, and interviews and communications with the leaders of some organizations were conducted in preparation of the following research visits.

While the cases had no homogeneity and varied in terms of their objective, size, scale, and scope, they were all selected because of their potential contribution to the objective of the study: to research into the significance of increasing self-sustainability for the achievement of their objectives and the means through which they enhance it, as will be further justified in each case in the following sections.

**ii. Data collection**

Some of the case studies' investigations involved site visits; some only interviews of some key informants; and some only bibliographical research.

Research methods included:

- Formal and informal semi-structured interviews recorded in field notes and mp3 to discover elements that could be relevant insights for the self-sustainability issue with relevant informants, such as initiators and leaders of the programs, participants, and
partners. Interviews included questions about resourcing, community involvement, interests in play, long-term vision, etc.

- Direct observation recorded in field notes of community meetings with the leaders of the programs, internal meetings, and program dynamics.

- Content analysis of websites, internal documents, and reports.

During this stage translators were not necessary because I was familiar with the languages employed by the participants (English, Portuguese, and Spanish).

iii. Case studies selected, justification, and their sources of information:

• Case study: Amigos de Calakmul A.C., Mexico City and Campeche, Mexico (referred within the thesis to as Amigos de Calakmul)

Justification for its selection: The case was selected because of its financial sustainability model. Despite being an environmental organization, Amigos de Calakmul works in an integrated and comprehensive way by addressing the different socio-economic conditions of the farmers and by developing novel means for their participation in and ownership of the programs. This has proved very effective in not only improving the economic self-sufficiency of its initiatives but also the effective procurement of thousands of hectares of rain forests for preservation.

Source: The information was provided by a personal interview (Jan. 2013) with Alberto Székely, Director, Tisza International Legal Consultants, Mexico City, Mexico.

• Case study: Fundación Escuela Nueva, Colombia (referred within the thesis to as Escuela Nueva Foundation or FEN)

Justification for its selection: The case was selected because 1) it was demanded by the Barefoot College 2) it runs an education program addressed to rural and marginalized populations and 3) it holds an integrative approach to education.

Escuela Nueva Foundation in Colombia has been internationally recognized because of its pedagogic model for quality rural education that has attracted the attention of 40 countries’ governments (many of whom have adopted it, especially in Latin America, but also as far as Vietnam), and received many international awards for its contribution to improving the quality of education around the world.

Source: The information was obtained from a phone interview (22nd. Jan. 2013) with Vicky Colbert, Co-Author of Escuela Nueva Model, Founder, and Executive Director of FEN.


• Case study: Mercado Alternativo y Economía Solidaria, Tumin, Veracruz, Mexico (referred within the thesis to as the Tumin Project)

Justification for its selection: The case was selected because of its alternative financial self-sufficiency model for rural populations. The Tumin Project, and the Tlaloc Barters Group (next case study) that inspired it, are both establishing alternative currency systems to reduce their communities’ dependency on the peso-based national economy, which is not guaranteeing that resources flow into their localities, pushing their inhabitants to migrate or live in poverty. By capitalizing on and promoting trust, the final aim of their project is to enhance social cohesion as the basis for improving the lives of the communities. The projects offered important insights about the significance and the means for self-sufficiency.
Source: The information was obtained through bibliographical research in the internet and through the interviews undertaken on a field trip to Espinal, Veracruz, Mexico from the 15th to the 17th of January 2013 of:

Juan Castro Soto, Co-founder and Partner of the Tumin Project
Human Rights Network, Espinal, Veracruz, Mexico

Oscar Espino, Promoter, Partner, and current Project Coordinator of the Tumin Project, Advocate of the Human Rights Network and teacher at the Intercultural University of Veracruz
Espinal, Veracruz, Mexico

Prof. Irene Fidencia Castellanos, Promoter, Partner, and current Treasurer of the Tumin Project, Owner of "Cyber Castell" Coffee shop, Espinal, Veracruz, Mexico

Additionally, informal interviews were taken of: Greengrocer and Tumin Partner César, Atole seller and Tumin Partner Brenda, and Baker and Tumin Partner, Espinal, Veracruz, Mexico


• Case study: Red de Multitruque Tláloc, Mexico City, Mexico (referred within the thesis to as the Tlaloc Barter Group)

Justification for its selection: The case was selected to complement the information of the Tumin Project, which was inspired by this initiative.
Source: The information was provided by a personal interview with Luis Lopezllera, creator of the Tlaloc Barters Group and promoter of several solidarity-based economy initiatives in Mexico at his office in Mexico City on January 21st, 2013.

Documents and other materials collected and analysed: Ecos Voces y Acciones (2009), Lopezllera (2008), and Red de Multittrueque Tláloc (2011 and n.d.).

• Case study: ChildFund International, Mexico City (referred within the thesis to as ChildFund)

Justification for its selection: The case was selected because of its focus on children's rights using a systemic approach that, similar to the Barefoot College’s SNSP, aims at improving their situations by addressing their community’s needs as well. It works mainly through cooperation with local NGOs to ensure relevance, and promotes cooperation schemes with the private sector as well. The organization offers interesting insights into strategies for financial sustainability.

Source: The information was provided by bibliographical research and a personal interview (Feb, 2013) with: Sol Alejandra Vargas Fregoso, former ChildFund Mexico fundraiser.


• Case study: Centro de Estudos Avançados de Promoção Social e Ambiental (Center for Advanced Study of Environmental and Social Promotion), better known as Projeto Saude e Alegria (Project Health and Happiness), Amazon region, Brazil (referred within the thesis to as Project Health and Happiness or PHH)

Justification for its selection: The case was selected, principally, because of its exemplary integrative service delivery model with which, similarly with the Barefoot
College, the organization has been working for the last 26 years with geographically and socially excluded populations, and has consciously developed reflections and strategies around the sustainability – and self-sustainability – of its programs.

Source: The information was provided by internet sources and interviews realized in a field trip to the Amazon region near Santarem, Brazil, from the 11th to the 17th of March 2013, with local people and the leaders of the program:

Caetano Scannavino, General Coordinator

Davide Pompermaier, Sustainable Entrepreneurships and Territorial Development Coordinator

Paulo Roberto de Oliveira (Magnolio), General Coordinator, Clown from Great Mocorongo Circus
Pedagogic Coordinator

Fábio Pena, Education, Culture and Communication Coordinator

Andrea Colares, Sustainable Entrepreneurship program

João Carlos Dombroski, Territorial Development Area, Community Organizer

Renata Alves Godinho, School Director, Escola Nossa Senhora de Fatima, Ana Arapiuns Community, Amazon

4.2.3 Methodological Problems and their Resolution

A number of methodological limitations were encountered during the thesis’ empirical research. The first and most evident was the time constraint. Talking about sustainability, especially, requires a longer period of time for observation, for familiarization with the research participants and their context, and for the processing of information. Yet, the budget and time constraints of the very PhD impeded this longer exposure to the environments in which the data was collected.

The limitations were of course geographical as well. The Barefoot College’s SNSP covers more than 150 schools in different regions of the country that, because of their different contexts, face diverse challenges and, likewise, address them in a differentiated manner. Something similar happened with some of the comparative case studies that, like the Project Health and Happiness in Brazil, cover huge areas which cannot all be explored in a short visit.

Moreover, as detailed in Chapter 1 “5 Personal Motivation and Positionality”, being a foreign participant researcher, a woman, and without the skill to speak the native language in India, made me somewhat reliant on the interpretation and translation support of the Barefoot College’s staff, who were also in charge of selecting which of the participants and schools to show me. This wasn’t the case in the programs I explored in Mexico and Brazil, where I was able to communicate directly with the local people; yet, I was, ultimately, an external observer to these developmental initiatives, and this of course resulted in some bias on my data collection.

However, these biases have been avoided to the maximum extent possible by cross checking and triangulating data from interviews, documents, and observations. Additionally, the conclusions of this chapter describe the constitutive and regulative evidence that permitted the, at least provisional, generalization of the findings.
4.3 The Case of the Barefoot College’s Solar Night Schools Program (SNSP)

This section presents the case of the Barefoot College’s SNSP. It starts by describing the context of the RTE, whose implementation in India has posed a challenge for the program’s sustainability. It then explains the SNSP, its objectives, its model, and its inherent sources of sustainability. Next, the section elaborates on another challenge that is threatening the survival of the program: its lack of financial stability and thus, self-sufficiency. Finally, the section describes the SNSP’s importance for education’s global agenda in the framework of the recent international agreements for the sustainable development goals.

4.3.1 India’s Right To Education Act – A Challenge for the Solar Night Schools Program’s Beneficiaries

As discussed in Chapter 2 of the thesis, three main principles tend to inform international education dialogue and policy around the world today: access (the latest figures indicate that 57 million children are still out of school [UNESCO, 2014a]); equity (dramatic inequities related to socio-economic status, gender, ethnicity, language, geographic location, and disability still permeate most education systems); and quality (although many more children than was the case in 2000 are now in school, questions about the quality of their learning persist). In this context, India enacted in 2009 the Right of Children to Free and Compulsory Education Act (RTE) to ensure that all children have access to education that is free, compulsory, and of high quality. The Act has precipitated a profound and complex transformation in India’s education landscape. In a country where 40% of its population is illiterate, and where 8 million children were out of school at the time of the Act's promulgation (UNICEF India, 2014), the legislation intends to ensure the fundamental right to education that Article 21A of the Constitution gives to children in the 6-14 age group. That is to say that the country’s efforts to universalize elementary education are not new: a great many policies and regulations have been promulgated in the past with the intention of increasing the number and quality of schooling opportunities. Yet it was only with the enactment of the RTE that this mandate became legally binding.
An important aspect of the Act is the requirement that non-minority private schools assist in incorporating out-of-school and dropout children into the education system by reserving at least 25% of their seats for students with socially, economically, or culturally disadvantaged backgrounds, with the understanding that the government will reimburse the latter for expenses incurred. The Act also forbids the charging of capitation fees (additional fees levied to cover expenses not included in the tuition fee) and screening procedures; prohibits the denial of admission to any child – including those with disabilities; and stipulates that no child can be forced to pass any Board examination, be held back from class, or expelled from school until the completion of his elementary education. Moreover, the Act stipulates that schools establish School Management Committees (SMCs) whose members are proportionally equivalent to the number of children belonging to disadvantaged groups, with women constituting at least 50% of their complement.

A further focus of the Act is on ensuring quality, and for that purpose it sets minimum requirements on instructional hours, school infrastructure, teacher qualifications, teacher-pupil ratios, assessment, community participation, management and supervision, and curriculum, teaching and learning materials (Ministry of Human Resource Development, 2014). The RTE’s quality criteria are to be met by non-government schools in order to secure formal recognition. Establishing a school or operating a school without such recognition incurs financial penalties “that may extend to one lakh [100,000] rupees [$1,600] and in the case of continuing contraventions, to a fine of ten thousand rupees [$160] for each day during which such contravention continues” (RTE, 2009, 19[5]).

4.3.1.1 Improving the Public Education Sector is not the RTE’s Main Focus, as it Should be

According to the Government of India, more than 40,000 primary and 12,000 upper primary schools have been built (Ministry of Human Resource Development, 2013), and more than 230 million children have enrolled since April 2010, when the RTE
came into force (Press Trust of India, 2013a). Moreover, the Annual Status of Education Report (ASER) of India calculated that compulsory education coverage has exceeded 96% since 2009 (Pratham, 2013). These are remarkable achievements. In reality, however, the criteria that the government has privileged in evaluating RTE has focused principally on enrolment rates and largely disregarded attendance, learning outcomes, and retention figures. While enrolment rates have increased significantly in recent years, children’s attendance rates, and, consequently, their learning outcomes, have diminished, which in turn leads to their dropping out of school in many cases (Pratham, 2013).

Most children are, in fact, at least two years behind where the curriculum expects them to be (Bhattacharjea, 2013). In 2013, ASER India reported that fewer than half of the 8th grade students in India felt comfortable solving a 3-digit by 1-digit division problem, and only three quarters of them felt comfortable reading a long paragraph of a 2nd grade text (Pratham, 2014b). Learning outcomes reflect divisions along the axes of public/private schooling, gender, urban/rural location, and socio-economic status background.

The Act’s prohibition from applying examinations that could result in a child's being held back or excluded from school is a measure designed to address the difficulties in retaining children within the system and avoiding their dropping out. Some consider, however, that access at the expense of learning is unsustainable, because education per se has little benefit for children enrolled in school unless they actually learn (Jamil et al., 2013). Others suggest that if minimum reading skills are not acquired, children cannot progress in other subjects (Pratham, 2013), and they end up dropping out anyway. Recent learning outcomes have had an impact on education policymakers in India, who have officially recognized the need to give this issue greater priority (Pratham, 2013).

Still, financial barriers might complicate these good intentions. There is no official account of the total cost required to enable all schools in the country, both public and private, to comply with the RTE’s quality norms. “It is almost a black box”, considers
Professor P. Jha, from Jawaharlal Nehru University (personal communication, April 18, 2014). However, he explains, if all government schools in the country were to use the norms and consecutive budget of the Kendriya Vidyalaya Schools (Central Schools, which mainly serve the children of government employees), public expenditure would have to be 15 to 20 times higher than current government expenditure in (non-Central) government schools.

In its current state, the public education sector is excluding, principally, the most disadvantaged children from their right to equal access to quality education in terms of RTE’s own criteria: girls, rural children, and children from the lower classes/castes – those for whom the Act’s entitlements have most urgency. Yet, the Act’s main focus is not the public education sector which is actually not subject to the RTE’s sanctioning scheme.

4.3.1.2 The RTE’s Quality Norms and Sanctions Scheme could Leave Many of the Most Disadvantaged Children without any Schooling

The great achievements made so far in the universalisation of compulsory education could not have happened without the support of India’s private sector, which has been key in providing access to education for various children, even before the Act was envisaged. While in 2006 only 19% of net enrolment was in private schools, in 2013 this figure stood at 30% nationally, and was as high as 70% in some states (Pratham, 2013).

For one part of the for-profit education sector, the RTE has provided niche growth markets. But India’s private education sector is composed of many types of schools (religious, international, minority, elite, and informal schools), and for some of them – especially those serving the most disadvantaged children whom the public sector hasn’t been able to attract or retain – the RTE has meant a considerable challenge to their survival, which, ironically, threatens the ability of many disadvantaged children to access any schooling at all, mainly for the following reasons:
Most private schools don’t have the financial capacity to comply with the RTE’s quality standards to avoid being sanctioned and/or closed

Under the Act, schools’ pupil-teacher ratios should rank between 30 and 40 students per teacher for Classes I to V, with a maximum of 35 pupils per teacher in Classes VI to VIII. Buildings have to be suitable for all local weather conditions, with at least one classroom for every teacher and an office-cum-store-cum-head teacher’s room. They have to provide obstacle-free access, separate toilets for boys and girls, adequate and safe drinking facilities for all the children, a kitchen where midday meals are to be prepared, a library, a playground, and a boundary wall or fencing. Schools are mandated to provide, in each academic year, a minimum of 200 working days and 800 instructional hours for Classes I to V, and at least 220 working days and 1000 instructional hours for Classes VI to VIII. Parents, teachers, and local authorities are to participate in SMCs, constituted by the schools, to supervise their management and use of funds, and to prepare development plans (RTE, 2009, Schedule).

With regard to teachers, the Act defines the qualifications for their appointment and the terms and conditions of their service (RTE, 23). The Act gives a time-frame of five years for teachers to get the necessary training to meet its standards, and requires the government to provide them with the opportunities to do so. In a country where teacher absenteeism is a problem, the Act emphasizes teachers’ duties to be present punctually and to be effective in the delivery of the curriculum, and forbids them to have a second job, including private tutoring.

The RTE’s quality norms can be easily met by some private schools; however, satisfying the infrastructural demands and providing qualified teachers with salaries determined by the Act can be very costly for schools with limited financial capacity, especially in rural areas (for an example of current debates on this issue see the report of Ernst & Young [2012]). Rangaraju (cited by Aiyar, 2012) recently concluded that, “if implemented, school fees will rise 560% in low-cost schools and 173% in higher-cost schools in Patna”. Similar issues arise with the implementation of the RTE’s
rules for teacher-pupil ratios, which would require the hiring of a great number of new staff. The deadline for Indian private schools to comply with RTE quality norms and standards has already passed, and most of them haven’t had the capacity to do so.

Many private schools have provided access and contributed to equity by offering an education in schools where the quality criteria differs from that of the RTE

The RTE intends to ensure quality education by standardizing all education services – public and private – “to maintain minimum quality and prevent dilution in educational outcomes by private interests coming in with the notion of minimum input and maximum capital gains” (D Roy, Indus Action, Program manager, personal communication, April 19, 2014). But the Act has, ironically, also become a burden for a number of private schools that have been contributing for some time to the provision of elementary education to India’s least privileged children (who are usually the “dropouts” and out-of-school children about whom RTE is most concerned).

For many of these schools, a shortage of funds is not the only impediment to their compliance with the Act: reaching students from the most disadvantaged backgrounds and responding to their particular contexts and constraints frequently requires them to challenge or go beyond RTE’s quality norms and standards. Setting a fixed number of instructional hours, for example, might not be suitable for migrant children. The issue of teacher training is complicated since the institutions that train them are not always well regulated and cannot always ensure the quality of their preparation. The question whether ‘officially qualified’ teachers are a better option than teachers who received their training in local schools is a constant area of debate.

It is true that more concrete standards and quality norms are being set through states’ implementation of the Act. In most states in India, quality supervision bodies are being created within local education authorities, while in other states external agencies are being appointed (Uttar Pradesh and Gujarat). In general, they are expected to define quality assessment tools that clarify how outcomes are to be evaluated, remediated, and sanctioned. In some states, schools’ evaluation results are
to be published. In Uttarakhand, teachers are to be held responsible for students' learning outcomes, and in Assam, teachers’ salaries are to be linked to their attendance, supervised by SMCs. Andhra Pradesh will not transfer the 25% reservation reimbursement to those private schools that don’t demonstrate good learning outcomes. Gujarat, like some other states, will support the recognition of schools according not only to their compliance with RTE norms, but also to their overall improvement in quality outcomes – to be assessed by an independent body on a regular basis (Bhattacharya, 2013).

The central government has acknowledged the need for implementing differentiated policies to reach children with particularly complicated contexts; and one of its main goals is to bridge gender and social category gaps. To achieve this, budgets have been allocated for both general and targeted interventions. Among them, school infrastructure is being developed in special focus districts; teaching and learning materials, scholarships, midday meals, and other incentives have been provided; and special training programs have been launched. These interventions, including the National Program for Education of Girls at Elementary Level, are based on the premise that flexibility is needed to better address the particular conditions of these children (Ministry of Human Resource Development, 2013, pp. 24-26). However, their approach is mainly transitional, and ultimately intends to mainstream children into the far less flexible public education system without really addressing, through any form of holistic intervention, the context that put these children in their difficult situations in the first place.

The next section reviews the experience of one interesting case that, having been cost-effective and successful in integrating into the education system a group of children whom the State has not been able to attract, suggests that achieving the RTE’s primary objective of ensuring equal access to quality education for all children implies challenging many of its quality criteria. The Barefoot College and its SNSP draws heavily on local knowledge and resources in its focus on a sustainable future for the communities served by the schools. This initiative, which provides educational
opportunities for children who would otherwise be excluded from school, is, with the implementation of the RTE, at risk of being shut down.

4.3.2 The Barefoot College’s Solar Night Schools Program – A Relevant Contributor to the Right to Education Act’s Goals

The Barefoot College (whose official name is the Social Work and Research Centre), has been operating since 1972. Among its various development projects, the SNSP started in 1975 in Tilonia, a rural community in the district of Ajmer, in Rajasthan, India, where the head office of the organization is based. The chief purpose is to provide access to education for children who cannot attend the local public schools because they open only during the day, when more than 60% of children in the region are expected to help with their families' subsistence activities.

Currently, over 7,500 children attend the approximately 150 Night Schools that are spread over five different states in India. Most of the schools operate in areas where agriculture and animal husbandry are the main economic activities. In this context, families are big (approximately five to six children): the bigger the number of children, the greater the help parents have to sustain the family. Families are constantly changing location with their cattle, so children frequently have to stay with their grandparents or join their parents in their journey, which makes it difficult for them to adjust to any formal schooling schedule. Children often work as goat herders, or help their parents in the fields in the harvesting season.

In the area around the Barefoot College, more than 60% of the population migrates to the cities to work. Despite families not needing to purchase dairy products because they own goats and buffalo, most of them need to buy produce in the market, since they either don’t have their own fields or work for a landowner. Migrating to the cities to earn wages, which are difficult to secure in their rural communities, is therefore of particular importance. Older brothers are usually the ones sent to the cities to earn wages for the family. As a consequence, they don't normally get much education, while their younger siblings are responsible for taking care of the animals.
These are, in most cases, the kind of children who attend the SNSP: poor, low caste, and with illiterate parents. Approximately 75% of the Night Schools’ students are girls. This is a fairly recent phenomenon, since with the increasing coverage of public schools more boys are going to 'normal' schools, while girls are required to help with their families' economic activities. As a consequence, the SNSP offers the only education option for many girls in the region. Local tradition dictates that girls marry and leave their parents – to join their husband's family – when they turn 18. Boys are therefore usually considered, as one parent said, "a better investment". Although recent legislation forbids children marrying before this age, many girls are engaged when very young. On our field trip, we met four girls who were engaged when they were nine years old. It is also possible that the majority of the girls attending the Night Schools are from the poorest families in the region. In one of our interviews, parents told us that they have five to six different castes in their village, but only upper caste girls go to day schools. That caste is the only one that has many educated generations; the rest tend to have none.

By November 2012, 75,000 children had attended the Night Schools since the program's inception; more than 4,000 of them, including 1,250 girls, have continued attending school in the formal mainstream education system (SWRC, 2012a).

Since 1988, the Barefoot College has reproduced its model in day schools (Siksha Niketan schools), which have their own governing body but collaborate with the College to provide an alternative for children not enrolled, for whatever reason, in government or other private schools. The College has also worked with the local government in pilot projects to adapt the SNSP's model into the mainstream education system to help it attract dropouts and out-of-school children (Siksha Karmi schools), but these efforts were largely disrupted because of tensions with official teachers who feared they might be replaced by local personnel.
4.3.2.1 The Model and its Inherent Sources of Sustainability

The success of the SNSP in preventing these children from being excluded from school depends mainly on its sensitivity to their particular socio-economic and cultural contexts, and its adaptation of its model accordingly. It does that by adapting its schedule to the children's constraints; integrating the schools within a network of other development programs that support the children and their families; decentralizing the program so that it can better respond to different contexts; and offering an intercultural education modality that makes education relevant not only in terms of the mainstream curriculum but also for the children and their families and communities.

- **Adapting its schedule to the children's constraints**

Schools operate at night (6pm to 10pm), after children have finished their household duties. This schedule is frequently adjusted according to the season and the agricultural cycles, some of which require that children help their families with the harvest or migrate to feed their cattle.

- **Integrating the schools within a network of development programs**

Besides receiving education, the SNSP students benefit from health services, communication resources, toys, and learning materials provided by other development programs operated by the organization. This includes solar-powered lamps that allow the operation of the schools at night in areas in which there is frequently no electricity grid. Another aspect of the integrated development program sees to the building of rainwater harvesting tanks adjacent to each Night School, which helps to ensure that families in semi-desert areas will still be provided with water by their children, even if they attend school during the hours they would otherwise spend collecting it from wells. The fact that the Night Schools are embedded in a mutually supportive network of initiatives grounded in the Barefoot
College facilitates attention to the children's and their families' diverse and specific needs.

This comprehensive model also allows for the sharing of funds among different projects to support one another, and for the shared provision of materials, personnel, training, and infrastructure across the different projects. Some examples of the benefits of this integration are the Field Research Centres' and Associate Partner Organizations’ roles as meeting points for a Children's Parliament (a key project in this comprehensive model, which will be shortly introduced), and the fact that many Night Schools’ alumni are incorporated into the Barefoot College’s development projects. Alumni work as, for example, solar engineers, coordinators of craft workshops or of the local early childhood education centres, cooks for the Barefoot College community, or as cultural workers in the community. Others extend the benefits of the SNSP into the mainstream education system at the Siksha Karmi and Siksha Niketa schools. Further examples of this integration among projects lie in the training offered to teachers by the Barefoot College’s Health Centre to identify common health issues in their students, and in the vocational training that the children receive.

➢ Decentralizing the program

An important feature of the SNSP is that it is monitored by a Children's Parliament. The children who are members of this forum, elected every two years by students attending the Night Schools, choose a Prime Minister who works with a student cabinet monitoring the work of the teachers, the functionality of the solar lanterns, the availability of safe drinking water, and the provision of teaching and learning materials. They also encourage children who have dropped out to attend school. The Prime Minister organizes monthly meetings in which the ministers raise any problems in the schools, ask adults for explanations, and prompt solutions. The cabinet is empowered to hire and fire teachers, and to expose cases of corruption. Some Night Schools’ teachers occasionally do not turn up for class, but children in the parliament help to create awareness of the potential problem so that it doesn't happen very often.
The forum clearly also serves to create awareness in the communities about the children's points of view and needs. The general view is that although some problems might take some time to be solved, the system works. Moreover, "the concept of the Children’s Parliament is integral to the curriculum at the Night Schools. Children attending the Night Schools get to know more about political systems and structures by actually going through the learning process" (SWRC, 2012k).

The families of the SNSP’s children contribute to the program with cash or with donations of teaching aids or learning materials. Parents pay 10% of the cost of the health check-ups provided to the children. These contributions from the families are made in spite of the fact that families need their children's contribution to the household income, and cannot easily afford to wait ten years for their children to start earning.

At a community level, the families’ contribution is even larger. The communities generally provide the buildings for the Night Schools and other activities (such as the Children's Parliament, fairs, workshops, and meetings), and contribute voluntarily with cash, food, time, or work to the realization of the program. The supervision and management of the SNSP is largely done by Village Education Committees and the Children's Parliament, both volunteer organizations run by the community. Ultimately, almost the only expenses that are not covered by the community are the teachers’ salaries and some costs for activities that they cannot bear.

The extent of this community involvement is also evident in the number of people associated with an extensively decentralized social structure that is integrated with the Barefoot College’s initiatives in this domain: 150 full-time staff, 500 half-time staff, and around 5000 honorary members. This is both important and unusual, given that policy makers and policies are usually very far from implementation sites and beneficiaries.

The degree of ownership that the communities have of the program means that it already bears the hallmarks of sustainability, given that development interventions are
generally successful to the extent that they are appropriated by and integrated into the communities where they are targeted. Such interventions are at greater risk of failure when project funding ceases or when external project advisers are withdrawn, probably because community ‘take-up’ or ‘buy-in’ has been limited, rendering the project unsustainable without such community investment and appropriation.

Offering an intercultural education modality

The SNSP caters to Classes I to V in multi-grade classrooms that host approximately 25 students each. Although age is not a barrier for attending the Night Schools, children's ages range between 6 and 14 years old. Classes follow the mainstream literacy curriculum and also incorporate the traditional knowledge of the community by bringing 'resource persons' to the school (people from the community who share with the children their knowledge about issues that are relevant to the community). The SNSP also takes children on day visits to their communities' local institutions (post offices, banks, police stations, and land records offices) so they learn how they work. Sometimes they organize short trips to nearby cities, but relatively infrequently, not least because the schools operate at night. To complement the curriculum, the SNSP also provides some vocational training. In the words of the organization: “The Barefoot College believes that ‘literacy’ is what one acquires in school, but ‘education’ is what one gains from family, traditions, culture, environment, and personal experiences. Both are important for individual growth. At the College, everyone is considered an education resource, the teacher as well as the student and the literate as well as illiterate” (SWRC, 2012a).

Month-long residential bridging courses have been designed for children to enter the mainstream education system in Class VI after completing three or four years at the Night Schools. This requires a written test. These courses are offered to children who: 1) wish to transfer from Night Schools to day schools; 2) whose parents are migrant workers and move to the cities during the working season; and 3) who might earlier have dropped out of mainstream schools. Children in this last group are accepted into the bridging courses only so that the organization can motivate them to go back into
mainstream schooling. The Barefoot College’s policy is not to readily accept dropouts from mainstream schools.

Communities have asked the organization to build more Night Schools and to extend them to Upper Primary and even to Secondary level, but the organization’s response has been that not only does the Barefoot College not have the budget for that, but also, more importantly, it does not seek to encourage families to choose the Night Schools over other mainstream possibilities. The SNSP teachers, in fact, encourage children to transition to mainstream schooling, but without much success. Private schools are generally regarded to be of poor quality and expensive, while government school teachers and supervisors are regarded as too informal and frequently violent with children. Moreover, the knowledge taught in mainstream schools is considered 'bookish' and largely irrelevant to their lives and needs, while students are apparently highly motivated by the Night Schools, their teachers, and what they learn there. Although the number of public schools in the region has increased – because of Education for All initiatives, the Central government’s policies, and the influence that the SNSP has had over the years – attending day schools remains a considerable challenge for these children.

On the other hand, the nightly schedule, although relevant to their needs, is difficult for children who have been working all day in the fields under a hot sun. The older children tend to have greater concentration capacities than the younger ones, although the latter will refuse to admit feeling sleepy. The school experience seems to be genuinely enjoyable for them. Children reported that they particularly enjoy what they learn, learning to read and write, to be able to read letters for their parents, learning to count, exchanging ideas, singing, painting. Some children who attend schools during the day also like attending the Night Schools because they like what they learn there. The same happens with some children who, after finishing the SNSP, continue to attend the Night Schools. These positive experiences also help to build remarkable degrees of self-confidence in the children.
One of the strengths of the SNSP lies in its teachers, who seem to be liked by the community and respected by parents and children, principally for two reasons: the manner in which they treat the children, and the devotion with which they work. Night Schools’ teachers are local adults from different working backgrounds (postmasters, keepers of records, policemen, nurses, traditional midwives, extension workers), which helps them to make their teaching relevant for the community. The SNSP teachers earn approximately one tenth of a government school teacher's salary. Although they earn the same rate as other staff at the Barefoot College, effectively they teach only part-time, so what they earn means that they amount to little more than volunteer teachers.

Teachers are prepared in a ten-day training program run annually during the off-season, and they meet monthly to discuss teaching methods and problems, and to improve their teaching skills. Teachers are also taught to repair the solar lamps and, as mentioned earlier, to identify common health issues in their students.

The communities themselves prepare the teaching and learning materials. Among them, a workshop of disabled people prepares toys made of recyclable materials for the Night Schools, and a carpentry workshop provides them with science toys. Maps and posters displaying the alphabet hang on the walls of the schools. Children frequently need to share the learning materials that are available.

The mission of the Barefoot College’s Communications team is worth noting here. Through puppetry, a traditional means in this cultural context of sharing messages with the community, the Barefoot College discusses in an interactive manner some of the problems faced by the Night Schools, such as the need for girls' attendance, the safety of the children, their relationship with their teachers, and so on. In a related vein, the Night Schools hold the annual Balmela Festival to provide feedback to their communities, to reinforce the value of education, and to thank them for their help and participation.
In summary, besides following the national curricula, the program puts a special emphasis on providing children with an education that is culturally and linguistically relevant for them and for their families, rather than a curriculum that would serve to encourage migration to the cities (and, possibly, a life in an urban slum).

One of the main outcomes of UNESCO’s Expert Meeting on Intercultural Education (UNESCO, 2006a) was the Guidelines on Intercultural Education (UNESCO, 2006b). This document set a general overview of the main principles with which to identify an intercultural education model: a model that builds upon the diverse systems of knowledge and experiences of the learners and their communities. That uses methods that are culturally appropriated, which are based on practical, participatory, and contextualized learning techniques. A model in which teachers are familiarized with practical, participatory, and contextualized teaching methods. A model in which there is strong interaction between the school and the community, both involved in the educational processes. And a model in which there is vast participation of learners, parents and other community members, teachers, and administrators in the school management, supervision and control, decision-making, planning and the implementation of education programs, and the development of curricula, and learning and teaching materials. As can be appreciated in Table 1, the SNSP is certainly a practical demonstration of such concepts, since it highlights the importance of co-management, relevant education, and strong context integration in order to ensure equal access to quality education.
Table 1. The SNSP’s Intercultural Education Aspects

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Activity 1</th>
<th>Activity 2</th>
<th>Activity 3</th>
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Note: Further details are not provided in the table for the sake of simplicity.
4.3.2.2 An Additional Challenge of Financial Instability

The average expenditure of the Night Schools is US$33 per child every year, and approximately US$3,000 per school each year. Although it is difficult to compare the SNSP with other initiatives because of its unique model and reach, Table 2 gives a basic idea of how extremely low is this sum as compared to other relevantly similar models of rural education in India.

**Table 2: Direct Cost Comparison for 5 Major Indian Models of Rural Education Delivery Against the Barefoot College’s SNSP**

<table>
<thead>
<tr>
<th>1. Organization:</th>
<th>TARA Akshar</th>
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<tbody>
<tr>
<td><strong>Program’s name:</strong></td>
<td>Tara Akshar Plus - Hindi literacy and numeracy program.</td>
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<tr>
<td><strong>Program’s content:</strong></td>
<td>TARA Akshar teaches Hindi speakers who are completely illiterate how to read and write Devanagari (Hindi) script and basic number recognition and arithmetic in 45 days. They serve anyone aged from 8 to 80 in Northern India who is illiterate. In practice, all their students are female. Their instructors receive a special training and most of them are not officially trained teachers.</td>
</tr>
<tr>
<td><strong>Area of work:</strong></td>
<td>Bihar, Jharkhand, Uttar Pradesh, Haryana, NCR, Madhya Pradesh,</td>
</tr>
</tbody>
</table>
**Uttarakhand and Rajasthan**

**Population currently served:** about 9000 students per cohort.

**Total cost of the program:** $990,000 USD / per cohort (The course takes 45 days and the grant they receive is paid based on the success/failure of their students’ results).

**Total cost of the per child:** Cost of implementation of the program per person is $110 USD. The course takes 45 days.

**Beneficiaries’ contribution:**
- **In cash:** Zero
- **In-kind:** Zero

**Program’s main outcomes:** More than 61,000 women made literate since 2007.

**Information source:** Tara Akshar (2014) and program’s creator V Lyons, personal communication, April 7, 2014

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**2. Organization:** Isha Education

**Program’s name:** Isha Vidhya

**Program’s content:** Isha Vidhya rural schools have been started in villages in 2005 to provide high quality school education to underprivileged rural children who cannot otherwise access or afford it. Isha Vidhya’s English-medium schools open the door for rural children to successfully pursue higher studies and gainful employment. The holistic, activity-based approach nurtures children’s development beyond just academics, ensuring that students realize their full potential and learn in a joyful manner.

**Area of work:** Tamil Nadu and Andhra Pradesh.

**Population currently served:** 3,863 children (in 2012-2013 period) (final number as per the end of the year after some drop out).

**Total cost of the program per year:** 811,047 USD (total expenditure on the program during 2013).

**Total cost of the program per child/year:** 210 USD approx.

**Beneficiaries’ contribution:**
- **In cash:** Full scholarships funded by individual and corporate donors, cover tuition, notebooks and textbooks, and support 56% of the children, while the rest pay a subsidized fee. **In-kind:** zero

**Program’s main outcomes:** Data not available. The program started in 2006 and most of the initial students remain in the system.

**Information source:** Isha Vidya (2013) and Isha Foundation, personal communication,
April 3, 2014

3. Organization: Pratham

Program’s name: Pratham Open Schools

Program’s content: Pratham is the largest non-governmental organization in India. It works towards the provision of quality education to the underprivileged children in India. Interrelated with other literacy programs, the Pratham Open School (POS) gives dropouts a chance to return to education. Completing secondary schooling is still a problem in India because of poor elementary schooling combined with lack of access to secondary schools. Plus, in many communities, girls after a certain age are not allowed to receive education or for that matter to even step out of the house. Pratham Open School gives dropout students a chance to complete their education and acquire skills for employment. In exchange, they are also expected to teach a group of school aged children. These trainees can work with primary school children or preschool children on a daily basis. POS will be the Centre of education for these drop-out girls. In a month each of these girls will spend 5 days at it. Centre-based faculty will teach them during this time period. During the remaining 25 days of the month, a tutor, who will be based in a cluster of 20 villages, will teach them. There will be one tutor for each cluster.

Area of work: Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Delhi, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Nagaland, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttarakhand, Uttar Pradesh, West Bengal

Population currently served: Approx. 3,000 children.

Total cost of the program per year: 16,581 USD (cost of one year course for secondary school certification for 50 young women who have dropped out of school).

Total cost of the program per child/year: 331 USD

Beneficiaries’ contribution: cash: zero in-kind: Girls repay for their course by teaching 20 children in their village.

Program’s main outcomes: 6,195 students enrolled since 2011.

Information source: A Baig, personal communication, April 9, 2014 and Pratham, 2014a
4. **Organization:** Sarva Shiksha Abhiyan (Government, DPI Campus).

**Program’s name:** The KGBV residential schools

**Program’s content:** Kasturba Gandhi Balika Vidyalaya (KGBV) scheme is a special government intervention that cooperates with local NGOs in serving Educationally Backward Blocks for out of school girls in the age group of 10+ to 14 at the upper primary level that are later mainstreamed in high secondary schools. The program has a strong gender focus and provides students with sports uniforms, cosmetics, free meals, insurance, regular medical check-ups, and learning materials. The program includes vocational training and sports courses.

**Area of work:** 61 KGBV schools are functioning in 45 Educational Backward Blocks in 12 districts of Tamil Nadu. Out of 61 schools, 31 are of Type II (50 girls) and 30 are of Type I (100 girls).

**Population currently served:** 4,520 girls.

**Total cost of the program per year:** $2,409,591 USD for the year 2013-14

**Total cost of the program per child/year:** $36.5 to $55 USD

**Beneficiaries’ contribution: In cash:** Zero  **In-kind:** Children are given training in doing compost which they use in kitchen gardening. The vegetables developed in the garden are also used for cooking. Children’s Parliament is also constituted which provides opportunities for the children to contribute to the residential school by developing communicative skills and decision making in certain key areas.

**Program’s main outcomes:** A total of 28,113 girls benefited since 2005.

**Information source:** Joint Director DPI Campus, personal communication, April 11, 2014

5. **Organization:** Literacy India

**Program’s name:** Pathshala (Open classroom)

**Program’s content:** Under this project Literacy India undertakes remedial classes for school going children and also helps children who do not attend regular school to get into mainstream education. A stepping-stone to the mainstream learning process, a child can spend just 2-3 hours a day to learn the basics. They use an educational approach that aims to capture the interest of children. This project is now reaching out to rural and street
children as also to children who are working as domestic helpers. Under this umbrella, they have also introduced adult literacy classes. This project has received support from organizations like PVR Nest, UPS Foundation, Kathpal Foundation, and many individual donors.

**Area of work:** Delhi NCR, West Bengal, Haryana, Rajasthan, Jharkhand, Uttarakhand, and Karnataka, among others.

**Population currently served:** 1,400 remedial students each year.

**Total cost of the program per year:** 140,000 USD

**Total cost of the program per child per year:** 100 USD

**Beneficiaries’ contribution:** In cash: NA In-kind: NA

**Program’s main outcomes:** Children have been mainstreamed from Pathshale Project to private schools for quality education and pursue secondary studies with science stream. Children had proved their ability and were provided with guidance and counselling to appear for the AEEE examination. More than 50 street children have been mainstreamed into education; several integrated with family and provided vocational training for livelihood, 40 girls, who were never done schooling up to primary level and were out of school completed their secondary level education though NIOS.

**Information source:** Project manager S Yadav, personal communication, April 21, 2014

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Source: Adapted from Maclean, Mason and Székely (2014)

However, in spite of the Barefoot College’s success in running this program with such little financial support, the challenges remain considerable, especially since the 2008 financial crisis. This budget is spent mainly on curriculum, teaching aids and teaching-learning materials’ design, production, and distribution; infrastructure; administration (which includes teachers’ salaries); special activities; services in support of the children attending the Night Schools; and training workshops.

The Barefoot College catalogues these expenses, using the usual accounting practice, as initial and recurrent expenses. These vary in each school, but what is typical is that the initial, capital, cost of a Night School is expensive (for example, the purchase of a blackboard, solar lanterns, etc.), while recurrent expenditure goes on repairs and
teachers’ salaries. For example, where Night Schools have rainwater-harvesting tanks, there are recurrent expenses in repairing the tanks. But for schools that don’t have that facility, the expense goes on water pipes. There are additional expenses for special activities: meetings of the Children’s Parliament, meetings with the community where children share their experience, and the likes.

The fixed expenses, or those that can be calculated in advance, are paid with funding provided by donations and grants. For incidentals, they use the interest returns on fixed deposits (FDR) from a capital fund created by investing funds received in an earlier award. But no donations or grants have been received of late and, as a consequence, they have had to use not only the FDR but the capital itself. What is clear is that external funding for the Night Schools is not stable. A similar lack of stability characterizes the families’ contributions, because employment in the region typically depends on the season and the weather, rendering family income unstable. This lack of stability in the SNSP’s funding is crucial because the families and the whole community’s contribution to their existence is, as detailed before, enormous.

4.3.2.3 The Importance of the Solar Night Schools Program for Achieving India's Access, Equity, and Quality Goals

The long-term benefits for the SNSP's participants are clear. Many were first generation learners who today have their children at school. Many children in the program indicate a wish to become teachers. By initiating a first generation of learners, the SNSP is contributing to educational sustainability in the sense of enhancing educational participation across generations. It is well established that educated mothers tend to seek ways to educate their children. This is particularly important in a region where the barriers to girls' attending schools are not only financial but also cultural. These rural, poor, lower caste girls constitute the most disadvantaged sector of the population.
Through the SNSP, the Barefoot College is advancing a greater agenda of gender and caste equity, not least by the setting of an example: in addressing the particular needs of girls; in inviting individuals from the lower castes to work as Night Schools’ teachers; in seating children from different castes together; and in defending the right of everyone to drink from the same water source. Although prejudices are being overcome, traditional attitudes remain a challenge – particularly beyond the school, where other sectors of the community continue to impose traditional practices in which caste and gender influence children's social relations and futures. Teachers deliberately hired from the lower castes by the Barefoot College are not easily accepted by all in the community. Because of this, the organization frequently has to hire men, given the additional prejudices against women. Nevertheless, because of their impact on the students, the teachers are, despite their caste background, increasingly valued and respected in the communities.

In contrast to the frequently punitive measures employed by local authorities to ensure school attendance (for example, making an educational qualification a prerequisite for a driving license), the Barefoot College, mindful of the causes that prevent families from accessing education, looks for the children in most need and adapts its program to their local socio-economic and cultural context. This is not only a key aspect of the SNSP's success in attracting these children into school, but a primary source of its self-sustainability and of the quality and relevance of the education they provide.

The extent to which the Barefoot College's programs are integrated into the local communities provides another source of their self-sustainability and, more particularly, of the sustainability of the educational initiatives. The modality of integrated service delivery – from health care through education to the provision of potable water and solar lighting – enables both the mutual strengthening of the various components of the project network and the deep entrenching of these initiatives within the local communities. The degree of ownership felt by the communities of these projects enhances their trust of the Barefoot College and their confidence to send their children to the Night Schools. The opportunity costs of
school attendance and community involvement in the projects are compensated by this sense of ownership, which is also a result of a widely decentralized budgeting process. The communities are deeply involved with the SNSP: they manage it, they contribute to it, and they benefit from it.

The threat of closure because of the RTE highlights the deep irony latent in the Act. Since the deadline given by RTE to schools to meet its quality criteria passed in 2013, the survival of the SNSP is technically at risk, because despite having shown itself to be cost-effective, it fails to satisfy many of the norms and standards mandated by the Act: its teachers receive training from the Barefoot College, but are not officially qualified; certificates cannot be given to the children on completion of their studies, because the schools are not officially recognized; and the school buildings frequently lack a head teacher's office, toilets, a kitchen, a library and, in many cases, fencing and boundary walls, all of which are stipulated by RTE as necessary. Moreover, since the schools operate only at night-time and their schedule is subject to local agricultural cycles, children often miss classes and cannot comply with the Act's minimum number of instructional hours per academic year. Consequently, the Night Schools do not qualify for government support or recognition, rendering themselves liable to be fined and even shut down. What is more, the Act also prescribes that no new school can be established without such recognition, so the scalability of this model that has been so successful in filling gaps left by the mainstream education system is also open to question.

The mismatches between the SNSP and the Act’s quality criteria (the former’s dependency on the authority that implements this regulation (regardless of its pertinence) and its challenges for overcoming financial instability) are all illustrative of the problem stated in Chapter 2: the consequences of the current distribution of political and financial resources for the achievement of the international goals for education. The SNSP's inherent sources of sustainability that have managed to keep it active (yet at risk) in ensuring children this educational right are illustrative, on the other hand, on means through which the unequal ownership can be tackled.
The next section presents the insights from the comparative case studies into, also, the significance of and means for educational initiatives’ increased self-sustainability.

4.4 Insights from the Comparative Case Studies

After the field research in India, six cases were explored in terms of their resourcing, organizational structure, financial sustainability, and scalability strategies, with the purpose of informing on means through which the SNSP could strengthen its self-sustainability. The cases are varied and rich in content. All of them are relevant to the extent that their practices are all influenced by the inequality that permeates the political economy dynamics in the field of development, and for that they have all elaborated responses to counteract the effects that such dynamics have on their programs, building on their self-sustainability. In the case of the Tlaloc Barters Group and the Tumin Project, this influence is big to the extent that the very objective of their project is to change such dynamic that is hindering their locality’s development. As will be evident, the six cases also show the relationship between those responses and strategies and the sustainability factors of relevance, integration, and ownership. Since each case study addresses these factors in a different manner, this relationship was in fact part of the criteria that was used to select the case studies (as detailed in the previous section). While some cases are stronger in integration (the Brazilian Project Health and Happiness being the most obvious example), others in ownership (such as Amigos de Calakmul that relies heavily on people’s participation or ChildFund, whose projects are greatly focused on capacity building), and others in relevance (which would be, for example, Escuela Nueva Foundation’s motto), the truth is that all cases place strong emphasis on the importance of the three factors (and their overlapping) for their self-sustainability, which in turn, proves crucial for the effective outcomes of their programs.

This section presents only a brief synthesis of these insights. More detailed information about their projects, their strategies for sustainability, and the recommendations that were made to the Barefoot College based on their experiences
can be found in the Appendix. Comparative case studies and their strategies for self-sustainability at the end of this thesis.

4.4.1 Amigos de Calakmul A.C. (Amigos de Calakmul)

Amigos de Calakmul has been working for 12 years protecting the tropical rainforest of the Calakmul Biosphere Reserve in southeast Mexico. Their work centres on providing legal and environmental advisory services to the local communities that own these areas and who used to supply wood to logging companies until, with the help of the organization, they organized a new scheme for meeting their needs without finishing the no-renewable resources of their subsistence. Through the new scheme, the organization collected enough donations to start what is known as a Capital Fund, which sum is enough to secure that the interests it yields are given to the farmers in replacement of the fees they were receiving from logging companies in exchange of their protection of the forest, securing, at the same time, that the fund itself is not touched, reducing the need to search for additional funds annually. This capital fund is subject to control by a banking trust fund mechanism composed of 3 parts: the trustee (the bank), the donors/foundations, and the beneficiaries (the organization/the local people), which contributes to the effective management of the funds and guarantees its credibility and transparency.

However, the vulnerability of the financial market plus the logging companies’ recurrent proposals to the farmers to increase their income make it necessary that the fund keeps on growing. For that, Amigos de Calakmul complements this strategy by searching for what is known as parity/matching funds, on which each donation that the organization manages to secure is paired by a third source on the condition that the said commitment of the farmers to help preserving the forests is verifiably met. An additional funding source comes from the project’s participation in the carbon bond market, in which it redeems its carbon emission certificates for the price set by the international market rules.
Despite being an environmental organization, Amigos de Calakmul’s financial sustainability model provided important insights for the SNSP not only in regards of practical strategies for improving its self-sustainability but also in regards to the significance it renders for the organization to increase its capacity for self-sufficiency. Through their integrated schemes, they are enabling the sustainability of the resources that enable the communities’ subsistence, while reaching the organization’s objective of preventing the exploitation of the forests and addressing the socio-economic needs of the communities at the same time. They are also being helpful to avoid searching for annual funds, easing the management of the process, and securing its financial sustainability without relying too heavily on external sources of income. Mechanisms such as the banking trust, the participation in the carbon bond market, and the parity funds also bring attention to the way in which local ownership can be capitalized for addressing funders’ concerns on corruption and the lasting effect of their donations without compromising beneficiaries’ capacity to negotiate their views and responsibilities.

**Insights into and Recommendations for the SNSP’s Self-sustainability:**

Considering that there are numerous ways in which the SNSP’s local community is already contributing in non-monetary ways to the sustainability of the Night Schools, which reduces the Barefoot College’s exigencies to secure the program’s subsistence, Amigos de Calakmul provided insights into strategies that could help the organization capitalize on its already transparent process for the management of the funds, and on the services and resources provided by the community to the schools. These two aspects are known by the funders to be of capital importance not only for securing that money is being spent appropriately in what is needed (and in terms of what is relevant for the community itself) but also for the continuation of the program once their funding is withdrawn.

Moreover, since the Barefoot College is already familiar with a sort of a capital fund (FDR) model, the case offered additional justifications for the SNSP’s interest in adopting this scheme as a means for reducing its vulnerability to both its internal and
external sources of financial sustainability, while ensuring that it is the community itself who keeps control of the project. Combined with strategies such as participation in the carbon bond market and/or the parity/matching funds, this capital fund scheme could serve the SNSP to attain true financial sustainability. The latter, it is important to note, would be facilitated by the Barefoot College strengthening the already existing connections between the SNSP and the organization’s other development initiatives, especially its Solar Energy Program, which generates renewable energy and therefore is eligible to participate in the carbon bond market scheme; this suggests that the more integrated a program manages to get, the broader its spectrum of possibilities for securing the resources it needs and of the dimensions in which it can have an impact.

4.4.2 Fundación Escuela Nueva (Escuela Nueva Foundation or FEN)

Escuela Nueva Foundation in Colombia has been internationally recognized because of its pedagogic model for quality rural education in rural areas (especially in multi-grade and poverty-stricken schools) that has attracted the attention of many countries’ governments. The model’s success in raising schools’ quality relates to its comprehensive focus on academic improvement, equity in education opportunities, and the community's involvement (the model counts, for example, with a Children’s and a Parents’ government that run the school). FEN operates as a social enterprise that generates surpluses to reinvest them in their social objective (to strengthen Escuela Nueva pedagogic model) and enlarge its area of impact, which has allow it to reduce its dependency to external financial support.

Nowadays, FEN mainly sustains itself by selling the model to governments, NGOs, private schools, etc. as a package of consultancy services that includes the settlement of demonstration schools in already existing schools (pilot schools), the co-participatory adaptation of its prototype guides and learning materials (their methodological structure), and technical assistance (training to different stakeholders) for the application and implementation of the model and for the community’s involvement. This way FEN capitalizes on its know-how on the systematization of
the school’s processes to promote stakeholders’ ownership of it and on the adaptation of the model to different contexts, offering an educational solution to improve quality, effectiveness, equity, and sustainability of education.

Other than its consultancy services, FEN also relies on other financial sources, that include donations from different agencies sponsors, online donations, volunteer workers, visitors’ fees, and parity funds schemes with foundations (similar with Amigos de Calakmul).

Although FEN doesn’t get involved with the school’s financial sustainability, because they don’t implement FEN’s model, but only provide technical assistance to already existing schools, regardless of their own financial scheme, they claim their model is in itself a tool to make schools highly self-sustainable because: a) it is systemic – works with teachers, students, and parents in all educational aspects; b) uses the promotion of social participation as its transversal dimension – all stakeholders participate in educational decisions, which motivates their ownership of the projects; c) it is trans-sectoral – it promotes the formation of skills as the basis of entrepreneurship reducing rural children’s migration to the cities, and emphasis is put on children’s application of their knowledge within their family and community; d) it complements the training of local stakeholders with mechanisms for the discussion and dissemination of innovations; e) it is cost-effective – although initial expenses are heavy not so the future incidental ones; f) it promotes inter-culturality – the national curriculum is reinforced but they place strong emphasis on the relevance of education and the appreciation of rural life and local knowledge, which has immediate effects in the community’s life and, as a result, in the involvement of parents in the learning process.

**Insights into and Recommendations for the SNSP’s Self-sustainability:**

Based on the above, the model provided important insights into strategies for increasing the self-sustainability of the SNSP. These strategies also suggested the importance of showing the donors the lasting effect of their contributions, which
relates to beneficiaries’ ownership and participation in the projects, but also to the organization’s capacity of finding means to sustain its programs regardless of external support, which ensures donors their investment to be backed up by other’s trust on the organization. The parity funds, sponsorship, online donations, and other schemes all provided ideas for the SNSP to diversify the sources of its funding and thus reduce its dependency to a sole source, while creating the abovementioned trust resource to further attract donors.

Moreover, the organization mentioned its interest for collaborating with the Barefoot College’s SNSP as a means for capitalizing on the experiences that each of them has developed to improve rural education’s quality. This brought additional considerations in regard to the significance of building collaboration ties for development initiatives to support each other and on the available mechanisms to undertake such partnerships, which include the funding management and acquisition schemes mentioned in the recommendations of other case studies, such as the Trust Fund, the Parity Funds, etc.

4.4.3 Mercado Alternativo y Economía Solidaria (the Tumin Project) and Red de Multitruque Tláloc (the Tlaloc Barters Group)

While the study centred on the Tumin Project and the Tlaloc Barters Group was explored only to complement its information, both initiatives’ central objective is reducing their communities’ dependency on the peso-based national economy, which is not guaranteeing that resources flow into their localities, pushing their inhabitants to migrate or live in poverty. By capitalizing on and promoting social trust and solidarity, the final aim of their project is to enhance social cohesion as the basis for improving the lives of the communities, which made these two cases of great help for exploring the significance and means for self-sufficiency.

The Tumin project operates in a rural area of Veracruz, Mexico, deeply affected by poverty and its cyclical causes and consequences, meaning: the dependence resulting from the lack of means of production (people work lands that are not theirs or sell
foreign products to survive), the violence permeating the State in the context of the country's war on drugs, social divisiveness based on class, ethnicity, etc. All this still persists, despite the extensive intervention in the area of various poverty reduction government programs. For that reason, and inspired by the Tlaloc Barters Group, which has operated from Mexico City since 1996 promoting alternative barter markets (of products and services), local university teachers in 2010 created an alternative market project popularly known as "The Tumin Project" as a tool to boost the local economy (promoting the circulation of goods which had no buyers due to the absence of conventional money in the place) and reduce external dependence (on resources and on the values from the printing and distribution of economic currency).

The Tumin is a voucher that is complementary to the peso, the Mexican currency. It seeks to support family income serving as a means of facilitating the development of an alternative exchange dynamic: the barter system (which actually used to be the traditional exchange system in the region).

Vouchers are used to exchange goods with value equal to (but not worth) 1 Mexican Peso ($ 0.08 USD approx.), backed up by the goods and services offered by its partners, which are listed in a directory so that its members can compromise to support each other. A coordinating team, which is rotatory (ensuring the equitable representation of and responsibilization of all of the members) monitors and evaluates the project. It is made up of Commissions (education, communication, etc.) that are in charge of organizing various issues related to the project, ensuring its integrative character.

The community contributes with volunteer work (e.g. the promoters), the payment and collection of Tumins, facilities for holding the assemblies, a space for Tumin’s House (the project’s head office), and 5% of the value of the partners’ products sold at the Tumin’s House to cover administrative costs. They also contribute with their participation in assemblies and other meetings, and with the payment of the Tumin house’s staff. This participation has enabled the project to sustain itself so far, despite the organizers’ complaint about the difficulties they have had in gaining the trust of
the people and enhancing their solidarity and participation, which they claim to be the result, mainly, of people's habituation to government's "welfarist" assistance, the corruption that permeated them, local cultural/class/ethnic-based divisionism, and people’s lack of clarity on concrete means to participate.

**Insights into and Recommendations for the SNSP’s Self-sustainability:**

Luis Lopezllera stressed the importance of these kind of projects to solve the problems caused by the lack of conventional money. Ensuring the diversity of the products and services included in the project so that different kind of needs (and not only economic) are addressed in a simultaneous and integrated manner while consolidating trust and solidarity (by rendering relevant and effective in addressing peoples’ needs and making people of different cultural/ethnical/class backgrounds work together) as resources for increasing self-sufficiency are some of the main insights provided by these case studies to the significance and means for increasing self-sustainability. Trust is key capital for these kind of projects to succeed in creating an unconventional economic means such as the barters. It is capital that the Barefoot College already possesses to a great extent due to the extensive experience and impact that it has had with the participants of its initiatives and that has enhanced substantially their ownership of the projects.

Moreover, Luis Lopezllera, creator of the Tlaloc Barters Group, shared a key reflection in this regard for SNSP:

_On what are the Night Schools' children going to live when they grow up? What is the economy in which these children are being educated about? Where does this education lead them?....We must create an option that represents an alternative to the current economy, which creates immense external dependence. Start creating it from the children, through an education that questions what is produced locally and what is missing, considering that the local production, however, is never enough. We need a trans-generational approach to transcend the economic dependence that creates scarcity, poverty._
To exit the well we must stop digging....The Children's Parliament is itself a model for the exchange of ideas. This could be the basis for the exchange of other valuables (knowledge, things... it would be necessary to define what, from a participatory assessment of what is in the region in terms of credits of trust, alienation. Namely: to go from parliamentarianism to economy with something that replaces money – or complements it – being careful not to replicate the criticized existing schemes).

An alternative economic model could complement Barefoot College's initiatives to curb migration and promote autonomy and capitalize on the already vast interconnections among its different development initiatives (remember the program produces in general solar lanterns, sanitary napkins, wooden toys, etc.), reducing its dependency on foreign aid. Also, it could reinforce Barefoot College's beneficiaries' organization and participation schemes, including the Children’s Parliament.

4.4.4 ChildFund International (ChildFund)

ChildFund International has 75 years of experience working with marginalized children and their communities in 31 countries, working in partnership with already existing local organizations, enterprises, and parent committees (a strategy that enables them to make better use of its efforts and resources) to identify key local problems and possible solutions (health, education, micro-enterprises, etc.), all of them family oriented.

As with the cases above, ChildFund has also realized that ensuring transparency in the management of the funds is a key strategy not only to ensure their effective use but also to attract donors’ support, for which they have established an informational hotline for its projects’ supporters. This transparency also helps connect donors to their recipients emotionally, which represents an important factor for the continuation of their support. ChildFund’s case also shows that this transparency, in turn, is reliant on the extent to which the organization is capable to systematize its project (its processes and outputs). This organisation also emphasizes upon the importance of
allocating an ample percentage of its income in fundraising work, that is, of investing the required resources to address the financial sustainability’s imperative.

Among the different strategies to secure diversity of funds (and as with the cases above: reduce dependency to one sole source), ChildFund a) establishes win-win partnerships with enterprises – in which enterprises promote themselves by demonstrating to their customers their support for ChildFunds’ projects; b) requests online donations in various modalities including children’s sponsorships; c) searches for grants; d) makes investments at fair value and beneficial interests in trusts; and e) matches donations of enterprises and their employees with community sponsorship programs.

Additionally, ChildFund promotes that enterprises invest in opening local cooperatives where an agreement is made with the participants that they will take care of their families and communities (e.g. bring their children to school) provided that a job is being offered to them and that there is already a buyer for their products (with fair prices). The cooperative’s surpluses are used to reinvest in the cooperative, cover the organization’s operation costs, pay the salaries of the cooperative’s employees, and invest in the community – e.g. on one of the NGO’s initiatives in that same community. With such a model, enterprises benefit with tax deductions (Corporate Social Responsibility) and ensure suppliers. The community, on the other hand, benefits by settling cooperatives that stimulate local production, promoting employment to the families, and reducing migration rates to the cities (as happens with the Tlaloc Barters Group and the Tumin Project). It also benefits from the agreement made with the participants about taking care of their families and communities, and from the investment that is done of the surpluses into initiatives that help improve its overall living conditions.

ChildFund strategies are quite comprehensive and integrative in reach because all funds collected are used to support both the sponsored child (and the different dimensions of its needs such as nutrition, medical attention, clean water, educational books, materials, teachers, etc.) and the whole community (clean water for drinking
and health care). This means that all funds are combined and used to benefit all children and their community, and not only the sponsored children.

Other strategies are specifically addressed to avoid creating dependency relations. In concrete, the community sponsorship programs are intended for a specific target: ensure the community’s self-sustainability in an agreed period of time. The money to find the partner enterprise comes from ChildFund’s main office and it is recovered from the money the enterprise provides in the sponsorship budget. ChildFund is an officially registered civil organization and each of its local offices is an officially registered civil organization as well, and not a part of ChildFund’s main office. So the budget goes to increasing the community’s Civil Association’s self-sustainability through capacity building programs (training them on getting funds, managing programs, establishing cooperatives, increasing social participation, etc.). The enterprise and ChildFund make an agreement where the local Civil Association (the community organized) ensures results in a certain period of time (10, 20 years), and if there are not results (periodical evaluations are made) the funding is stopped. In short: the partnership contemplates an Exit Plan for both the enterprise and the ChildFund’s main office with the intention of ensuring a decentralized development program.

Insights into and Recommendations for the SNSP’s Self-sustainability:

ChildFund aims at fostering local economies that can become a sustainable source of financial support for the children and their families by creating alternatives that are based on the mutual support of its different initiatives. Its insights are significant for the SNSP in that they provide specific means through which their already integrative project can further stimulate the creation of a local economy that is less reliant on its community members’ migration and that, at the same time, can become a sustainable source of financial support for the Night Schools. The settlement of cooperatives, such as the ones mentioned in this case study, could stimulate the regions’ production, empower local citizens, and reduce the migration rates to the cities offering local economic alternatives to the people. If parents of the Night Schools students have an extra income, perhaps they could afford to send their children to
school. If there is a cooperative in the town, perhaps the Night Schools children would have greater job expectations in their own community, as suggested also by Lopezllero from the Tlaloc Barters Group. Moreover, if the cooperative surpluses are used, at least partially, to fund the SNSP, its financial self-sustainability would increase.

Another significant insight for the Barefoot College was ChildFund’s emphasis on systematizing its projects’ processes, and results to increase their transparency and with it their advocacy capacity – a resource from which the SNSP could take large advantage given its weakness in this aspect despite its extensive experience and reach.

Additionally, the Barefoot College already has a strong organizational structure but the field research showed that, although social ownership of the project (participation) is strong, the Village Development Committees (including the Village Education Committees) and/or the Field Research Centres still rely heavily on the support from Tilonia’s Office (the organization’s headquarters). Further decentralizing the Barefoot College structure through local organization’s capacity building programs seems to be an important ingredient for preparing the grounds for its head office’s future “exit” from the SNSP, which would help in the latter’s long run sustainability.

4.4.5 Centro de Estudos Avançados de Promoção Social e Ambiental/Projeto Saude e Alegria (Project Health and Happiness or PHH)

The Project Health and Happiness has 26 years of experience working with socially and geographically excluded populations in the Brazilian Amazon region. The credibility that the organization has gained among the people as a result of all of this time of work has allowed it to expand its area and purpose of intervention, with a more comprehensive agenda for integrated and sustainable community development, and with a methodology that the organization is purposely systematizing with aims at scaling the project within and beyond this region.
PHH initiatives are divided into Territorial Development, Health, Education, Culture, and Communication, and they are all structured through a permanent process of Institutional Integration that enables their mutual support.

This integrative approach has been one of the organization’s main strengths from the very beginning. PHH started as a health delivery program in the year 2006, when the organization acquired a boat (the Abare Ship) that, making regular rounds from community to community, approached people with an interdisciplinary team presented as the Mocorongo Great Circus teaching them how to take care of their hygiene and prevent diseases through fun, participatory games. Personnel from the boat also offered basic medical and dental attention, family planning trainings, minor surgeries, adapted technologies such as micro-systems for the provision and treatment of water, house filters, wells, etc.

The success of the project resulted in its absorption by the Brazilian Ministry of Health and in its escalation at State level in 2010. As a consequence, the organization finished its health mission not only in the consideration that it had achieved its objective, but also that the State’s delivery and funding capacity was bigger. Caetano Scannavino, PHH’s current director, argued that the organization’s mission is to create replicable development models of action that can be further scaled by agents that are capable of implementing and funding them sustainably, for which it also works on strengthening the links between the communities and partners from abroad. Models that serve as demonstrative references for the State (not the – rather unstable – government) and/or the private sector so they learn better and cheaper ways for designing and implementing public policies/projects and adopt them. Once this mission is achieved, the organization changes its role from implementing the programs to creating management capacities in the communities to oversee their continuous persistence and quality.

The Territorial Development Program is the basis of the social and political support of all of PHH’s work, since it enables people to manage their own development by
strengthening their self-management capacities and adapting the program to local conditions. One of the main initiatives within this program is the Sustainable Entrepreneurship Program. It responds to the fact that the Amazonian communities live in an extremely vulnerable region where land occupation and resources mismanagement are the prevailing practices. In addition, the government conditional cash transfers’ development model Bolsa Familia has resulted in the disappearance of local production and led to extreme dependency by the communities on external subsidies.

In education, while PHH’s efforts where concentrated until not long ago into complementing schools’ activities, they are now focused on a pilot project developed in partnership with a few schools, a foundation, and the local government for making education more locally relevant. For that, they make use of a participatory mapping technique (explained below) which allows them to identify which elements of the local context are more familiar and significant for the children and their communities, and customize the teaching learning materials accordingly.

Although their model is allegedly cheap, it relies heavily on external funding, which is why (as with the previous cases) ensuring financial sustainability represents one of the organization’s main concerns and where it devotes a great extent of its time and energy. As a consequence, PHH is currently discussing the possibility of creating a parallel for-profit enterprise that can serve to fund its social objective. Also, as with the other organizations, it has been careful to ensure transparency in the management of the funds to facilitate donor’s support, for which it usually hires an independent auditing service.

As mentioned above, PHH puts special emphasis on the comprehensive character of its interventions in the recognition that community life is integral itself, that all age sectors have to be attended, and that one area can support another because it is frequently the same people that are involved.
However, to achieve this level of integration is very difficult. Many factors work against it: the responsibilities of PHH’s staff are distributed by areas and each area has to be accountable of the programs at its charge to ensure maintaining donors support (whose funding criteria are not integral and they expect concrete results in concrete areas). Thus, while all personnel are encouraged to be involved in all areas of work, they can only do it superficially because they have to concentrate on their own projects.

To counteract these effects, PHH has established an *Area of Institutional Integration* that is responsible for linking the organization’s diverse programs and determining institutional articulations and policies (so that they can share their human, infrastructural, financial, and other resources), planning the dissemination, expansion, and replication of the model, and ensuring its sustainability. For those purposes, this area uses strategies that include:

a) Gaining international visibility by bringing famous figures to attract funding – that is, working on the models’ advocacy capacity.
b) Diversifying its sources of financial support.
c) Allowing online donations of materials, equipment, or others.
d) Offering consultancy and advisory services to the public and private sectors, including NGOs and social movements (capitalizing on its experience).
e) Working in partnership with the communities and institutions (public or private) from abroad that have diverse development agendas – which enables the organization to expand these communities’ access to a wide variety of social programs that support one another, and also benefits the foreign partners because they make good use of PHH’s experience, know-how, and credibility in the region to access it. As with ChildFund, the partnerships with the communities are made to create or strengthen their local organizations that, being independent from PHH itself, require less of the latter’s financial and administrative support.
f) Promoting the beneficiaries’ ownership of its programs. All programs are created through the participatory mapping methodology mentioned above, in which the community members gather with the members of the organization to draw up,
together, a map of their community. During the drawing process, a diagnosis is made of local conditions, challenges, problems, and priorities. The participatory mapping not only allows the communities to visualize themselves and their context but to become agents of their own development, defining strategies, and distributing roles, which enhances the programs’ possibilities for sustainability. The above is particularly important because local people lack an entrepreneurial mind-set, most probably as a consequence of a governmental intervention that has not been particularly keen to include them in its development programs. This methodology not only enhances people’s ownership but also enables the description of people’s integral perspective about their community, its components, conflicts, resources, problems, needs, as well as the possible strategies to respond to all of them. PHH also ensures that all its programs are supported by a training of "multiplier" agents, that is, local leaders that can manage and disseminate the programs independently.

g) Using PMES annual cycles (planning, monitoring, evaluation, and systematization) to ensure (and promote that) the organization’s initiatives work transversally. In this regard, the circus is another key resource for PHH, because it integrates the way people learn, conceptualize, and appropriate its initiatives by using different languages (dancing, singing, talking) that interrelate knowledge.

h) Developing a multi-annual strategic plan for scaling-up PHH’s model (made in collaboration with Ashoka & McKinsey & Company [2010]) that places emphasis on strengthening the integrative character of PHH’s practices and the organization’s inter-institutional agreements, contemplates the means for the model’s sustainability and scalability and PHH head office’s future retrieval from its management.

**Insights into and Recommendations for the SNSP’s Self-sustainability:**

PHH’s project, although contextualized, covers similar areas with those of the Barefoot College. Because of their similar objective with the Night Schools, particular attention should be given to the education programs aimed at increasing the relevance of local schools’ teaching methodologies, curricular contents, and learning materials design. The schools’ lack of relevance for the rural children is a problem to
which the SNSP offers an alternative, and the use of PHH’s participatory mapping technique could complement its efforts greatly.

It was also envisaged that like PHH (and all of the above mentioned case studies) is doing with its local entrepreneurship initiatives, Barefoot College could profit by innovating new means to motivate local production and vocational training to create a long-term economic autonomy both for the people and for the SNSP. Perhaps by settling new for-profit initiatives in the Barefoot College (a strategy also used by FEN) the incomes of which support, the funding of the SNSP, a possibility that could also be combined with the cooperative scheme of ChildFund. If done in collaboration between the SNSP and the Solar Energy Program, for example, this model could contribute, at the same time, towards the global fight against climate change (as suggested in the recommendations of Amigos de Calakmul’s case) that ultimately is relevant for the Barefoot College’s beneficiaries as well.

On the other hand, working with partnerships has not only enabled PHH to disseminate its experience in the benefit of other organizations and their beneficiaries but also, it has served to distend PHH’s financial constraints. This is a resource from which the Barefoot College could take further advantage (capitalizing on its extensive credibility and know-how) to concurrently strengthen the SNSP and its other initiatives in the understanding that these collaborations are designed by and subject to the control of the local people. Capitalizing also on the agency capacity created in the children through the Parliament’s experience could have great social effects that, ultimately, might result in sustainable sources of support for the Night Schools, which could be done by consolidating a network of "multiplier" agents with the Night Schools alumni, for example.

Most important of all, a programmed consolidation of the existing integration among the Barefoot College’s different development initiatives through the definition of a program for institutional integration could strengthen the financial sustainability of them all – one program supporting another – and create greater perspectives for the Night Schools students after their "graduation". Again, the trans-generational
approach suggested by the Tlaloc Barters Group. This program could be in charge of systematizing and monitoring (with the use of PMES for example) the long term transversality of the SNSP and the other initiatives of the Barefoot College, and of settling partnerships with internal and external agents for the concrete purpose of increasing this transversality.

Finally, PHH’s insights also showed the Barefoot College that, in the sake of the SNSP’s self-sustainability imperative, it is pertinent to reflect not only on the long-term objectives of the program but also on the degree of responsibilities expected for the organization's main office.

4.5 Feedback Experience on the Significance and Implications of Increasing the Self-sustainability of Educational Initiatives for Effective Outcomes in Educational Development, and thus, on Sustainable Development

Why is it that reducing educational initiatives’ level of dependency to external sources of financial and/or political support is crucial for their effective outcomes in terms of sustainable development, that is, for improving the quality of the education they provide? What is the significance of increasing educational initiatives’ self-sustainability, and through which means can this self-sustainability be built?

This chapter discussed the case of the Barefoot College’s SNSP: a program that is attracting a sector of the population that the government and private schools are not managing to catch (the most unprivileged, the girls, the castes without any educational background, the dropouts) and pushing them back into the mainstream system.

The SNSP’s success in attracting these children seems to come from the fact that it is designed to be flexible and adapt to the needs of the children and their parents, providing them with services and conditions that address the roots of their decision of not sending their children to schools: their social, economic, personal, and cultural context. That is exactly why the SNSP model is particularly comprehensive, and that
comprehensiveness is its principal strength, as well as one of the principal ingredients that makes possible its high level of financial self-sustainability and public ownership.

The RTE’s quality standards and sanctioning scheme, on the other hand, present a trap for the effective achievement of the Act’s objectives, mainly because of the narrowness of its approach on quality and the lack of flexibility in its implementation. It seems that realizing the RTE’s primary objective of ensuring access to quality education for all children implies challenging many of its prescriptions, and a more flexible approach that allows for local customization of national policy in order to attract and retain the most disadvantaged children.

The research into the Barefoot College’s SNSP demonstrates how drawing on the different local conditions, knowledge, and resources of the communities served by the schools is critical to ensure equal access to quality education for all children – including the most disadvantaged.

The RTE Act addresses the overall quality of the educational system. There is certainly a noble intention behind it – one probably better than the approach used in many countries where governments tend to promote non-formal education in these areas instead of developing formal education for all. However, the Act’s lack of sensitivity to the particular conditions of many of India's schools not only fails to address the causes that prevent the retention of a great number of the most marginalized children in the country, but may even leave many children currently attending alternative schools like those in the SNSP without any schooling at all.

How many schools are there in this situation? To date there is very little information about what is really happening to all the private educational institutions in India that do not meet all of the RTE's standards and, therefore, either lack the government’s recognition needed to operate, or might lose it, if they ever managed to get it in the first place. There is in fact no official account available of what the results of the RTE have been since 2010 (Chhakchhuak, 2014), so it is difficult to get a clear picture of
what is happening in general, let alone for these kind of initiatives. Calculations vary quite radically. According to Central Square Foundation’s CEO Ashish Dhawan (cited by the Press Trust of India, 2013b), more than 300,000 private budget schools are currently facing the threat of closure because of their lack of compliance with the RTE’s norms. However, according to the National Independent Schools Alliance (2014), the number is 5,907. This same organization estimates that 2,983 schools have been shut down as of March 2014.

According to Indus Action, a civil organization that promotes awareness of the contents of the Act to support its smooth implementation, if schools wish to avoid being shut down,

they will have to raise funds, to increase infrastructure to a level where they can get recognition. Even infrastructure in progress has been considered for provisional recognition, and that makes them eligible for economically weaker section (EWS) students’ reimbursements. The other method is to buffer some load, by enrolling kids in the 3-6 age group in nearby private schools which are eligible for EWS reimbursements. The third option becomes open schooling through the National Institute for Open Schooling. (D Roy, Indus Action, Program manager, personal communication, April 19, 2014)

Private schools catering to EWS students can secure 100% reservation under Section 12 of the RTE. However, to be entitled to the government’s reimbursement, they still need to comply with the infrastructural and other norms of the Act (D Roy, Indus Action, Program manager, personal communication, April 19, 2014 and A Doegar, Indus Action, Program manager, personal communication, April, 19, 2014). That is, the options that these organizations appear to have to avoid being sanctioned is to channel their children to neighbouring public schools and to formalize their curricula, the profile of their teachers, and their school infrastructure to comply with the Act’s norms – all at the risk of losing the flexibility that makes them so successful in attracting these children.
It is of course true that inputs like the preparation of teachers and the school's infrastructure (as suggested by the RTE) are relevant and important. In fact, in the case of the SNSP, the availability of drinking water represents one of the major attractions for families when deciding to send their children to school – because they can use the time they would have spent collecting water from wells receiving education without compromising the provision of this essential family need (Rajasthan ranks among the bottom five Indian states as far as access to drinking water in rural areas is concerned [Sharma, 2014]).

It is also true that infrastructural conditions in the Night Schools are relatively precarious. Students study on the floor, and, although the solar lanterns are revolutionary in enabling the schools to operate after sunset in areas without electricity, there is little doubt that the light they provide is not ideal for the children to study. Children certainly deserve much more and, especially since the RTE has made education a fundamental right, it is the State’s responsibility to ensure that children have positive access to it in at least reasonable conditions.

But there are other ways of allowing for contextual flexibility without compromising the rights of children or permitting “private interests to come in with the notion of minimum input and maximum capital gain”, that is, what the Act intends to avoid (D Roy, Indus Action, Program manager, personal communication, April 19, 2014). The state of Gujarat has acknowledged that decent infrastructure and full compliance with the RTE’s norms do not guarantee effective learning outcomes (Gujarat Education Department, 2012). Moreover, what the SNSP case shows is that the Act cannot guarantee universal access, equity, relevance for the community, nor their ownership of the schools. In cases of private schools working with disadvantaged children, as the Barefoot College does, Gujarat requires infrastructural compliance with the RTE, but is flexible with regards to the schools that demonstrate improvement in learning outcomes over time. This state’s interpretation of the RTE is, thus, more sensitive to the contribution that such organizations are making in realizing the intention behind the Act, and shows that there are ways to respond to such education initiatives other
than purely punitive, and based more on audited performance (Press Trust of India, 2013b).

In fact, there are many ways in which the government could benefit in the pursuit of its aims by cooperating with private schools like those of the Barefoot College – supporting rather than punishing them. The consultancy firm Ernst & Young’s survey (2012) made some suggestions in this regard: NGOs could share the particular knowledge they have of the communities with whom they work; they could help the State in training its teachers so that they may respond to the context in which they work; they could help in bridging children into the mainstream education system, do evidence-based advocacy, and support innovation in educational models. Furthermore, their capacity for mobilizing communities could help in the effective implementation of SMCs; and they could contribute in the elaboration of teaching and learning materials and of assessments so that they reflect the situation of the children better.

The central and state governments are currently piloting public-private partnerships, which include the Rajasthan Education Initiative. But what the SNSP – as a model that is mainstreaming children to the formal education sector – tells us is that, while it is crucial to find new means of cooperation with the private sector, it is not enough, because government schools are still the largest providers of education in the country. If India wishes to achieve universal access, equity, and quality in its compulsory education, the government will need to go beyond establishing transitional flexible interventions, and design strategies that build flexibility into the system. What the SNSP shows is that making education accessible and relevant requires a holistic approach in the design and implementation of public policies that responds to the factors that prevent families from sending their children, boys and girls alike, to day schools, and that enhances opportunities in children’s futures, not only in the cities but also in rural contexts.

The relevance of the curriculum, the community’s ownership of the schools, the cultural bond with the teachers, and the mutually supportive programs that constitute
the ecosystem in which the schools are embedded, are perhaps some of the reasons why parents, in spite of the availability of public schools in the region, still prefer to send their children to the Night Schools.

With its Balmela Festival, its Children's Parliament, its emphasis on girls’ education, its community’s participation in the management of the schools its usage of its own evaluations, its bridging courses, its teachers, and the visits and extracurricular activities that it organizes (among others), the Barefoot College’s SNSP represents a practical operationalization of the intercultural education’s principles as defined by UNESCO (2006b).

A model that facilitates equitable opportunities in education, that adopts measures that facilitate the integration in the education system of groups with special needs (like the migrants), that provides non-discriminatory learning environments, and that implements concrete measures to address contexts where historical backlogs limit the ability of learners and teachers to participate as equals with everyone else in society by providing an education that is responsive to the global but also to the local context. Programs such as this ask critically important questions to the government: questions that suggest not only alternatives for dealing with the implementation challenges of the RTE, but also the importance of joining forces with, rather than punishing, those who are contributing to the sustainable provision of quality education for all children.

While that happens, it is evident that the SNSP needs to keep working on improving its levels of self-sustainability, so that it can effectively keep addressing its social objective with less vulnerability to external financial and political challenges or support. This is because, although the program already bears hallmarks of self-sustainability, such sources are not stable and its difficulties in acquiring external financial and political support have increased dramatically, both in the global context following the economic crises of 2008, and in the national context following the enactment of India’s RTE. Therefore, the experiences of the comparative case studies provide important insights into strategies to improve the financial self-sustainability of the SNSP, which also shed light on some of the considerations that educational
initiatives in general can take into account when building upon their self-sustainability. Based on these insights, the Barefoot College Study suggested the organization to define a multi-stage plan for the Night Schools that includes:

1. Capitalizing on what the model already has:

In the first place, to increase self-sustainability the findings demonstrated that it is important to capitalize on what the model already has. In the case of the SNSP, especially in terms of the beneficiaries’ ownership of the project, evaluating the current state of the Night Schools’ model (What is it offering that the public schools are not? What is missing?), and systematizing the methodologies used and their results (see case studies’ recommendations R1, R2, R14, R23 in the Appendix. Comparative case studies and their strategies for self-sustainability).

2. Enriching, strengthening, and consolidating the Night Schools’ model (see case studies’ recommendations R9, R17 in the Appendix. Comparative case studies and their strategies for self-sustainability) by:

a) Consolidating the organization’s management of funds, enhancing its already high levels of transparency, and defining new funding strategies (see case studies’ recommendations R2, R3, R4, R6, R7, R8, R9, R11, R14, R15, R16, R19, R22 in the Appendix. Comparative case studies and their strategies for self-sustainability).

b) Mapping and evaluating the already existing interconnections between the Night Schools and the Barefoot College’s other initiatives, and defining concrete strategies to reinforce their integration still further (see case studies’ recommendations R5, R21 in the Appendix. Comparative case studies and their strategies for self-sustainability).

c) Exploring new partnership possibilities that can enrich the model and expand its scope (see case studies’ recommendations R9, R19, R23 in the Appendix. Comparative case studies and their strategies for self-sustainability).
d) Decentralizing still further the organization and accentuating the co-management of the Night Schools (see case studies’ recommendations R12, R20 in the Appendix. Comparative case studies and their strategies for self-sustainability).

e) Designing creative ways to strengthen the local economy to a level of self-sufficiency that encourages children to remain in their communities and not to migrate to the cities (already an aim of the program), so that they can make better use of the experience provided by the Night Schools, and thereby creating in parallel an environment that stimulates the emergence of new sources of financial support for them (see case studies’ recommendations R10, R11 in the Appendix. Comparative case studies and their strategies for self-sustainability).

3. In the long-term, envisioning new directions for the scaling up of the Night Schools model and designing the Barefoot College main office’s future/long-term possible exit plan from the SNSP (see case studies’ recommendations R13, R23 in the Appendix. Comparative case studies and their strategies for self-sustainability).

There is an apparent conflict in the Night Schools model that was mentioned in the study as well. If the Night Schools are serving children that the State schools are not (thanks to the flexibility and relevance of the former to the children and their communities), the bridging courses offered by the Night Schools might appear misleading in their intention to bridge children into a public system that is not pertinent for them, where they will probably drop out or be directed to the cities’ job market. What, then, is the mission of the Night Schools? How can they improve their strategies to avoid that fate for these children? If the Night Schools are bridging children into the public schools, how might they influence the latter to become more consistent with their conception of quality education and literacy, and with the proper means to ensure access to schooling for the populations they serve?

Public, free, and quality education is a right of all children. While the State works on its own strategies for this to happen, the solution to the challenge that the Barefoot College’s Night Schools face regarding funding should not be found in demanding
school fees from these already marginalized children. It is rather a matter of enhancing the Barefoot College’s self-sustainability by increasing the level of integration that the SNSP has with its overall development strategy, improving the effectiveness of the Night Schools model, capitalizing on the beneficiaries’ ownership, and innovating techniques for attracting funding, as well diversifying and managing these funding sources. These are all approaches that the Night Schools might consider for designing a multi-stage plan for the self-sustainability and scalability both of the Night Schools and of all other Barefoot College’s initiatives.

After all, it has been widely demonstrated that literacy and education are pre-requisites for the alleviation of poverty and for the successful implementation of other development interventions.

Finally, the study suggested that what is important is that the Barefoot College capitalizes on its significant degree of integration in the community within which it works, and discusses the plan proposed in the Barefoot College Study with the beneficiaries of its SNSP, not least because they know what is feasible and urgent. As it happens with most of the initiatives currently run by the Barefoot College, the participation of the beneficiaries in the design and implementation of the development initiative increases their sense of ownership and agency with regard to the program and its outcomes.

4.6 Conclusions to Chapter 4

Programs such as the SNSP ask critically important questions to the government: questions that suggest not only alternatives for dealing with the implementation challenges of the RTE, but also the importance of joining forces with, rather than punishing, those who are contributing to the sustainable provision of quality education for all children, enabling the global and the local agendas to support each other.
Yet, the “SNSP-RTE conflict” is a typical case of how the prevalence of top-down and “best”-solutions’ policy design and implementation can hinder policies’ plural relevance, democratic ownership, and integrative responses. Additionally, it is a case that demonstrates how this prevalence hinders the achievement of the agreements that the international community has finally made on promoting a model of development that is sustainable. In other words, the mismatches between the SNSP and the RTE’s quality criteria – the former’s dependency on the authority that implements this regulation (regardless of its pertinence) and its challenges for overcoming financial instability – are all illustrative of the problem stated in Chapter 2: the consequences of the current distribution of political and financial resources for the achievement of the international goals for education. The SNSP’s inherent sources of sustainability that have managed to keep it active (yet at risk) in ensuring children this educational right are illustrative, on the other hand, on means through which the unequal ownership can be tackled.

Moreover, as evident with the comparative case studies, this problem is widespread in the field of development: the prevalence of unequal power dynamics not only obliges development practitioners at all levels to develop strategies to compensate for the challenges posed by their dependency on external resources, factors, and actors, but also represent one of the motivations for the setting of development initiatives aiming at counteracting such power imbalances. This context provides the constitutive and regulative evidence that, according to Evers and Wu (2006) allows for the at least provisional generalization of the findings, because the studied cases are all defined by these social rules and moreover, exist the way they do only because they follow such social rules, designing their programs (like Juan Castro from the Tumin Project suggested) “as they can” be done and not “how they should” be done.

All the empirical evidence presented in this chapter makes clear the significance of increasing the self-sustainability of development initiatives from different levels and areas, if the sustainability factors are to be addressed “sustainably”, and the international development goals are to be achieved. It also shows how, the other way around, building on democratic ownership, providing integrative responses, and
ensuring plural relevance, contribute to increase initiatives’ effective outcomes and thus, their self-sustainability.

For that, all sorts of strategies are used by both the SNSP and the comparative case studies. The next chapter will go back to them through an abductive inference analysis that will put into dialogue these feedback experiences with the feedforward theoretical patterns of expectation of Chapter 3. The purpose is to build an explanatory hypothesis for the significance of and the means for reducing educational initiatives’ level of dependency to external sources of financial and/or political support and, thus, improve their effective outcomes in terms of sustainable development (the quality of the education they provide) – which is the objective of this thesis.
CHAPTER 5

ANALYSIS AND CONCLUSIONS

5.1 Introduction to Chapter 5

“Man has two types of delirium. One, clearly visible, is the absolute incoherence, the onomatopoeia, the words spoken at random. The other, much less visible, is the delusion of absolute consistency. A resource against this second delirium is self-critical rationality and the use of experience”.


This thesis explores the significance of the ownership factor on the effectiveness of educational initiatives’ outcomes for sustainable development, which, it argues, should be considered in the operationalization of education’s quality. The ownership factor refers to the extent to which the distribution of political and financial resources ensures egalitarian advocacy capacities (power) for the different stakeholders to get involved in the design, implementation, and evaluation of policies, programs, and/or initiatives, and decide on contesting issues. That is, the extent to which it recognizes the different actors’ right, capacity, and responsibility to own and control these processes.

Considering the inequality that currently characterizes such distribution in the field of educational development (see Chapter 2), this thesis also aims at exploring the considerations that should be taken into account for building an alternative scheme of ownership in which the self-sustainability of educational development initiatives at different levels and across sectors is enhanced.

After gathering insights from a selection of relevant theories and empirical evidence, this chapter represents the last step in the abductive inference logic process followed by the thesis. For that purpose, it triangulates and validates the theoretical and
empirical findings by analysing, in a comparative perspective, the matches and mismatches between the feedforward patterns of expectation of the complexity theory and the capability approach, and the feedback experience brought by the empirical evidence of the Solar Night Schools Program and the insights of the 6 relevantly similar comparative case studies. The comparative analysis is structured around the three thematic categories that, emerged from the literature review on political economy presented in Chapter 2, have guided the whole thesis’ discourse: relevance, ownership, and integration. The chapter describes how the theoretical and empirical evidence respond to the thesis’ line of inquiry. Through their insights, an explanatory hypothesis is made on the significance of increasing the self-sustainability of educational initiatives for improving their outcomes in terms of the international sustainable development goals. These insights also served to devise some of the considerations that could be taken into account for building on this self-sustainability.

Finally, the chapter concludes by arguing that, as the study originally suggested, education needs to be further connected to its developmental context matching its ‘sustainability’ and ‘quality’ imperatives, as it has been proposed by some within the field of Education for Sustainable Development. This way, education can strengthen its potential as a cost-effective means and socially just objective of a development model consistent with the characteristics of sustainability implied in the Brundtland Report. The chapter also concludes that such a matching depends upon itself addressing in a sustainable manner the factors of relevance, ownership, and integration, that is, upon its quality. The thesis provides a proof of concept that this would be helped by concentrating efforts on increasing the self-sustainability of educational initiatives (as development initiatives they are) at different levels and across sectors, and promoting their solidarity-based cooperation.

As a final note, the chapter briefly reminds the reader of the justification given in Chapter 3 for the selection of the theories and of the constitutive and regulative evidence that allowed for the at least provisional generalization of the findings (as detailed in Chapter 4), with the purpose of elaborating on the significance of the present study, its main limitations, and its insights for future research.
5.2 Analysis: Indeed, Affirmative Ownership, Relevance, and Integration are key for Sustainability, and Neither one can be Compromised

The Brundtland Report’s premises suggest that development’s sustainability requires the 3 factors of integration, ownership, and relevance to be addressed in an affirmative and non-interchangeable way. In other words, a development initiative is considered “sustainable” when,

a) it is integral (responds to the local and global developmental – political, environmental, social, economic, cultural – contexts that affect it and towards which it has an impact),

b) it has pluralistic relevance (is relevant to the needs, views, interests, conditions, working approaches of the different actors affected by it, both in the present and in the future generations),

c) it is built by and for democratic ownership (recognizes the right, capacity, and responsibility of the different actors affected by it to own and control its design, implementation, and evaluation processes),

and in which none of these imperatives compromises the other.

What this thesis originally suggested, is that the decisions taken among stakeholders in issues that shape the design and implementation of educational initiatives are being taken on the basis of unequal negotiations (and many times even in the absence of them) that are rendering ineffective in addressing the abovementioned sustainability factors. Because of that, it proposed that a means for addressing such a problem is concentrating efforts on increasing the self-sustainability of educational initiatives – in their capacity as development initiatives – at different levels and across sectors, that is, democratizing their ownership, which would help in the overall improvement of their outcomes in sustainable development.
The findings corroborated such hypotheses: the problem of unequal ownership behaves as a self-fuelling cycle for which the solution seems to be in another such a cycle, but in its opposite direction. In other words: just like unequal ownership has a negative impact on the three sustainability factors, conversely, increasing the self-sustainability of educational initiatives (democratizing their ownership) has a positive impact on the three sustainability factors. Increased self-sustainability reduces dependency, enhancing policies, programs, and/or initiatives’ capacity to be more integrative and pluralistically relevant (of plural relevance), and reducing ownership’s inequality, improving, as a result, their outcomes in terms of sustainable development.

The findings are conclusive in this inconclusive verdict. Conclusive because all of them demonstrate the significance of increasing the self-sustainability of development initiatives as a means for their outcomes to be more effective and sustainable. Inconclusive because such conclusion suggests, also, that there is no content-filled answer to the problem of the harmful effects that the current unequal distribution of financial and political resources are having on the building of a sustainable development model. Only the shape of a skeleton, of the structure of a process that, by enabling a more balanced distribution of power, allows its different stakeholders to fill its gaps and regularly transform it as they find it relevant to their various, ever-changing, and concurrent interests and developmental contexts.

Democratizing ownership implies giving up on searching for fit-for-all solutions and decentralizing the power that is currently concentrated in the hands of those that have the required financial resources, of those with the greatest political authority, of those that dominate development’s discourse, of those that hold more lobbying visibility and power to affect legislation. It implies sharing their control of the process, giving space to more freedom, and thus, to flexibility, constant adaptation, contextualization, and the inherent impact on the initiatives’ capacity to be relevant to a plurality of interests and responsive to different developmental needs at both global and local levels.
Distributing the financial and political resources among the constituents of the social system implies not only respecting their agency to responsibly affect change but also undertaking positive (and not only marginal) actions to empower it, both as a matter of social justice and of practicality, so that the momentum can be built as a catalyst of a solidarity-based development model that is sustainable.

All evidence points to a series of interconnected reflections that support this argument:

5.2.1 Integrative Models and Increased Self-sustainability

Although with different supporting arguments, the recognition of education’s potential contribution to development has been widely recognized. It is known, for example, that if its outcomes are effective, education can contribute to prepare the human resources that the market requires so that the global and national economies can grow; to transmit the social values required for the political system to operate “properly” (nationalism, democracy, competitiveness, solidarity, manicheism); to change the consumption patterns of the citizens to support the economy and/or address the globe’s environmental concerns; to modify or to maintain the status quo; and at an individual level, to improve students’ capacity to take better care of both themselves and their families’ physical, economical, emotional well-being, etc. Because of these not always confluent reasons, policies and budgets in the last decades have centred in universalizing the access to education and more lately, on making it equally accessible and of quality so that it can fulfil its potential.

One would expect that with the recognition that education has gained for its potential crosscutting effects in the achievement of the broader development agenda, this new quality imperative would have been matched with the sustainability imperative that has gradually arisen for the broader field of development. Yet, that has not been the case. Education is expected to improve its quality but this quality is usually not fostered and/or evaluated in terms of educational initiatives’ level of integration – the
extent to which they are plurally relevant and to which they are built through and for
democratic ownership. In other words, despite there being an assumed premise that if 
education wants to contribute to the global quest for sustainable development it has to 
be sustainable itself, this matching of the “sustainability” and “quality” imperatives 
has been marginal in the field.

Instead, education tends to be detached from its developmental context and, when it is 
not, it frequently prioritizes global over local needs, or the other way around. It is rare 
that educational initiatives are designed, implemented, and evaluated in accordance, 
simultaneously, to the contextual (local and global) developmental factors – political, 
social, economic, cultural, environmental – that affect them and towards which they 
have an impact. That is, it is rare that educational initiatives are integrative. Usually, 
the trend is to decontextualize developmental interventions, to design and evaluate 
policies relying on aggregative or narrow-focused data (usually quantitative) whose 
limitations are not recognized. Education, health, economic, and other policies are 
usually applied through budgets that are not only scarce but also don’t relate to one 
another; that are expected to bring out immediate results that can be evidenced in the 
following elections; designed by people working in separate projects and/or agencies 
who rarely understand the intensity with which these areas interrelate both at a local 
and at a global level or that simply lack of the resources (budget, time…) for linking 
them. Despite the growing awareness of its importance for sustainability, addressing 
development initiatives with an integrative perspective is a deficiency in the field of 
development in general, and education is not the exception.

Educational initiatives operate at many dimensions that both define them and are 
defined by them (e.g. the family, not only the economic but also political, nutritional, 
and other future needs of the children, their emotional conditions, the political 
environment, the working conditions of the principals, the impact on the community’s 
ecology). Yet, their quality is frequently designed and evaluated only in terms of the 
learning outcomes of their students – of outcomes that say only little about the overall 
schooling experience, if considered within the context that signifies it and gives it 
raison d’être; about the extent to which those skills are effective in improving the
conditions of the children and their communities, that is, the conditions that surround
the school (the social relationships they prompt, the health conditions they ameliorate,
the empowerment they foster); and of outcomes regardless of critical inputs with
which they are operating, such as the means through which skills are built (if the
curricula was responsive to local and global needs, if opportunities were equally
distributed), for example. As the complexity theory, the capability approach
energetically highlights that this tendency of policies to decontextualize and simplify
with the purpose of increasing efficiency, usually evades the problems, instead of
solving them (Sen, 2000, p.77), rendering ineffective in contributing with the
building of the sustainable patterns of change in which the international development
agenda is interested.

In other words, the tendency to search for “best solutions” that most of the times are
also transferred a-critically over all sorts of contexts and usually without undertaking
egalitarian negotiations with the different stakeholders affected by them, overlooks
the cross-cutting and bidirectional relation of education with the cultural, social,
health, economic, and political spheres of children's lives, and those of their families.
That is, it overlooks the relationship that exists between educational initiatives and
their (both global and local) developmental context, which is not only affected by
their outcomes, but also has a crucial impact on the extent to which educational
initiatives are able to reach their social objective, and thus, contribute with the
overarching goals of global sustainable development.

5.2.1.1 The Importance of the Integration Factor

Integration is important for educational initiatives’ effective outcomes in sustainable
development for several reasons:

- It enables plural relevance.

All development initiatives’ capacity to convert incomes into valuable outputs for the
diverse actors affected by them (that is, to be plurally relevant) is affected by a
multidimensional array of factors (beyond economic imperatives) that interact differently in each of them according to both the local and global development contexts in which they are simultaneously immersed. This suggests that achieving valuable outcomes requires system-wide interventions that address the diverse specificities that impact the variation in the capacity that different persons or groups have to take advantage of the educational initiative (which is what the capability approach calls addressing the capability failure).

The case of the SNSP in India is a clear example of the importance of addressing the integration factor for the effective outcomes of educational initiatives in terms of this capacity variation. The SNSP caters to families that have been presented by the current public educational arrangements with the need for making a “tragic choice” (as Nussbaum calls it) between different capabilities that they value as essential for their own development (sending their children to school or ensuring their livelihood). In other words, the program caters to families that lack a capability set that avoids capability failure, that is, one that ensures them the positive enjoyment of their right to education for their children. Children don’t get enrolled in the already available public schooling opportunities and if they do, they frequently end up dropping out, which has resulted in these children’s exclusion from school. Yet, despite having been cost-effective and successful in integrating into the education system a group of children that the State has not been able to attract, the SNSP’s survival is now threatened by the recent enactment of India’s RTE, which establishes a set of homogenous criteria that all private schools in the country (with the exception of minority unaided schools\(^\text{12}\)) have to comply with in order to avoid being sanctioned and/or even get shut down.

While aiming at guaranteeing equal access to quality education for all children in the country, this legislation lacks sensitivity to the particular conditions that govern the

\(^{12}\text{In 2012 the Supreme Court resolved that minority unaided schools cannot get their recognition withdrawn in terms of the 3\textsuperscript{rd} clause of section 18\textsuperscript{th} of the Act and are exempted from the obligation to save 25\% of their seats for unprivileged students.}\)
diverse cultural, political, and socio-economic contexts of the country’s different schools and, therefore, their capacity to comply with its quality standards – which has put the achievement of its own objective (and thus, that of the international EFA agenda) in a predicament. Not only because for many schools (including the Night Schools) the shortage of funds impedes their compliance with the Act, but also because reaching students from the most disadvantaged backgrounds and responding to their particular contexts and constraints frequently requires them to challenge or go beyond RTE’s quality norms and standards (e.g. setting a fixed number of instructional hours, for example, might not be suitable for migrant children). Thus, the options that these organizations appear to have to avoid being sanctioned is to channel their children to neighbouring public schools and to formalize their curricula, the profile of their teachers, and their school infrastructure to comply with RTE norms – all at the risk of losing the flexibility that makes them so successful in attracting these children. Ironically, the ultimate victims are the very children that the Act intended to benefit, because customized programs like the SNSP were so far the only alternative that worked for them.

In this context, the Barefoot College is implementing an integrative (rather than isolated educational) response that places education within its context and that is structured and adapted according to the local social, cultural, and economic conditions of the children and their families, which helps it to convert negative freedoms into positive rights. First, it adapts the schools’ schedule and curricula according to local needs: not only do schools operate at night after children are finished with their household duties, but their schedule is flexible also as per the local agricultural cycles. Also, they offer an intercultural education modality that values not only the mainstream curricula but also local knowledge, resources, and skills that makes education relevant for children and their families, rather than a curriculum that, by focusing only in the former, would encourage migration to the cities (and, possibly, a life in an urban slum). Second, they integrate the schools within a network of other development programs that support the children and their families’ specific needs, which is strengthening and sustaining local communities by providing an overall schooling experience that renders relevant to the particular kind of life in
those communities. This is reducing the scope for capability failure and tragic choices, which is enhancing the opportunities for these children’s positive enjoyment of the fruits of each of such initiatives – in particular, their right to have access to quality education. This model resembles what Nordtveit (2010) calls an Integrated Service Delivery model, which is consistent with the key practical implications of both the complexity and the capability approaches into the nature of sustainable change for the field of development.

➢ It creates momentum for sustainable change to emerge.

Educational initiatives’ potential crosscutting effects in development require the strengthening of their interconnections within that developmental context. Interconnections that, if of quality, can make a better use of the available local resources to support and strengthen educational initiatives and to, simultaneously, make them more effective in addressing the contextual development needs that give them raison d’être, preparing the grounds for future generations. This of course includes the environmental dimension most frequently associated with the concept of sustainability, but – for what should be already clear at this point of the thesis – is not limited to it. Integrated interventions (such as the SNSP’s modality of integrated service delivery that includes from health care through education to the provision of potable water and solar lighting), enables both the mutual strengthening of the various components of the initiatives’ network (with a system-wide perspective, as Mason [2009] suggests), and the deep entrenching of these initiatives within the local communities, building the momentum for the needed change to emerge.

As also supported by the evidence of the comparative case studies, implementing educational initiatives through this kind of comprehensive and system-wide model (especially if complemented with cooperation partnerships with other local or external development initiatives that help in addressing the educational initiatives’ diverse needs in a holistic manner) also allows for the sharing of human, financial, knowledgeable, methodological, infrastructural, and other resources (capabilities included) across the different projects to support one another. Therefore, it helps in
reducing educational initiatives’ level of dependency to one particular source of financial and/or political support, enhancing their sustainability. This is of particular importance considering the limited resources available for educational initiatives and the consequential high reliance that most of them have on the external resources they manage to secure, which threatens their capacity to deal with their social objectives in what they deem to be the more pertinent and relevant way.

- It creates the conditions for new patterns of sustainable development to be sustained.

The level of integration that educational initiatives have with their developmental context, thus, has a trans-generational reach in terms of both its impact and its means for sustainability. Not only addressing the local development context of the educational initiative (as the insights from ChildFund, Escuela Nueva Foundation, and the Tlaloc Barters Group suggest) helps in preparing the context in which the children of the schools are going to be immersed after graduation, but it also enhances the possibilities that the conditions of the community in which the school operate (and the capability set of the future generations) are ameliorated and, thus, that its members become increasingly capable to provide the school with the political and/or financial resources it requires to be sustained – with less dependency on external resources, and with less need to push their children to migrate to the cities to earn a wage to support their families, which reproduces the dependency vicious cycle.

- It fosters a more democratic ownership.

As mentioned above, educational initiatives’ integration enables that material, knowledge, and other resources are shared and, thus, increases their self-sustainability (their autonomy, agency, capacity) and with it the possibilities of the intervention to be relevant to local needs, that is, to be contextualized.

Yet, integrating educational initiatives within their developmental context, by enlarging and deepening their sources of support and their impact, also builds in
another critical capital for their sustainability: credibility and trust. This was an insight brought up by the case studies (especially the SNSP, PHH, Tlaloc Barters Group, and the Tumin Project), and overlooked by the theories explored despite there being some research corroborating its value (see particularly Gillies [2010, p.146], who considers credibility as “an essential element of political capital”). Trust and credibility, are essential ingredients that motivate ownership. When initiatives address people as multidimensional beings, that is, when they address their diverse and differentiated interests and needs, they become more relevant to each of them. If they are relevant for people, it is more likely that they trust the initiatives, and thus appropriate them — becoming agents rather than passive beneficiaries of them. This appropriation, in turn, increases the chances that people advocate for what they need and want and, thus, it lays the groundwork for perfecting the design and implementation of a capability set that is rich for the different stakeholders (more relevant) by its becoming, with their inputs, more integrative.

It became evident from the interviews undertaken in India that it is the trust gained by the Barefoot College – after years of working in the integrative development of its communities – which motivates the parents to send their children to school and the communities to support the SNSP. This support is what prompts their discussion (through the Village Education Committees and the Children’s Parliament) of what they need and how (when, where) they want to reach it. This support (built on trust) is what reduces the financial dependency of the SNSP and, thus, what enables it to customize its initiatives in terms of what the communities require, achieving more effectively its social objective of ensuring the right of children to a quality education. This effective outcome, product of the trust created by the integrative character of the Barefoot College’s interventions, is what contributes to the global sustainability agenda by being advanced in its educational objectives and means.

PHH had a similar experience in the Amazon region. Achievements in some developmental areas of work, said in an interview one of the leaders of the program, built the credibility required for the communities’ participation in further initiatives – a participation that enabled the latter to become more integrative in scope and thus
more relevant to the different stakeholders. Only with trust (suggested the leaders of the Tlaloc Barters Group and the Tumin Project) traditional power dynamics can be challenged and new ones imagined and supported. How, if not for trust (and despite the knowledge of widespread corruption), would the people accept to be paid with a voucher printed by the local teachers instead of with the national currency?

This way, not only integrated interventions foster trust, but trust fosters solidarity – another key resource for development initiatives as suggested, consistently, this time not only by the case studies but also by the two theoretical approaches; this solidarity that enables social cohesion, breaks with cultural/ethnic/racial barriers, reinforces ownership, and increases the awareness for the other; the solidarity that can enhance the sustainability of the initiative insofar that it creates the conditions for relevance to be more plural (now that “the other’s” needs and interests are also taken into account), ownership to be more democratic (increasing people’s interest in equality and negotiation as suggested by the theories), and integration to be further supported (with people’s cooperation and sharing of their diverse products, services, and other resources). This is particularly important considering the environment mentioned in Chapter 2 in which the lack of social cohesion is a problem that frequently occurs not only within but also among educational and other development initiatives: the scarcity of funding is forcing them to compete (rather than cooperate) with each other – a dynamic by which educational initiatives frequently end up adjusting their own priorities and methodologies to please their already existing funders or attract new ones, challenging, this way, the effective implementation of their programs.

Because of the above, educational initiatives’ internal trust-built solidarity fostered by locally integrative developmental interventions helps in consolidating, in turn, the agency/autonomy of the educational initiative (its self-sustainability) and, thus, its capacity to responsibly negotiate in a more equal basis with its stakeholders and others with which it shares a common destiny, attending this way, the sustainability imperatives of different levels of the greater social system. For this, PHH’s experience is also illustrative because of the way in which some of its social
methodologies (deeply rooted in the above exposed) have been adopted and scaled by the Brazilian State.

5.2.1.2 The Importance of Educational Initiatives’ Self-sustainability for Enhancing their level of Integration

If something has become clear with the emergence of the concept of sustainability, it is the reality of the mutual interdependence of the global and the local. Thus, neither of these dimensions can be overlooked in a process of development that aims at being sustainable. Addressing social systems’ needs at different levels requires the knowledge of the particular specificities that impact the variation in the capacity that each educational initiative (and each of the actors affected by them) have to take advantage of its inputs and turn them into effective outcomes; of the specific problems and challenges that the educational initiative confronts not only at a global but at a local level as well; of the local and not only external resources (financial, knowledgeable, human, infrastructural) that can be taken into advantage to support it and; of the local and external environmental and cultural factors (including the concerns for corruption that frequently justify top-down interventions) that can hinder or enhance the implementation of an integrative scheme.

Certainly, some of this know-how and resources to make educational initiatives integrative can be brought by external actors in their differentiated preparation and experience. Or, as per the complexity theory, external inputs can represent important resources for educational initiatives’ capacity to meet their own ends. It is important to emphasize this here, because the point made by this thesis is not that development initiatives can totally do without external inputs. The SNSP and the Barefoot College’s model in general has benefited greatly from external material and know-how resources. While taking advantage of local resources the night schools also benefit from the official curricula. The solar lanterns that enable the operation of the schools at night, although adapted, are originally a technology coming from abroad. Part of its financial sustainability is helped by the support of external resources, etc. Education, in fact, is greatly about taking advantage of the inputs offered by
humanity's accumulated knowledge. That is to say, not only the abovementioned interdependence prevents educational initiatives from totally detaching from the inputs coming from their environment, but also that these inputs can actually be a rich source of support for the initiative, regardless of its economic status. But of course that depends on the way in which these know-ledge/resources’ transactions are undertaken. And that is the problem addressed here, because, most frequently, when educational initiatives’ internal stakeholders lack the financial and or political resources required to decide on the means to make the initiative locally integrative, their views are subordinated when deciding contesting issues, and many a time they end up merely becoming executors of other actors’ wills – perpetuating models that, ironically, reinforce their dependency.

Educational initiatives’ self-sustainability is important for taking advantage of these inputs because their internal stakeholders have a capital that external stakeholders will rarely have: the first-hand knowledge of the “local” variable and the capacity to entrench the initiative among the community in the long term so that it constantly keeps on adapting, as required, due to the changing local and external conditions. Because it is the “local” population (whose life itself is integral as suggested by Scannavino from PHH) who live the particular interposition among educational initiatives’ different developmental dimensions (as suggested by the theories) and who can better identify local problems and how they relate to the global imperatives; it is “local” people who have the know-how and experience to discern what is useful or not to make educational initiatives more integrative at a local level, where emphasis should be placed upon.

Reducing educational initiatives dependency on external actors and providing them with the political and financial resources they need to become able to advocate their views can therefore help in the balancing of such negotiations and in taking advantage of both local and foreign resources. Addressing educational initiatives in an integrated manner, thus, not only can build on their self-sustainability (as mentioned above) but also is highly reliant on the degree of self-sustainability that educational initiatives already have.
5.2.2 Plural Relevance and Increased Self-sustainability

The above has obvious consequences for the relevance factor, which is also greatly significant not only because of the way it can hinder/enhance the achievement of the sustainability goals, but also in terms of the legitimacy of the prevailing process of development.

The global development agenda has made it all the more clear that it intends to be relevant to all. That is one of the key imperatives of the broadly-agreed-Brundtland Report for sustainability. Yet, educational initiatives are frequently designed, implemented, and/or evaluated on the basis of pre-set criteria (usually homogeneous and standardized) that claim to be value-neutral, that tend to be decontextualized and reductionist for the sake of efficiency, and that, most of the time, are little consulted with the beneficiaries (for which priorities for funding or working criteria might be quite different) to ensure that their diverse needs and interests are addressed. Moreover, these criteria are often used to determine both nationally and internationally, the provision or removal of financial or political support for educational initiatives, which then are forced to adapt to those criteria and priorities (many times homogenizing their educational supply – curricula, materials, etc.), placing aside the exigencies, needs, and also priorities of their internal stakeholders – which are deeply influenced by the particularities of their local contexts. This results in a condition of inequality in which the interests and needs of those who have greater power to affect their agency or autonomy prevail over those with less, mainly because it is them who have the political and financial resources (power) to decide on the design, implementation, and evaluation of educational policies. In other words, it is rare that educational initiatives are plurally relevant and, as this section suggests, that is mainly the result of educational initiatives unequal advocacy capacity and dependence to external sources of political and financial support, which are scarce and, thus, more decisive.
The above is not about educational initiatives’ level of integration, but about the extent to which they are being plurally relevant. The former concerns the degree to which they are addressing and linking the diversity of factors that at different organizational levels of the greater social system and at its many dimensions hinder or enhance the effective achievement of their social objective. This has an obvious relationship with plural relevance, because the form and extent to which these factors are addressed and linked influence educational initiatives’ capacity to render relevant for the interests and needs of the different (and diverse) stakeholders, which is significant in itself, as will be explained next.

5.2.2.1 The Importance of the Relevance Factor

What the Framework for Action on Education 2015-30’s agenda (to be approved in May 2015) makes clear is that ensuring “equitable and inclusive quality education” remains one of the main challenges of the international community (UNESCO, 2014b, p.3) – a claim that suggests that it is not only important that education reaches all, but that it is of quality to all as well. Quality to all, this thesis’ findings suggest, relates to plural relevance, which is important for educational initiatives’ effective outcomes in sustainable development both as a matter of social justice and of practicality.

➢ As a question of legitimacy and social justice.

The capability approach departs from the key questions that should guide any decision made during the policy making process: what do we mean when we talk about development, and whose development are we talking about? This question is precisely what the relevance factor refers to: how do development initiatives (including educational ones) directly affect the lives of those towards whom they are supposedly addressed? To whom are they, actually, being addressed? To what extent are they enhancing people’s choices to be and do what they have reason to value? To what extent are they being relevant to the (many times contested) needs, interests, conditions, priorities, philosophies, and working approaches of the different actors
that either in the present or in the future are affected by them? That is, to what extent are they plurally relevant?

Any “development” initiative (including educational ones) implies *per se* change and transformation. We identify situations as problems that we want to solve, we decide there is a need for making things different, and, therefore, we set strategies to achieve our objectives. But, which and whose problems are to be tackled? Why are they understood as problems and how should they be solved? More importantly, who has the financial and political resources to decide on these issues? Are their interests and/or opinions more legitimate than others in the sake of their greater advocacy capacity?

In a sense, the assumption that educational (and other developmental) initiatives have to be relevant to all (which is what the international sustainable development agenda pursues) is mainly a question of principle, of legitimacy, of an ethic that respects each human’s dignity and right to choose the kind of life he wants to live and take action and responsibility for it. However, plural relevance is also important for educational initiatives’ effective outcomes in sustainable development as a matter of practicality.

➢ *As a question of practicality.*

As both the capability and complexity approaches suggest, humans’ interests and needs are organized through the concurrent processes of diverse social systems that, operating at different levels (from the individual, his community’s institutions, the State, the Globe), influence each other and, thus, are mutually dependent on the extent to which the other systems of organization hinder or enhance their possibilities to satisfy their own imperatives for sustainability. Thereby, the individual is not immune to the interests of the rest of his community who, in turn, cannot ignore the dynamics that at a national level negotiate his interests and needs with the rest of his countrymen, and, through multilateral organizations, those of the citizens of other nations. Likewise, it is these individuals, their interests and needs, which give reason for such negotiations, which in terms of their own agendas adopt or reject their
resolutions, modify them, give them meaning. Thus, diversity and unity are both realities of the systems, which forces us to take our attention to the relevance that policies render at different levels, as well as to the interests and needs that originate them. That is, to the causes and the impacts that society’s organizational processes have, both at an aggregate and at an individual level, because they all interact and influence each other.

Certainly, the task of ensuring plural relevance is of a complicated nature. Interests (needs, priorities, etc.) in the field of education are multiple and complex, and, many times, overlapping, which motivates the trend for privileging top-down and “best”-solutions’ policy design and implementation, that is, the trend to over-control. However, partial causality (that is, the uncertainty that frames the process of development) forces us to give up on absolute truths. The ability of systems to survive the natural trend of decay that awaits all phenomena depends upon their ability to continually modify themselves, fostering the emergence of new patterns of behaviour that allow them to adapt and survive – deciding what is it that should be sustained and what should not. This emergence is a product that resulted from a set of uncertain processes connected to each other, which carries within its roots convergences and contradictions. Embracing uncertainty, thus, requires the addressing of interests and needs of all constituents of the social system, so that they can become empowered not only to solve their own needs but also to equally negotiate with the others the joint construction of certainties, and become equally responsible for that. In other words, the sustainability of the greater social system encompasses a battle among the multiple subsystem’s own needs and interests that are to be negotiated in conditions of equality in order to respond not only to the greater system’s needs for sustainability but also to those of its different components, which are equally important.

The trend, yet, is to undermine one or the other, and a clear example can be found in EFA’s experience of trying to universalize educational access on behalf of the international development agenda. Despite the fact that the coverage of compulsory education has witnessed a dramatic spread in recent decades, and that schooling
facilities are increasingly available to most of the world's populations, research has widely shown that rural schools in most developing countries have frequently the smallest matriculation figures, lower education attainment, and higher rates of desertion in comparison to urban schools, and that one of the main causes of that problem is the schools' lack of relevance and accessibility for their populations (see: Batelaan [1992]; Schmelkes [1997]; UNESCO [2014a]).

Like the SNSP, there is plenty of evidence that shows there is no one single truth that works for all and that different contexts demand different inputs and represent the origin of different demands – all of which should be concurrently addressed because they mutually affect each other. This is what the intercultural education modality with which the Night Schools operate proposes: to provide the students with the skills to equally participate in today’s asymmetric society by drawing heavily on local knowledge and resources and, concurrently, taking advantage of the contents of the official curriculum. That is, it is a model that by being plurally relevant and integrative enhances the capability set of the students, enhancing their choices, and, with them, a more democratic ownership that addresses both local and global needs and interests.

The SNSP, for example, ensures access to education to children (whose families' particular socio-economic situation prevents them from attending the local private or public schools) by flexibilizing and adapting its model to the different local needs (including those of the girls, the lower castes), adapting the curricula, and incorporating local knowledge. This local relevance has made it cost-effective in contributing, also, to education’s global agenda on education for all, which is also an imperative for the global need for sustainability because of the potential education has to transform the status quo and contribute in the building of a more sustainable model.

This way, if plural relevance is key for developmental initiatives’ capacity to contribute not only to the satisfaction of their own needs and interests for sustainability but also those of the greater social system, plural relevance in education
is of even greater importance: making education plurally relevant to the present and future interests and needs of the different systems simultaneously (of the individual, of his community, of his country, of his environment, of the planet, etc.), by creating self and global awareness at the same time, can change the patterns of metacognition that affect the practice of students after graduation, and, thus, enables the latter to increase educational initiatives’ integration and democratic ownership in the future. It has, as integration, a trans-generational reach.

It is about the recursive logic mentioned by both of the theories: if social arrangements ensure plural relevance to the diversity of stakeholders, their needs and interests for sustainability can be better addressed and thus their conditions to become able to affect change and modify those social arrangements can be improved, permitting educational initiatives’ outcomes to be more effective in terms of sustainable development. Education here acts as a broker between the individual and the social processes of development, that is, as a broker for the mediation between the interests and needs for sustainability of both.

In sum, the same way that educational initiatives’ integration enhances plural relevance, plural relevance fosters ownership and with it sustainability. Because, once their needs and interests are taken into account people are more likely to (and more capable of) appropriate educational initiatives and become responsible agents rather than passive beneficiaries of them, which, in turn, increases the chances of people advocating for what they need and want. This seeds the ground for perfecting the design and implementation of a richer capability set (more integrative) that is relevant to the different stakeholders, that is, more effective (of more quality) for all.

5.2.2.2 The Importance of Educational Initiatives’ Self-sustainability for Enhancing their Plural Relevance

When defining and implementing policies related to the provision of education, most countries have concurrent mechanisms for the political deliberation of the different stakeholders’ interests and needs. Some allow for the negotiation among students,
their families, and the authorities of a school. Others regulate the discussion between the families and the State about issues related to the education of the former’s children. There are also those that consider the demands and expectations of the donors that financially support the implementation of certain policies, or those that debate the needs of the markets and the opportunities they could provide to the students once they graduate. However, currently, these negotiations are being held in conditions of unequal ownership: developing countries, for example, have less of an impact in defining worldwide-impact policies than multinationals, financial markets, or richer countries. And the same happens with intergroup contrasts within national states, where national interests or development standards frequently contrast with those of smaller community organizations, and the power of the latter to contest them is certainly smaller. This inequality hinders the possibility of dealing with diversity effectively, challenges people’s equal agency capability, and, consecutively, affects the distribution of rights and responsibilities and the possibilities for addressing sustainability needs and interests at different levels.

This is why this thesis puts so much emphasis on the conditions upon which such negotiations are being held, because they are currently preventing that (for the sake of sustainability) the needs and interests of the different stakeholders are addressed. It seemed obvious from the experiences of the case studies that development initiatives’ capacity to address the interests and needs of the different actors affected by them derives from the knowledge they hold of the local conditions – knowledge that they can capitalize on if they have a minimum degree of ownership in the process. This ownership is both the result of and the producer of what complexity calls autonomy and the capability approach calls agency – which is what enables educational initiatives to responsibly deal with the different forces that affect them effectively, creating the conditions for their sustainability. That is, as both the theories and the empirical data suggested, educational initiatives capacity to address the interests and needs of the different actors affected by them, that is, to be plurally relevant, is not only reliant on their level of integration. It is also dependent on their ownership conditions, according to which the particular knowledge they hold of the local conditions is or is not capitalized to accommodate the differentiated capacity that
their varied stakeholders have, due to their particular conditions, to take advantage of the educational functioning. Yet, in the field of education, the political and financial resources are not distributed in a way that this local ownership is respected and capitalized, resulting in the hindering of educational initiatives’ effective outcomes, even when objectives are shared, which is the case of the SNSP’s lack of the political and financial resources it requires to self-regulate and ensure the sustainable accomplishment of its social objectives.

The research into the Barefoot College’s Solar Night Schools Program demonstrates how drawing on the different local conditions, knowledge and resources of the communities served by schools is critical to ensure equal access to quality education for all children – including the most disadvantaged. The public alternative puts the families of the SNSP in a predicament between their financial subsistence and their children’s opportunity to attend school. While trying to address this situation, the national interests represented by the RTE are not being plurally relevant, that is, relevant to the diverse needs, views, interests, conditions, and working approaches of the different actors affected by it. That is, resources are not being distributed in a way that enables the children of the SNSP to take advantage of the schooling experience, if not for the SNSP, who's survival is at risk. The decision of sustaining the SNSP or shutting it down should emerge from a discussion about the extent to which its model, in particular, is being more or less cost-effective than the public alternative in guaranteeing children their right to quality education. But the RTE’s sanctioning scheme fails to provide a space for that discussion, and those implementing the SNSP are subordinated to this national law. Ironically, the ultimate victims are the very children that the Act intended to benefit, because the program was, so far, the only alternative that worked for them.

It is “local” people who have the know-how and experience to discern what is useful or not to make educational initiatives more relevant to their needs, to what extent can inputs be converted into the outcomes expected according to local conditions, where emphasis should be placed, what needs to be dealt with in order to sustain the educational initiative, etc. Ensuring theirs (and their educational initiatives’) greater
self-sustainability thus, allows for relevance at a local level to be addressed and, with that, it improves educational outcomes in terms of global sustainability.

5.2.3 Democratic Ownership and Increased Self-sustainability

The second chapter of this thesis already elaborated on how, despite awareness having grown about the harmful consequences of the prevailing unequal ownership, there is a strong trend to promote policy schemes that end up reinforcing these power dynamics and even accentuating dependency relations. Because of that, this thesis contributes to the debate by giving new elements for the understanding of this problem’s significance and also by exploring the means through which alternatives can be built.

This section briefly analyses, based on both the empirical and theoretical insights, the importance of educational initiatives’ democratic ownership for more effective outcomes in sustainable development, and the way in which it can be improved by increasing their level of self-sustainability.

5.2.3.1 The Importance of Democratic Ownership

Democratic ownership is important for educational initiatives’ effective outcomes in sustainable development for the reasons outlined below.

- in the face of development’s complexity and uncertainty, our sustainability relies on our joint construction of certainties.

The process of development in which education participates is complex and uncertain. Not only are the factors and actors that interact within it vast, diverse, and impermanent (actors’ frequent turnover reduce certainty, as suggested specifically by Escuela Nueva Foundation), but the limited predictability of the result of their interactions completely diminishes the possibility of finding "wonderful formulas" (as Sen calls them) that are appropriate for all contexts and moments in time. This means
that, as Sen also suggests, we might need to resign ourselves to the fact that, at the end, what matters is what we collectively can afford to aspire toward the future and how we equally negotiate our different approaches on how to achieve it. Our strategies for development, in other words, should not ignore the little certainty that accompanies our actions – the ever present possibility that any action we undertake will be modified during its interactions with the different and complex factors and actors through which it unfolds. Conversely, they should depart from the recognition of the ineffectiveness of rigid planning and the need to cross check it with flexibility and constant readjustments. This will certainly become an easier task with the joint and solidarity-based construction of certainties, which requires democratic ownership.

- the distribution of power enhances plural relevance and integration.

As already mentioned repeatedly during the chapter, humans meet their interests and needs both individually and organized through different social systems. It is this organization that occurs simultaneously at various levels which regulates both their rights and their responsibilities. As organizational systems of society, educational initiatives also represent the interests and needs of the individuals who compose them. As a consequence, not only do they have a responsibility towards them but also a unique ability to fulfil this responsibility, which is due to their particular knowledge of the conditions and resources needed to become integrative and ensure their relevance for all of their stakeholders. Yet, harnessing the potential for educational initiatives to make effective use of their know-how and internal resources requires their enjoyment of a certain level of self-sustainability, which is currently undermined by the unbalanced dependence that they tend to have on external political and financial resources.

Self-sustainability, which depends on the availability of such resources, is the capacity of each educational initiative to discern between what suits it and what doesn’t, to identify the problems that affect it and the resources with which it counts to solve them, as well as the interactions it can foster in its interior to emancipate the
changes required for its survival. That is, the capacity of agency/autonomy that allows educational initiatives to visualize and meet the interests and needs of the specific context of which they are part. And also, the one that allows the implementation of global development projects without neglecting the local ones in accordance to the multiple dimensions (political, economic, environmental, and cultural) in which they operate. Redistributing the financial and political resources among development's different stakeholders is, thus, a matter of practicality. But also, and as mentioned before, a matter of principle. Of an ethic that recognizes that people also have the right to be treated with dignity and to choose on the lives they have reason to value and be responsible for their decisions in that regard, what is to say, the right and responsibility to exercise their freedom.

Recognizing the importance of people’s dignity implies seeing the stakeholders affected by educational initiatives not only as beneficiaries but also as agents that, while affected by those initiatives, are (can and should be) also architects of them. Education is a process through which the society “shapes” its members, but, also, one that allows that those members transform it. Yet, the trend is to undermine such quality of autonomy, of producer, of agent, and to favour unilateral top-down policies that with inflexible methodologies, expect concrete results from their objectives, as if they were inanimate objects.

The promotion of positive freedoms requires policies’ adaptation and flexibility, which implies decentralizing the decision making process and empowering the weakest of development’s stakeholders. This way it is the people directly affected by development policies that provide the information that is appropriate to their real circumstances, so that policy design is adapted to them. Also, it is that same people who decide on the weights and priorities for the goals and means of the development policies that target them, rather than mechanical or standardized criteria and mechanisms.

Over-control, the capability approach argues, increases (instead of prevents) the corruption that usually concerns the funders, underplays people’s agency and
freedoms, underestimates people’s dignity, and impedes development being relevant at multiple levels and dimensions. Conversely, a scope for freedom is necessary to enable the emergence and empower the “islets of certainty” through which Morin proposes we embrace development’s complexity and uncertainty. Recognizing the right, capacity, and responsibility of the different actors involved to own and control educational initiatives’ design, implementation, and evaluation processes requires, thus, to create the conditions for such autonomy/agency (that is, such self-sustainability) to be exercised, so that both local and global needs and interests are addressed. Again the SNSP’s experience is illustrative. It is the current high level of appropriation that the community of the Barefoot College has of the program which enables it, as an educational initiative, to spot and respond comprehensively to the needs and interests of the particular profile of families it serves, making education not only a right but also a reality for their children. Its already acquired level of self-sustainability allows it to have such effective outcomes despite of its difficulties in obtaining funding for its education objective.

As implied by both the complexity and the capability approaches, the capacity of agency/autonomy of an educational initiative, that is, its level of self-sustainability, largely shapes its exercise of choice during the negotiations among internal and external development agendas – of choices (decisions) that affect the way in which responsibilities are distributed and the sustainability factors are addressed. This means that increasing educational initiatives’ self-sustainability is important for democratic ownership because it makes these negotiations more egalitarian and, thus, more effective in addressing the sustainability needs and interests at different social (organizational) levels.

- freedoms also need to be modulated, distributing responsibilities

Increasing educational initiatives’ self-sustainability is important for making the negotiations among internal and external development agendas more egalitarian. These negotiations are also of particular importance because, coming back to the first point, no truth can absorb all complexity, and, as important as it is to distribute the
agency capacity to embrace it, there is also a common destiny that forces us to negotiate and bridge the multi-levelled and different organized social units that work on education and the other development areas related to it.

The right to education for the children of the Barefoot College is, thus, not only a local interest but a global need in a world in which everything is interrelated and dependent on one another, and the behaviours and fates of some affect those of the others. In this sense, the concerns frequently voiced about the huge array of vested interests playing in the field, the extent to which the satisfaction of local needs and interests can affect those of the others, the commonality of corruption practices, the unequal expertise of those in charge of providing education services, the urgency to find a model of development that is sustainable, the limitedness of funding, and the need of its effective management are also to be addressed. It is important to remark this here, because while many top-down policy schemes are justified by the abovementioned concerns, at the same time much of the claims for greater autonomy is being used to justify the argument that the State should allow and incentivize the privatization of education, which is not the case made here because the public sector has a central role and responsibility in ensuring the positive enjoyment of the right to education.

Misunderstanding this claim for increased empowerment from the bottom to the top as a defence of privatization is overlooking not only the fact that interests and needs (including the right to quality education) are regulated at different levels of social organization in a simultaneous manner, but also that each of these levels of organization holds responsibilities for their procurement. Responsibilities that have to be granted by the people who have the right and the capacity to decide how better to distribute them. And, as Nussbaum suggests, nowadays (democratic) national states are the ultimate representation of people’s autonomy, so they hold a unique capacity and responsibility to balance the power in education for effective outcomes in sustainable development. This capacity, yet, requires them to abandon the trend to homogenize, standardize, and develop top-down and narrow-focused control mechanisms. Instead, it can be harnessed by increasing the self-sustainability of its
educational initiatives at all levels and across sectors without refraining from its own responsibilities at a national level – especially because the latter is also a product of people’s choice and exercise of agency.

It is of course true that inputs like the preparation of teachers and the school's infrastructure (as suggested by the RTE) are relevant and important. In fact, in the case of the SNSP, the availability of drinking water represents one of the major attractions for families when deciding to send their children to school – because they can use the time they would have spent collecting water from wells receiving education without compromising on the provision of this essential family need.

It is also true that infrastructural conditions in the Night Schools are relatively precarious. Students study on the floor, and, although the solar lanterns are revolutionary in enabling the schools to operate after sunset in areas without electricity, there is little doubt that the light they provide is not ideal for the children to study. Children certainly deserve much more and, especially since the RTE has made education a fundamental right, it is the State’s responsibility to ensure that children have positive access to education in at least reasonable conditions.

But there are other ways of allowing for contextual flexibility without compromising the rights of children or permitting “private interests to come in with the notion of minimum input and maximum capital gain”, that is, what the Act intends to avoid (D Roy, Indus Action, Program manager, personal communication, April 19, 2014). The state of Gujarat has acknowledged that decent infrastructure and full compliance with the RTE norms do not guarantee effective learning outcomes (Gujarat Education Department, 2012). And what the SNSP case shows is that the Act cannot guarantee universal access either; nor equity, relevance for the community, or their ownership of the schools. In cases of private schools working with disadvantaged children, as the Barefoot College does, Gujarat requires infrastructural compliance with the RTE, but is flexible with regards to those schools that demonstrate improvement in learning outcomes over time. This state’s interpretation of the RTE is, thus, more sensitive to the contribution that such organizations are making in realizing the intention behind
the Act, and shows that there are ways to respond to such education initiatives other than purely punitive, and based more on audited performance (Press Trust of India 2013b).

Here, it is important to be reminded that India’s public education system is still the main provider of education in the country and that, in fact, the SNSP runs only in places where children are not being sent to day schools. Their purpose is to bridge them to the mainstream education and ensure they enjoy their right to education, and not to retain them within their program or be a permanent alternative for them. Both of these reasons imply that national states, as educational initiatives are, also need to find means to permanently, responsibly, and sustainably address the relevance, integration, and ownership factors, instead of getting satisfied with transitional flexible interventions, which are important but insufficient. Of course, they also imply that national states cannot elude their own responsibilities, which go beyond the very urgent control of vested interests in the private education sector.

It is ultimately people who should decide whose responsibility it is to ensure that all children have access to quality education and how this objective should be achieved, but to decide it through egalitarian negotiations that also derive in new responsibilities for each of them (including the SNSP) to better address theirs and the others’ needs and interests. Negotiations that can be largely fostered and improved with the active and responsible action of the national states and all other educational initiatives that have a stake (and a differentiated role and responsibility) on promoting the global sustainability agenda (including the multilateral organizations and the funders).

Freedom, according to the imperative of global sustainability, should be enhanced, but not unlimited. The very sustainability of the planet requires that needs and interests are negotiated so that each of the systems become able to adapt as necessary to ensure that the sustainability factors are well addressed at all levels. And that is why, as proposed by complexity theory, autonomy is not only nurtured but also limited by dependency.
Democratic ownership, thus, means balanced ownership. It means that the same way it is important to address local needs here it is important to address them there and all over; that educational initiatives are not only affected by the multidimensional context in which they operate but also affect it, and, thus, operate as brokers between the individual and the social processes of development – that is, as brokers for the mediation between the interests and needs for sustainability of both.

Structures for egalitarian negotiations among different educational initiatives and the other social – and not social – systems with which they interact are, therefore, key for balancing the sustainability imperative of systems at different levels: structures that enable the negotiations of inter-systemic interests and needs; structures built for ownership and built through ownership, that is, structures that can be developed and sophisticated through the very agency of the different educational initiatives while, at the same time, serving for their mutual modulation, so that the imperatives of sustainability of each one of the systems (including the global) are balanced.

5.2.3.2 The Importance of Educational Initiatives’ Self-sustainability for Enhancing Democratic Ownership

By combining self-sustainability with negotiation, democratic ownership enables the factors of relevance, integration, and ownership to be addressed sustainably not only within but beyond and among educational initiatives. That is, that the local and global needs and interests for sustainability are balanced.

Since the current is a condition of unequal (rather than democratic) ownership, it is evident that what is imperative is to increase the level of self-sustainability of educational initiatives so that power can be balanced and they become more effective in addressing the sustainability factors, and, thus, in contributing to the global development agenda. Therefore, democratizing ownership requires of creating the conditions for self-sustainability to be strengthened which, as redundant as it sounds,
can be helped by educational initiatives’ already available capacity for self-sustainability.

Increasing the degree of self-sustainability of educational initiatives enhances democratic ownership: first, because it improves their level of integration and plural relevance, which, as discussed in the previous sections, contributes to increase self-sustainability because they create trust, credibility, and solidarity – all of them crucial for people’s further appropriation of the programs. And also because addressing the relevance and integration factors “sustainably” enables the sharing and capitalization of the local human, financial, knowledgeable, methodological, infrastructural, and other resources (capabilities included) across the different projects (or aspects of the project) to support one another, therefore reducing dependency.

Second, because by directly tackling unequal ownership increasing educational initiatives’ degree of self-sustainability helps in breaking the vicious cycle in which development stakeholders’ differentiated advocacy capacity not only results from the decisions made during the unequal negotiations that tend to prevail in the field, but also creates the conditions for the distribution of power for the future negotiations. That is exactly what happens with the Children Parliament mechanism of the SNSP that is creating local awareness of the importance of education and democratic participation among the children’s communities. And it is also the case of its decentralized organizational structure, which strengthens the management capacity and responsibility of the communities to increase their neighbours’ participation and to provide the night schools with the resources they need to operate. This not only reduces the program’s dependency on external sources of support, enabling it to accommodate to local needs and interests, but the community’s participation and support also enables the education program to constitute as an additional source of self-sustainability for the community – a source that, by increasing the latter’s agency/autonomy capacity, is empowering its members to better negotiate their views in the design, implementation, and evaluation of this and other development initiatives. Moreover, it is also what is expected to happen as a result of PHH’s entrepreneurship programs, that are building on the conditions for (if) whenever a
new government in Brazil decides to remove the current conditional cash transfers’
development model (Bolsa Familia) that is accentuating local dependency in external
resources (see the following section).

5.2.4 The Sustainability Factors’ Non-exchangeable Aspect

Unequal ownership hinders contextualization, that is, the possibilities for educational
initiatives’ integrality and plural relevance. Moreover, it creates and/or strengthens
dependency, reinforcing the current status of the ownership factor, as a vicious cycle.

This thesis supports the sustainability premises implied in the Brundtland Report.
Indeed, affirmative relevance, integration, and ownership are key factors for
sustainability because they address the for whom, the of and through what, and the by
whom of development. Development is driven by motivation – something that is
aspired or “valued” as the capability approach conceptualizes it. But development of
what and through what? For whom and by whom? More importantly, at the expense
of what and at the expense of whom?

The “sustainable” imperative that has gradually been incorporated within the global
development agenda wonders about the effects of our actions and their multiple
causalities for both the present and the future generations: causes and effects that are
largely affected by the distribution of financial and political resources among its
stakeholders. In this regards, pursuing democratic ownership is crucial as a matter of
social justice and of practicality because of the way it affects the integration and
relevance factors, as well as the ownership factor itself.

This section wants to add that, in the aims of sustainability, not only the affirmative
treatment of the three sustainability factors is important (ie. the need for relevance to
be plural, policies integrated and ownership democratic). Additionally, that it is key
that in designing, implementing and/or evaluating policies or programs none of the
factors is compromised. This is important to remark upon because, usually, in
practice, one or more of them tends to be undermined. In line with the EFA goals, for
example, the RTE aims at making quality education plurally relevant and inclusive for all. Yet, with its sanctioning scheme in which negotiations about its criteria are out of the question, it hinders the possibility that the educational initiatives regulated by it address the integration factor in a sustainable manner, hampering the plural relevance it aimed to promote.

As another example, nowadays many governments have understood the need for policies’ integration and have adopted strategies such as the Conditional Cash Transfers model (CCT) that exchanges support (money most of the time) for people's commitment to go to the doctor and, for example, send their children to school. That is, people are offered financial support in exchange for their (and their children’s) co-responsible enjoyment of a comprehensive set of functionings that are not negotiable in the understanding that such co-responsibility will help in addressing short and long term poverty deprivation. Moreover, the financial support for these families is supposed to avoid people's need to make tragic choices (when sending their children to school they are not losing an income but gaining it) and the ‘conditional’ component to “ensure” people’s ownership of the programs. The experiences of the CCT are many and diverse, and it is not the purpose here to reach any kind of judgement about their performance. However, what the empirical data collected for this research showed is that the CCT Bolsa Familia initiative that the Brazilian Government runs in the area where PHH operates, despite being integrative is, conversely, undermining local ownership. Interviewees revealed that now that people have found that they don’t need to work to survive anymore they have stopped most of the local food production and started buying canned food from outside instead. As a result, the government’s model that aimed at empowering the poorest of the poor has created extreme dependency from the communities to external subsidies, which is of great concern, because these kinds of programs are highly vulnerable to political/electoral interests and governmental changes.\(^{13}\) What is important to note is

\(^{13}\) This is not to say that the State doesn’t have the responsibility to financially and politically support local development but that, for the sake of sustainability, it should not do so by undermining local ownership, plural relevance and/or integration.
that, sustainably addressing one sustainability factor while undermining another sustainability factor reduces the chances for sustainability.

A final example of this point is the very debate about quality education. The international community has two simultaneous agendas. On the one hand, it wants education to contribute to the achievement of the sustainable development goals. In that, there is consensus. On the other hand, it wants equal access to quality education for all. But (most frequently), such quality is not understood in terms of education’s contribution to the sustainability goals. So, for what is education being promoted? Why do we want to put every single child on earth in school for 6 or more years of their lives? What is the purpose behind it? When operationalizing quality, aren’t we concerned about outcomes? Results? But outcomes and results in terms of what exactly? Can we have quality education for all if that education doesn’t help children to address their particular needs and the aspirations emerged from their particular context? Can we have it if children cannot change, with that education, the developmental context in which they are immersed? Can we have it if the very concept of quality that the learners and their communities have is taken as secondary or sometimes is not taken into consideration at all?

The three sustainability factors are important for sustainability and none of them should be compromised even for the sake of that sustainability. The non-exchangeability among the 3 development factors is what balances the pragmatic and ethical concerns mentioned throughout the thesis, according to which educational and other development initiatives should be relevant for all, integrative and built for and by democratic ownership — as a recognition of the right, capacity and responsibilities of both the present and the future generations to lead the lives they have reason to value, that is, to own and control the process of development, while respecting the right, capacity and responsibilities of the others as well. Not only democratizing educational initiatives’ ownership by increasing their self-sustainability has a positive impact on the 3 sustainability factors, but it also, promoting their pluralistic relevance and integrative responses, is means to, in turn, reduce their dependency to external factors and actors, democratizing their ownership.
The above implies that the 3 factors are mutually binding. Educational initiatives’ effective outcomes in sustainable development depend on their ensuring positive freedoms for their different stakeholders (regardless of their race, gender, etc.), which is only possible if they are integrative. But to be integrative they require a certain degree of self-sustainability that allows its internal stakeholders to determine the possibilities for that integration to occur and consolidate so that, in turn, outcomes become relevant for the needs and interests of the contexts in which they are immerse. This not only determines the different stakeholders’ capacity to convert their available resources into effective outcomes, but also, as a consequence, affects the conditions in which these outcomes are to be pursued in the future. As a broker of the sustainability imperatives of the different levels of the social system, educational initiatives need to address, simultaneously and in a sustainable manner, the 3 factors of integration, ownership, and relevance for not only their sake but the globe’s sustainability.

As detailed before, it is currently rare that educational initiatives are simultaneously integrative, plurally relevant, and built by and for democratic ownership. Because of its role as a facilitator for the sustainable treatment of the ownership, relevance, and integration factors, this thesis concentrates on the significance of increasing educational initiatives’ degree of self-sustainability. Since that was already justified in the last sections of the thesis, the next section will revise some of the considerations that could be taken into account, according to both the theoretical and the empirical data, for designing strategies to increase educational initiatives’ self-sustainability so that they can improve their outcomes in sustainable development.
5.3 Analysis: Strategies for Increasing Self-sustainability

“To exit the well we must stop digging”
Luis Lopezllera, Tlaloc Barters Group

The current distribution of political and financial resources among stakeholders in the field of education promotes the prevalence of practices that are hindering the efforts to build a model of development that is sustainable. The above section of the thesis justified, through an abductive inference analysis, why it is significant that the self-sustainability of educational and development initiatives in general is increased so that they can improve their outcomes in terms of sustainable development. Corresponding political adjustments should be made at all levels and across sectors of the global system to enable this power distribution of the political and financial resources, so that negotiations and trade-offs among the different development stakeholders are made on a more equal basis and the sustainability goals are more effectively addressed.

In that sense, three main implications derive from the confluent insights of the complexity and capability approaches that could be helpful to increasing the self-sustainability of educational initiatives, which are only briefly mentioned here in the understanding that they are already detailed in Chapter 3:

- Changing the informational basis that informs development (including education’s) practice.

Our informational basis determines the extent to which our development practice conceives and addresses the sustainability factors. Adopting an approach that pays attention to the different actors and factors that affect the purpose and process of development, as well as to the interactions that exist and can be fostered among them, will be more likely to address in a sustainable way the factors of relevance and integration. Of greater urgency is a paradigm shift that starts by recognizing the uncertainty that frames human actions and therefore their development process. This
change should be reflected in the design and implementation of strategies that contemplate (since their inception) spaces for constant adjustments to both the deviant factors and behaviours that come in the way, in considering that no initial planning (solution) may avoid the changes required by the different contexts and agents with which it encounters throughout its process of implementation.

Development, just as education for development, is a complex and uncertain process. Ensuring sustainability will depend on how the conditions are promoted so that answers to its challenges can emerge from any side of the system: answers (initiatives, practices) that can be mutually linked in a spirit of solidarity, rather than of competition, in order to create “islets of certainty” that enable the navigation, as Morin says, in development’s sea of uncertainty; “islets of certainty” that would only emerge and consolidate if emphasis is placed on recognizing the freedom of all components of the system to choose their own paths to development and be responsible of them, and on promoting their egalitarian negotiation with the others; “islets of certainty” that will strengthen with positive actions that increase the degree of self-sustainability of the various initiatives that are simultaneously participating in the development process (including educational ones), which requires flexibility and constant adaptation as well as the aforementioned basis of solidarity to address the common problems that challenge our planet's sustainability.

➤ Building the ground for sustainable change to emerge and sustain.

Basing the design, implementation, and evaluation of development policies on an informational basis that recognizes the importance of the self-sustainability of educational initiatives would translate into a new development model that renounces from searching absolute truths and creates the conditions (within and beyond them) that motivate the emergency, strengthening, and negotiation among alternatives/solutions that may be confluent and conflicting at a time.

Morin’s Via Proposal (detailed in Chapter 3), that brings the comprehensive development proposal of the capability approach to a global level, suggests to
combine order and disorder through regulation. That is, it proposes the organization of both in a compound that privileges, with equal priority, freedom and solidarity. The Via Proposal suggests to broaden the scope of freedom and remove anything that prevents it to expand the possibilities of sustainability of the social system. This would favour the emergence of all kinds and levels of initiatives. These initiatives, if empowered by plurally relevant measures, not only can become able to solve the interests and needs of those to whom they are accountable. They could also increase their capacity to responsibly contribute to the joint construction of integrative certainties. The proposal also suggests to increase, simultaneously, the number and quality of structures and mechanisms that allow the healthy interaction among these initiatives, that is, their solidarity and the negotiation of the various and diverse interests and needs to whom they are accountable (and responsible for), so that the common sustainability concerns can also be effectively addressed.

The above means improving the conditions for strengthening the agency/autonomy (that is, the self-sustainability) of educational initiatives, which will facilitate both their current trade-offs and the development of mechanisms for future trade-offs. While democracy itself cannot guarantee any specific outcome, the democratization of the overall development process could foster an environment that better favours the emergence of alternatives that favour sustainability.

➢  *Prioritizing education.*

Despite its unquestionable importance in regards to development, education is currently being significantly underfunded.

Because of its potential to expand the informational basis and multidimensional awareness that informs developmental practice and transforms the learning and creative aptitudes of both the individuals and the social systems in which they organize (including educational initiatives), education is a crucial resource for their self-sustainability. It is the conscience of social systems – what enables their self-knowledge and projects them beyond themselves. This means that education can
transform the shape and scope of their development practices by building on their capacity for self-sustainability, their agency, autonomy, power, and capacity for discrimination among alternatives for the design, implementation, and evaluation of their initiatives, enabling them to deal more effectively with the uncertainty and complexity implied in development. Due to its cross-cutting effects, and the range of development dimensions that it incorporates and to which it obeys (environmental, political, economic, cultural, etc.), education is a broker that mediates between the global, local, and individual interests and needs for sustainability. Therefore, education has the potential to transform the current and unsustainable status quo and create the conditions for building a more sustainable model of development that is more pluralistically relevant, integrative, and democratic for the individuals, their communities, and their nations. Prioritizing education involves recognizing this potential and allocating the necessary resources and efforts to take advantage of it and develop it.

Doing the abovementioned political adjustments is imperative for increasing the self-sustainability of educational initiatives and, with it, improving their outcomes in sustainable development. However, since it is evident that these changes are subject to complicated readjustments in the current balance of power, development initiatives may need to devise their own strategies to survive and become able to improve the effectiveness of their outcomes, and, the other way around, improve their outcomes to survive.

The following are some of the considerations brought about by both the theoretical and the empirical data about the factors that contribute to increase self-sustainability, all of which, as will become evident, are related to one or more of the sustainability factors. These considerations might guide development initiatives (education included) in defining specific strategies pertinent to their particular context. Because, of course, none of these considerations is generalizable. As has been repeated throughout the thesis, no “best” solution for education or development is likely to ever become appropriate for all contexts and moments in time. Only the shape of a structure could be generalizable. A structure for a process that, by redistributing
power, being integrative and ensuring plural relevance, enables its different owners to signify and adapt it as they find it relevant to their various (concurrent, common and conflicting) interests and needs – and in accordance with their developmental contexts, capacities, and responsibilities.

- Adaptation and flexibility to address the ownership, relevance and integration factors “sustainably” and in a simultaneous way enhancing positive liberties (effective outcomes).

What both the theoretical and the empirical insights suggest is that overcoming the dependency relations that the current distribution of political and financial resources generates requires the building of conditions for this dependency to be reduced. Building such conditions signifies gathering, creating, and/or reinforcing each development initiative’s inherent sources of sustainability so that they can improve the effectiveness of their outcomes. That is, positive outcomes that are actually (and not only figuratively) available to the people – which is known as positive liberties – and that, consecutively, favour the possibilities of the initiative to be sustained. This can be helped by addressing the ownership, integration, and relevance factors simultaneously and “sustainably”, that is: 1) recognizing the right, capacity, and responsibility of the different actors involved to own and control its design, implementation, and evaluation processes (democratizing ownership); 2) responding to the local and global developmental – political, social, economic, environmental, cultural – contexts that affect it and towards which it has an impact (being integrative), and; 3) becoming relevant to the needs, views, interests, conditions, working approaches of the different actors affected by it, both in the present and in the future generations (being plurally relevant). In order for this to happen and that these sources of self-sustainability (plural relevance, democratic ownership, and integration) are enhanced without compromising any of them — favouring with it educational initiatives’ effective (positive) outcomes —, all data consistently highlighted the importance of flexibility and adaptation (strategy versus rigid planning as complexity suggests). This way, global needs and interests can be
balanced with the local ones and uncertainty and deviant events can be sorted out without neglecting from the initiatives’ objective.

Of course, and as has been already discussed in Chapter 4, the experience of the Night Schools is largely illustrative of the usefulness of adaptation and flexibility for designing and implementing means that can be used with the abovementioned purposes: The success of the SNSP in preventing its children from being excluded from school relies mainly on its sensitivity to their particular socio-economic and cultural contexts, interests, aspirations, needs, and capacity to convert incomes into desirable outcomes (as the capability approach suggests). It also relies on the adaptation that it does of its model in accordance to such particular conditions, which it does by: adjusting its schedule to the children's constraints; integrating the schools within a network of other development programs that support the children and their families – addressing the different conditions that determine capability failure; decentralizing the program so that it can be better customized according to different contexts; and offering an intercultural education modality that makes education relevant not only in terms of the mainstream curriculum but also for the children and their families and communities. This way the SNSP, by providing a bridge for children previously excluded from any form of education to the State schools, is supporting both India’s RTE and UNESCO’s global Education for All initiatives (as well as the global efforts to implement the intercultural education principles already embedded in many international and national legislations). Moreover, the effective outcomes of the abovementioned mechanisms (product of SNSP’s flexibility and adaptation) have enabled the program to subsist despite the lack of stability that characterizes its internal sources of financial and political support.

In other words, adaptation and flexibility are key for the customization of integrative service delivery models for educational initiatives; for setting up and taking advantage of decentralized structures for the decision-making process; for developing and implementing intercultural education models of education that are relevant for the children and their families, while also following the mainstream curricula so that they can have richer resources to equally participate within the society and contribute with
its global development process. All of these will ultimately reduce educational initiatives’ dependency to external sources of political and financial support, by enhancing the beneficiaries’ appropriation of the initiative through these alternatives for integrative development, democratic ownership, and plural relevance.

SNSP is an example of the importance of adaptation and flexibility (in contrast with inflexible pre-made recipes) for positive action and, thus, for effective outcomes in sustainable development. More importantly, it demonstrates the importance of capitalizing on local ownership, on the local know-how, and on the trust created by working closely with/within the communities. This is because these are the local resources of which educational initiatives can take advantage to adapt and allow for more flexibility, so that further self-sustainability can be enhanced.

For complexity, acknowledging not only the diversity but also the uncertainty of the effects of development initiatives and the future inputs with which they will count implies ensuring that adaptation and flexibility are a permanent feature of the initiative – from its inception to its design, implementation, and evaluation. Geyer says that this can be done by adopting a model that resembles a complexity cascade, in which planning anticipates moments and possibilities for its frequent re-planning and keeps flexible “as long as the system stays within the general boundaries of good performance” (2012, pp.29-30). As Morin (1990) adds that this might be helped by torpedoing the action when it deviates its planned course (which is what the RTE could be doing now that it has noticed that by aiming at controlling vested interests it has endangered the survival of other potential allies). The above is the reason why the capability approach puts so much emphasis on taking advantage of and improving the mechanisms for participation, discussion, and scrutiny (the judiciary system, the electoral system, etc.).
The importance of education’s potential as a fertile capability to enhance other capabilities and, thus, self-sustainability has already been detailed above and in the previous chapters.

By having education as an important component of its broader development model, the Barefoot College is further promoting its sustainability by playing a key role in initiating a first generation of learners into education, by fostering local ownership through the SNSP Children’s Parliament scheme and the involvement of the communities in the educational process, etc. This way the Solar Night Schools are contributing to further developmental sustainability in the sense of enhancing educational participation across generations (we know that educated mothers tend to seek ways of educating their children) and, thus, building local capacity to deal with development’s sustainability imperatives.

ChildFund also uses education as a strategy to reduce the level of dependency of its broader development model. Education is serving to enrich the cooperatives scheme that is creating sources for self-sustainability in the regions where they are implemented, for example. And the other way around, the cooperatives are also generating resources that are supporting the educational initiatives.

Here it is important to insist on the theoretical approaches’ emphasis on the importance of education being pertinent and relevant. Pertinent in the sense of taking advantage of its potential to change the informational basis that affects development praxis (with the teaching of Metacognition, for example), which is in itself crucial for increasing self-sustainability (as mentioned above) insofar that it enhances the capacity of autonomy/agency. Relevant by using schemes that like the Intercultural Education Model14 (used by the SNSP) address the interests and needs of the different present and future social systems simultaneously – of the individual, of his

14 For more about the implications of an Intercultural Education Model please refer to UNESCO, 2006b.
community, of his country, of the planet, of its environment, etc. This of course is important, among others, for local empowerment.

➢ *Fostering integration by stressing on the number and quality of connections.*

Educational initiatives are social systems of organization that simultaneously respond to and affect other systems of organization — social and not social (e.g. the culture, the environment, the markets, etc.), which is to say that they obey to multiple determinisms: the interests and needs of the other systems with which it interacts and which are not only affected by their outcomes but provide them with inputs that can enrich the regulation of their own interests and needs. At the same time, educational initiatives are complex supra-systems composed by a myriad of subsystems (components) – all of them interrelated (e.g. the teachers, the infrastructure of the schools, the students, the learning methods, the relationships among the parents and the principals, etc.). From this systemic perspective, consolidating educational initiatives’ capacity to be more self-sustainable and less reliant on external sources of financial and political support requires the meeting of the needs of their different constituents and improving the qualities of their internal and external interactions – basically strengthening their system as a whole.

A practical consequence of the above (as suggested by Mason, 2008a, 2008b, and 2009) would be undertaking massive (and still conscious) interventions at all levels of educational systems (which includes everything concerning the facilitators of education, its contents, its tools, relationships, resources), which will multiply the number and quality of interactions exponentially among their constituents. Reinforcing each other like a snowball, these actions can reach the critical mass and momentum needed to precipitate and sustain the desired change. This implication from complexity theory is actually shared by the capability approach, which suggests that all of the dimensions in which development initiatives operate have to be addressed to enhance the capability set, address capability failure, and prevent tragic choices (all of them key for self-sustainability). In this sense, one of ChildFund’s main strategies for fundraising is attracting one to one sponsorships for children but at
the same time it makes sure that all funds collected are combined and used to benefit all children and their community, and not only the sponsored children.

Of the same importance is to improve, as just said, the quality of the interconnections within and between the internal and external factors and actors that affect educational initiatives, because these interconnections represent an input that can consolidate and enrich their resources for building on self-sustainability. The SNSP’s Balmela Festival is to note here. Being a space for the evaluation of the SNSP organized with the joint participation and contribution of the different stakeholders, it also prompts their interaction and further involvement with the program. Moreover, the abovementioned Integrative Service Delivery model conceptualized by Nordtveit as a practical consequence of complexity theory and used by the SNSP, the PHH, and to some extent by the other case studies, is one of the means to foster that capabilities mutually reinforce each other and that financial, infrastructural, human, and other resources are more easily shared across different areas. This is of particular importance for educational initiatives, because education tends to have more difficulties than other development areas in producing or attracting financial sources of support.

As the SNSP, many of the case studies reported that integrating the different components of their programs increased their effectiveness – especially the ones that, like the Brazilian Project Health and Happiness (PHH) or ChildFund, work using a very transdisciplinary approach and comprehensive development model. However, there was consensus that donors typically work with established criteria according to their own aims, regarding the allocation of funds and the assessment and evaluation of the interventions. These lead to the setting of relatively strict funding guidelines and the expectation of specific results from the programs they fund. As a consequence, these initiatives often have to plan their funding, institutional responsibilities, and, more critically, their development programs, in a fragmentary fashion. Such fragmentation, of course, runs contrary to the integrated nature of the environment in which they are working. To counteract this problem, it was observed that organizations frequently design strategies targeted at increasing the availability
of funding, by way of strengthening the transversality of their institutional responsibilities and the interrelations among their development programs. In that sense, it is important to note PHH’s experience. The organization has established an area that concretely dedicates to institutional integration (and it is called like that), which is in charge of precisely ensuring that the different programs of the organization, its different administrative processes, and resources, are all designed, monitored, and evaluated in a way that it is ensured that they are mutually coordinated, working transversally, and supporting each other.

Integration not only reinforces each development program’s potential for sustainability, but allows both for a more flexible distribution of funds and for the benefit of funding in one area of the overall development strategy to be spread across other areas. A model of integrated service delivery seems to help them in attracting more funding that will actually benefit many or even all areas of their activity. Although donors generally target their funding to some specific area (health, for instance), if they are shown that their investment can contribute to positive outcomes in other areas as well (such as community empowerment, environmental protection, etc.), they might be more willing to support the program (see Chapter 2’s insights about the Value for Money approach).

Another key resource used by some of the case studies, especially ChildFund, Escuela Nueva, PHH, and the SNSP, are the partnerships. Establishing partnerships (in the understanding that these collaborations are designed by and subject to the control of the local people – see section 5.2.2 of this chapter) can help in taking advantage of inputs (services, methodologies, resources, etc.) that fill the gaps that the initiative itself cannot cover, making it more integral, and thus more plurally relevant — and consequently more self-sustainable and less reliant on one particular source of financial or political support. At the same time, of course, establishing partnerships helps in the joint and cooperative (solidarity-based) construction of the “islets of certainty” that global development requires to sort out uncertainty and its natural tendency to decay.
Another interesting resource utilized (even if not purposely) by some of the case studies, to improve the quality of their interactions, is what I call the “bridge people”. Bridge people are the stakeholders who, because of their particular profile, can better help in linking the educational initiative with outside support, and in scaling the educational initiative’s know-how abroad. They are people that have the necessary knowledge to understand, at least enough, the basic of the two worlds – the internal and external dynamics that surround the educational initiative. This knowledge of course includes, for example, language skills. When undertaking the field research, bridge people were key in translating what was going on to an outsider who did not have the time nor the resources required to fully understand what only the educational initiatives’ internal stakeholders knew. These people were not only helpful in terms of translating the local language to my own language and/or vice-versa (permitting the mutual transference of knowledge and experiences), but also to systematize their meaning. Since partnerships occur among initiatives that come from different contexts and not obviously share the same experience or objectives, these people – as a medium for the inter-systemic flow of information – are key to potentialize the quality of such partnerships: to help the local stakeholders convert external inputs in a way that is locally relevant, and; to share their experiences and gain visibility¹⁵ abroad (which helps in attracting further support for the initiative). Finally, bridge people can help in linking initiatives and stakeholders through communication means such as the Barefoot College’s community radio station, or its traditional puppetry activities.

Building on trust and solidarity is another means for improving the quality of the internal or external interactions of educational initiatives. For both of the theories,

¹⁵ In 2011, the Bank of Mexico sued the Tumin Project’s creators who allege they were blamed for challenging the State’s monopoly on emission of currencies in the country (Soberanes, 2012). Litigation proceedings have made minimal progress due to lack of legal grounding. Nonetheless, the involvement of the Bank was enough to dissuade the Intercultural University of Veracruz from supporting its Tumin-associated professors. However, the news spread rapidly, which increased the interest of foreign people and institutions. This diffusion outside is today intentionally fostered by the partners because it serves as a protection against possible threats from abroad for the development of this project. PHH and the Barefoot College also use this strategy (bringing famous people from abroad) to gain international visibility and attract support. In the case of the latter, this visibility might be of help if the government decides to apply RTE’s sanctioning scheme to its SNSP.
solidarity is a cohesive element within and beyond initiatives that encourages the interest in negotiations, in their egalitarian character, and their effective results. Trust motivates solidarity, solidarity motivates trust. And both, together, motivate the conditions for participation, partnerships, and cooperation – which, as already said, are important inputs for building on educational initiatives’ self-sustainability. PHH takes advantage of the credibility and trust it has acquired within the communities after years of demonstrating effective outcomes as a resource to initiate new initiatives in solidarity with them. Some donors, on their side, also became interested in cooperating with PHH because of the possibility they saw to capitalize on the Amazonian communities’ trust on PHH to work in the region. The Tumin Project and the Tlaloc Barters Group generate and capitalize on trust and solidarity by taking advantage of the local resources and by creating new ones in order to complement them and become able to address more effectively people’s different needs (the Tumin currency is, as the project leaders say: a credit of trust, without which, is only a printed paper). More importantly, they depart from solidarity and trust. Solidarity because the first step for including a new member into the network of partners is providing him with a given amount of the alternative currency. This solidarity (a free income?!) motivates the person to trust the initiative and give it a try by using the received currency, which in itself is an act of solidarity with the other members of the project who will benefit by this transaction.

Another less tangible example of the potential of trust and solidarity for building on ties and motivating negotiations comes from an insight also brought by the Tumin Project. In a region where ethnicity and class barriers are “natural” boundaries for any development initiative, the trust resulted from the initiatives’ previous effective outcomes (which, as mentioned in the previous sections, can be related to the extent to which the relevance, integration, and ownership factors are addressed “sustainably”) has motivated solidarity among otherwise divided community members. People are given new reasons to transcend these discriminatory barriers and find themselves as partners of a joint project. This is also the aim of the SNSP, in which children from all castes are sat together and “untouchables” are particularly encouraged to become teachers. Yet, although people send the children to the Night
Schools in an act of trust – a trust motivated by the Barefoot College’s known effective outcomes – changing these cultural treats to solidarity takes time, a long time, and the conditions outside the school might not change that fast.

Improving the negotiations among different educational initiatives and between them and other social systems of organization also relies on building structures for participation and negotiation as a transversal dimension (as FEN suggests), that enhance effective dialogue among their different interests and needs – which is what the RTE intends by promoting the development of local School Management Committees. These structures have been key for most of the case studies. The Baking Trust created by Amigos de Calakmul enables the negotiation among the different internal and external stakeholders involved. Both Escuela Nueva and the SNSP facilitate the communication between the communities and the schools through the settling of a Children’s Parliament (or government as FEN calls it).

Another resource used by most of case studies to favour the quantity and quality of their relations with outside sources of support (and internal as well) is ensuring transparency in the management of the funds. Transparency gives certainty, and therefore trust and credibility – both crucial for improving effective communication and negotiations and thus, cooperation (more about this below).

> **Removing corrosive disadvantages.**

Increasing the self-sustainability of educational initiatives can be favoured by mapping and resolving whatever stands in the way of such an objective, which the capability approach calls “removing the corrosive disadvantages”. This might imply special financial and institutional arrangements and the design of new strategies related to the management, the means of acquisition, and the diversity of the funding. As an example of one of such strategies, many of the case studies pointed out that they frequently try to ensure that their programs don’t only rely on one sole source of funding. External donations are both an incentive and a burden for all of them, as the funders’ agendas and expected results do not always fit their own. The limited
number and lack of stability of funding sources require that initiatives set up strategies in order to become more self-sufficient, and that will give them the wherewithal to better negotiate financial support with the donors. Another example is Amigos de Calakmul’s Capital Fund Scheme, which reduces the organization’s need to search for additional funds annually and allows it to keep in the stewardship of its project, without being obliged to fully adapt it to the interests of the financial supporters that it manages to secure.

Amigos de Calakmul also uses an interesting institutional arrangement to deal with potential treats to self-sustainability that is the Banking Trust Fund scheme in which all stakeholders’ interests and responsibilities are negotiated, defined by contract, and supervised by an external actor. This Trust Fund is also important because it helps the organization to ensure and demonstrate that the financial support it receives is transparently managed and effectively used, which, as mentioned before, has been signalled as an additional challenge that organizations face when seeking donors or governments’ support. The latter is most frequently concerned about politicization and the level of corruption in the non-profit sector and its social context, as well as a frequent lack of management capacity. Therefore, an organization’s ability to ensure transparency and to demonstrate effectiveness in the management of its budget seems directly related to its capacity to attract funding.

With the same purpose of ensuring transparency to deal with the fear of corruption of both internal and external stakeholders and gain the trust and support they need for their project to succeed, PHH regularly hires an independent service to audit the organization, and ChildFund has established an informational hotline for its projects’ supporters. In the case of the latter, this transparency also helps it to connect donors with their recipients emotionally, which is an important factor for the continuation of their support. ChildFund’s case also showed that this transparency, in turn, is reliant on the extent to which the organization is capable to systematize its project (its processes and outputs).
Furthermore, since racial/ethnic/class/caste/etc. barriers are also a burden for self-sustainability, the considerations mentioned in the section above could be taken into account for addressing them. Also, since the lack of participation (or interest in it) is also a very frequent burden to self-sustainability, building on means concretely designed to foster it (some of which will be detailed below) can help in counteracting the dependency challenge.

As a final example on strategies for removing burdens to self-sustainability, some case studies seek for the solidarity of individuals (volunteers) that, while being external to the initiative, contribute in the strengthening of the organization by sharing their knowledge or their free work.

➢ Capitalizing on the resources already available.

In the same way that it is important that educational initiatives increase their degree of self-sustainability by mapping and resolving whatever that stands on the way of such an objective, it is also crucial that they do it by mapping and capitalizing on the resources that they already have available – specifically on the “fertile” (the capability approach would say) resources that can enhance the self-sustainability objective. Which is exactly what the Tlaloc Barters Group and the Tumin Project do as the first step of their projects: a directory in which the already available services and products are listed, from which they depart. This is because education is being significantly underfunded and aid is becoming increasingly difficult to secure—a panorama that, according to OECD, is not going to improve in the next years (UNESCO, 2014d), and that is triggering the competition among educational initiatives for funding and threatening their ownership and, thus, the potential effective outcomes of their projects. Frequently, the little opportunities available to choose the more appropriate funding partner—and, consequently, the high reliance that most educational initiatives have on the external resources they manage to secure—threatens their capacity to deal with their social objectives in what they deem to be the more pertinent and relevant way, when that way doesn’t fit the working standards or interests of those that provide them with the financial support on which they rely.
Educational initiatives’ already available resources can be of different types, but, whatever they are, it is important that educational initiatives take advantage of them.

Capitalize on integration: The empirical data proved that it is important to capitalize, for example, on the already existing and/or potential interconnections among the initiative’s different education and development facets, which can help not only in increasing the level and quality of integration of the initiative (which, as already discussed, helps in building self-sustainability because of the way one area can support the other), but also helps for broadening the sources of financial support and for facilitating that financial, infrastructural, human, and other resources are more easily shared across different areas. Capitalizing on the already existing interconnections might include capitalizing on the ties of solidarity already existing within and beyond the initiative (solidarity, Morin says, is a resource frequently used in poor communities).

Capitalize on the initiative’s know-how and experience: The experiences of the Escuela Nueva Foundation, PHH, and ChildFund suggest that the capacity that an organization has to systematize the components and results of its model and advertise its effectiveness in comparison with other models is critical to its success in securing funder's support and, equally importantly, in designing strategies for its sustainability. ChildFund, for example, puts special emphasis on this issue as a strategy to sensitize donors about the effects of their contribution showing the organization's differentiated capacity to make them cost-effective. The Escuela Nueva Foundation was a significant case as well, because the international recognition that its educational model for quality rural education has achieved has also improved the advocacy capacity of the organization to promote the model itself at a political level. Nowadays, it advises different national governments that want to scale-up the organisation’s model because of the concrete process it offers to solve the problem of quality in rural education settings. FEN capitalizes on its know-how on the systematization of the school’s processes to promote stakeholders’ ownership of it and to facilitate the adaptation of the model to different contexts. The latter has also been a key strategy for PHH, who has worked intensively in systematizing its
model’s social methodologies for sustainable development (as they call them), so that it can promote them as demonstrative experiences for the government’s further adoption and scaling up of them (as a means for the sustainability of the initiative/model and for improving development practice beyond PHH). It has done it to improve their visibility abroad and gain support as well, to facilitate the settling of new projects, and to get extra resources by offering consultancy services to other organizations.

But the know-how of educational initiatives can also be capitalized to design projects that are more plurally relevant and integrative, that is, with greater potential for effective outcomes in sustainable development – effectiveness that increases the initiatives’ status in the decision making negotiations. Taking advantage of this know-how can be done by using social techniques such as PHH’s participatory mapping, in which the community members gather with the members of the organization to draw up, together, a map of their community. During the drawing process, a diagnosis is made of local conditions, challenges, problems, and priorities. The participatory mapping not only allows the communities to visualize themselves and their context but to become agents of their own development, defining strategies, and distributing roles, which enhances the programs’ possibilities for sustainability. This methodology not only enhances people’s ownership but also enables the description of people’s integral perspective about their community, its components, conflicts, the resources they have available, problems, needs, as well as the possible strategies to respond to all of them.

Capitalize on the already existing efforts: ChildFund, for example, only works through partnerships with local organizations, enterprises, and parent committees that are already working in its target communities to save money and energy.

Capitalize on ownership: To increase its self-sustainability – and especially considering the limited availability of resources for education – an educational initiative can also capitalize on its ownership. If the ownership is already vast, then an educational initiative can track and systematize the value of the services provided by
the communities/stakeholders (creating for example, and as recommended to the SNSP, a Community Contributions Inventory) to address donors’ concern about the lack of local ownership that they know treats the long term sustainability of their investments, and to facilitate the settling of parity/matching funds mechanisms that take into account the value of these contributions, for example. Moreover, local ownership can be capitalized for addressing funders’ concerns on corruption and the lasting effect of their donations without compromising beneficiaries’ capacity to negotiate their views and responsibilities.

Mapping and capitalizing on the resources that the educational initiative already has available (such as all of the above mentioned) would also favour the creation of barter/exchange mechanisms (such as those used by Tlaloc Barters Group or the Tumin Project), which could reduce dependency from resources from abroad and strengthen the local economy of education.

➢ **Fostering local ownership.**

All of the organizations approached claimed that the lack of stability in the funding sources (and in the transitional governments’ support) makes them rely not only on external support but also on the support of the communities with which they work. They agreed that the community and its members should, for this as well as other reasons, pursue their own development as independently as possible.

Moreover, it seems that when people appropriate the programs and initiatives targeted at their own needs, it is more likely that problems are addressed with bottom-up solutions that are more apposite to the context (relevant) and less dependent on external support. Leaders of the Project Health and Happiness suggested that defining strategies specifically aimed at ensuring the community's participation in the design, implementation, and evaluation of the programs increases their level of ownership, which is expected to give projects a greater possibility of survival should financial support be withdrawn or the presence of the development organization diminish. They, for example, design and monitor all of their programs through the above
mentioned participatory mapping techniques, allowing the communities to identify what is causing them problems and the best means to solve them. The SNSP, on its part, operates through the Children’s Parliament, the Village Education Committees, and the Field Research Centres, which undertake monitoring and advocating roles that, otherwise, would require the organization to acquire the funds to cover them. FEN has done something similar with the Children’s and Parents’ governments that run the schools. And the same with the communities support in providing the Night Schools with the infrastructure they require. In education, the use of these schemes is not frequent and yet, it should be. Not only because of the source of support they represent and their usefulness to gather the views of the community – which is significant for the above exposed – but also because they enable that the interests and perceptions of the children (which are usually undermined –see: Douse [2013]), are taken into account as well, building ownership from the roots.

However, as explained above, increasing people's participation is difficult and takes much time, especially in contexts where communities are used to being passive beneficiaries of public programs and incentives, and/or where their people are divided by socio-economical or, for example, racial barriers. In the case of the Tumin Project, the organization is promoting the use of an alternative currency system based on trust and cooperation not only to reduce the community's dependency on the national economic system that has marginalized them and forced them to migrate to other cities, but it also does it to create trust, solidarity, and participation among people in order to solve their community's problems. The Tlaloc Barters Group also commented that by promoting alternative models based on people's participation, trust, and solidarity, they have developed non-monetary inputs that constitute a significant proportion of the resources needed for the implementation of other development programs with the communities.

Creating this trust and solidarity, as already discussed before, can also be helped by implementing comprehensive and integrated models of development around the educational initiative – which help in better addressing people’s different needs and interests and, thus, in creating not only more effective outcomes but, based on them,
credibility for the initiative. A credibility that will increase people’s appropriation of it, and, hence, increase its self-sustainability.

Fostering people’s ownership, empowerment, and participation can, at the same time, help in filling the gaps of the educational initiative by facilitating that the internal stakeholders share their diverse products, services, and other resources.

As a final note, establishing structures for local ownership can also help in creating further local ownership. And again, the SNSP’s Children Parliament is a good example in this regard because "the concept of the Children’s Parliament is integral to the curriculum at the Night Schools. Children attending the Night Schools get to know more about political systems and structures by actually going through the learning process" (SWRC, 2012k). Fostering local ownership helps in distributing the political and financial resources needed to sustain the program over time.

➢ Adopting a trans-generational approach.

Leaders of PHH raised a key question regarding the purposes of and, hence, the long-term planning of the initiatives’ funding and overall strategizing. Their whole working scheme is based on the view that the capacity of non-profit organizations to sustain their programs financially is frequently limited. Because of that, they consider it crucial that organizations position themselves regarding to whose responsibility it is to resolve the social problem they are addressing (the State’s? The community's?), who has greater capacity to maintain and keep effective the initiative (or its working methodologies) in the long term, and who can ultimately bring it (them) to scale. These questions have a direct bearing on the allocation, the purposes, and the long-term planning of the funds and on the initiative’s design in general.

It may be the case that, as the Brazilian organization does, the most appropriate funding allocation is one that serves to demonstrate the effectiveness of a particular intervention strategy, in order to convince the State (rather than the naturally
impermanent government) to integrate it into the system and take it to scale, enabling its sustainability. PHH calls them *demonstrative experiences*.

It can also be the case that it is also appropriate to concentrate funds and efforts on *building on the local capacity* to gradually take ownership of the initiative, through plurally relevant and integrative measures that create, in turn, and as a result of such ownership, plurally relevant and integrative outcomes. That is the approach of both ChildFund, the Tumin Project and the Tlaloc Barters Group, which, by the former’s cooperative schemes or the latter’s alternative economy models, aim at creating a local economy that produces local resources that can become a sustainable source of support for the initiative, reducing its dependency this way on external support (including the need of people to migrate to the cities to get a wage to support the family). The entrepreneurship programs of the PHH are also built with the same purpose. In this sense, another means to ensure future sustainability could also be accommodating all funding strategies around the objective of enriching a Capital Fund through which the organization can subsist without relying so much on its capacity to acquire financial support, as suggested by Amigos de Calakmul. Or around creating a for-profit section within the initiative that creates value with the same purpose (as FEN, and the Barefoot College have done to a certain extent – the first one with its consultancy services (it actually has established itself as a social enterprise), and the second one with its production and commercialization of local arts and crafts).

Another important insight in this regard is ChildFund and PHH’s experience on designing an *Exit Plan* for their organization (and the partners) from the initiative – which, considering the limited capacity of the organization, they argue, would help in the initiative’s (rather than the organization’s) long run sustainability and even scalability. For that, *decentralization* and *capacity building* are key strategies, but also a long-term approach (apposite to the context) that is reflected in the initiatives’ overall design and evaluation methodologies. Here, for example, PHH concentrates on training young local leaders as “multiplier agents” that can keep on managing and disseminating the programme without the support of the organization. The Barefoot
College has a totally different strategy. They claim that young people, once trained, migrate to the cities to sell that know-how. Conversely, in their Solar Program they work with elder women, who are the most stable members of their communities, and therefore the ones that have the greatest capacity to disseminate and sustain the initiative over time. However, like Escuela Nueva, the SNSP also has settled a mechanism by which the views of the children are taken into account and their agency empowered (the Children’s Parliament/Government) creating the conditions for future self-sustainability.

➤  Planning self-sustainability.

The above means that planning on how to build self-sustainability is a “supra”-strategy in itself. The case studies selected for this comparative research differ both from the Solar Night Schools Program and from themselves in many aspects – including their social objectives. However, they all have designed strategies, pertinent to their own purposes, to compensate the challenges posed by their dependency to external factors and actors or the lack of relevance that their policies render on their very particular contexts. The case studies’ awareness of the threats and challenges posed by this dependency is reflected in the many strategies that they have set to reduce such dependency and become able to better meet the local needs. Some of them have gone a step further and have concretely and purposely developed a long term comprehensive plan specifically aimed at building on their self-sustainability so that they can meet the needs and interests of the present generations while building the conditions for the future generations to meet their own needs and aspirations. The clearest examples are the Tumin Project and the Tlaloc Barters Group, which were actually initiated with the specific purpose of counteracting the prevailing power unbalance. Also, PHH developed, in cooperation with Ashoka and McKinsey & Company, a multi-annual strategic plan for scaling-up PHH’s model which contemplates the many ways in which its self-sustainability can be increased. The Barefoot College’s request to our team to undertake a comparative study to envisage practical recommendations to increase the Night Schools Programme’s self-sustainability is also a good example of what is meant to be said here – that
concretely planning on building on the initiative’s self-sustainability is crucial for reducing its dependency on external sources of financial and political support, which would enable it to be more effective, sustained, and expanded.

5.4 Conclusions

5.4.1 Proof of Concept

In Chapter 2, this thesis presented the problem of power distribution that is currently hindering education’s potential contribution to humanity’s urgent need for a model of development that is sustainable. It also explained that although this problem has been recognized, there is a vicious cycle that impedes that this power unbalance is overcome. It continues the trend to homogenize, standardize, and develop top-down and narrow-focused control mechanisms, partly because of the way we are using and interpreting information (which has an obvious effect when designing, implementing, and evaluating policies), and partly to counteract the vested interests that might come in the way of the international development agenda – which is one of the purposes, for example, for India’s RTE Act. As reality has proven many times, however, there is not a single recipe that can satisfy the many and diverse priorities, needs, interests, working methods, and criteria that cohabit the field of education. What is certain is that currently, the already limited financial and political resources are distributed in a way that is hindering the possibility for reaching a sustainable model of development, despite its urgency.

The social objectives of development initiatives (governments, funders, NGOs included) are frequently the same. Often they even share similar ethics and values. The MDGs, as the Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda points out, have served as key instruments to "build momentum" and "crystallize consensus" about minimum standards to be achieved for each citizen of the world (UN, 2013b, p.14). Yet, it seems that there is an obvious gap between theory and practice, between the internationally agreed development standards promoted by funders and national or international regulations for
development, and the difficulties that practitioners face when trying to implement them with solutions that, even if not always effective, emerge from the specific context in which these development goals are trying to be implemented. There is a power relationship among development actors that tends to underestimate the role of development practitioners at the bottom and suffocate their capacity to adapt methodologies as they find more appropriate to their contexts. Having a global development agenda for humanity is certainly a great achievement that has given direction to both public and private actions in the field. However, making that agenda feasible and pertinent to the needs and conditions of different cultures, communities, and individuals, from both the present and the future generations, has proven to be another story.

In the face of this common problem for the implementation of the international development agenda after 2015, it is clear that the different development actors need to consider this mismatch aspect more seriously. Because of that, this thesis aimed at further exploring the significance of the ownership factor on the effectiveness of educational initiatives’ outcomes for sustainable development, and the considerations that should be taken into account for building an alternative scheme of ownership in which the self-sustainability of educational development initiatives at different levels and across sectors is enhanced.

This thesis argued that ensuring plural relevance, democratic ownership, and integrative responses requires that the financial and political resources currently available for educational development are redistributed. In order for that to happen, *it might be wise that the national and international normativity and actions for development focus on empowering development initiatives at all levels and across sectors* by creating conditions and designing policies specifically aimed at raising their status within development's decision making processes, and increasing the available supporting resources so that the voices of all of these agents are incorporated into the public debate and frameworks of action (Morin, 2011). Those are pre-requisites for democracy, and the emergence of a global sustainable
development order that respects this key value requires of a process that encourages the trade-offs of opinions and experiences among its different agents.

Meanwhile, *since those changes are subject to complicated readjustments in the current balance of power, development initiatives may need to devise their own strategies to survive and become able to improve the effectiveness of their outcomes,* and the other way around, improve their outcomes to survive. The considerations mentioned in the previous section about the factors that contribute to increase self-sustainability (all of them related to one or more of the sustainability factors) might guide development initiatives (educational included) in defining specific strategies pertinent to their particular context\(^\text{16}\).

On the other hand, it has been widely recognized that education, if of quality, has the potential to contribute to the international development agenda. Furthermore, now that this agenda has placed at the centre of its attention the imperative of sustainability (that is, the quality of the development process), there is an implicit assumption that such contribution to sustainable development depends on education being itself sustainable. One would suppose that the recognition of the close relationship between education and development would have resulted in a consensus for matching the quality and sustainability imperatives for education. It has not been the case.

This thesis provides a proof of concept of the significance of concentrating efforts on increasing the self-sustainability of educational initiatives (as development initiatives they are) at different levels and across sectors (governmental or not, local, national, and international) and promoting their solidarity-based cooperation attacking the

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\(^{16}\) Of course, while all strategies aim at creating self-sustainability and reducing dependency, they might result, depending on each initiative’s context and objective, contradictory, complimentary and/or used in accordance to a different overall development approach. The Tumin Project, for example, would not systematize and promote the visibility of its model with the purpose to demonstrate its effectiveness in comparison with other models and succeed in the competition for funding (like PHH, ChildFund would do for example) because its whole approach is to rely the least as possible on external support. Yet, it would still foster the visibility it gained after being sued by the Bank of Mexico as a protection against it and other possible threats from abroad.
roots of dependency, as the thesis originally suggested. This is to ascertain that education is further connected to its developmental context, that it turns relevant to the interests and needs of the different actors affected by it, and, as a consequence, that it improves its quality strengthening its potential as a cost-effective means and socially just objective of a development model consistent with the sustainability imperative — matching its ‘sustainability’ and ‘quality’ imperatives as it has been proposed by some within the field of Education for Sustainable Development.

This proof of concept derives from the explanatory hypothesis constructed through an abductive reasoning process that put into dialogue the insights offered by the feedforward of the theories on one hand, and the feedback of the empirical evidence on the other — an explanatory hypothesis that supports the original claim of the thesis that such a match depends upon addressing the factors of relevance, ownership, and integration in a sustainable manner itself, that is, upon its quality, for which increased self-sustainability is key. Self-sustainability is the capacity of each educational initiative to discern and take advantage of the inputs that suit its particular condition, and sort out those that do not; to identify the problems that affect it and the human, financial, structural, and other resources on which it counts to solve them; and, to devise the interactions it can foster in its interior to emancipate the changes required for its survival. That is, the capacity of agency/autonomy that allows educational initiatives to visualize and actively and responsively meet the interests and needs of their different stakeholders according to the specific context of which they are part. And also, the one that allows for more flexibility and adaptation for the implementation of global development projects without neglecting the local ones in accordance with the multiple dimensions (e.g. political, economic, environmental, cultural) in which they operate.

5.4.2 Justification for the Selection of the Theoretical and Empirical Sources

This research integrates the theoretical foundations and the concepts of both the capability approach and the complexity theory, because it considers that they are complementary in their recognition of the complexity of human nature and in their
acknowledgement of the lack of predictability of social development – one consequence of which is their emphasis on the importance of democracy, freedom, agency, and dignity of people. This way, the composed explanatory model (made up by the analysis of their convergences and complementarities) proposed by this thesis, helps the latest purposes: further understanding the significance of the distribution of power for the handling of the sustainability factors and devising the implications of an alternative scheme of ownership that helps in breaking with unequal ownership’s vicious cycle and in achieving our diverse and common goals in sustainable development. Additionally, both provide an alternative and consistent informational basis with which to understand development’s sustainability that captures the basic premises of the Brundtland Report – the minimum consensus gathered by the international community despite the lack of clarity that still permeates the debate about development and sustainability. This means that, in a rather complementary (instead of repetitive) way, they both address the issue of the coexistence of different levels of autonomy that represent and regulate the interests, needs, and perspectives of the diverse stakeholders in the field of education (from the individual agent to the schools, the communities, the national governments, the international organizations) according to different contexts and purposes. They recognize both the diversity and commonalities among human beings, and acknowledge that “different people, cultures, and societies may have different values and aspirations” (Clark, 2005, p.5). That is, they address sustainability's concern with the differences and connections between universalism and diversity (the relevance factor).

The two theories also converge in their emphasis upon addressing the interactions among the different developmental dimensions of educational initiatives, and between them and their environment, and emphasize the substantial role of education in the attainment of its developmental context’s goals of sustainability (the integration factor). Additionally, they both advocate systemic change but warn against simplistic-standard solutions. Together, they offer propositions to navigate the complexities of development – its many interests, dimensions and contextual challenges, causes, and effects – by keeping awareness of the moral consequences of their systemic perspectives on sustainability. These include the distribution of resources among the
constituents of the system in order to respect and empower their agency to responsibly effect change, both as a matter of justice and of practicality, so that the momentum can be built as a catalyst of a new trend of development (the ownership factor).

While the different currents of the capability approach (particularly those of Nussbaum and Sen) suggest that there is not unanimity about its potential generalizability, Alkire (2005) claims that it is the approach’s informational pluralism that makes it generalizable.

The comprehensiveness with which the capability approach and complexity theory understand educational initiatives’ relationship with their context unavoidably points at the importance of perfecting the means for the regulation of interests and needs at different levels of autonomy in a simultaneous manner – for building enough flexibility within the system to allow for contextualization, and yet ensure that the objectives and challenges posed by our common destiny are protected as well. It calls for enabling our global sustainability through a solidarity-based joint construction of certainties that fosters, at the same time, the means for supporting the different components of the system in having their own aspirations and creating their own paths of change.

On the other hand, the fact that the Barefoot College requested a study specifically aiming at increasing the self-sustainability of its SNPS (which was, in turn, a suggestion made to them by the Barr Foundation) signified a finding in itself for the argument of this thesis: there is awareness in the field that power distribution in education is not only an ethical problem, but also a critical impediment for effective outcomes in sustainable development.

Moreover, the feedback experience of the other case studies demonstrates that the Barefoot College’s conflict is very common among development initiatives, in the sense that:
a) they are all facing difficulties in attracting and securing funding to sustain their programs;
b) their programs' survival is reliant on the effectiveness with which they handle their social objectives, but this effectiveness is, itself, largely conditioned by the kind of negotiations that they have with the external actors on which they financially and/or politically rely. Negotiations for deciding on priorities and working methods and criteria. Decisions that are frequently based on relations of dependency and that, therefore, challenge their capacity to deal with their social objectives in how their direct experience tells them is best. Dependency relationships that ultimately influence the extent to which objectives are effectively achieved – even in the cases in which they share the same motivations with the other stakeholders.

The case studies selected for this comparative research differ from the SNSP and among themselves in many aspects, including their social objectives. However, they all have designed strategies, pertinent to their own purposes, to compensate for the challenges posed by their dependency on external factors and actors, and some have even set their development initiatives with the specific purpose of counteracting such power unbalance. This context gives the constitutive and regulative evidence that, according to Evers and Wu (2006), allow for the at least provisional generalization of the findings, because the cases selected are all defined by these social rules and, moreover, exist the way they do only because they follow such social rules, designing their programs (like Juan Castro from the Tumin Project suggested) “as they can” be done and not “how they should” be done. Thus, the experience of these cases (which has still very limited representativeness), can be (at least provisionally) generalized because of the political economy context in which they operate. That is, the problem of unequal ownership represents a general rule, making the need for increased self-sustainability a crucial requisite for the effective achievement of educational initiatives’ objectives. Their experience, consistent with the broader literature on educational development, therefore, provided important insights to enrich the theories’ explanation of this problem.
5.4.3 Significance of the Study

The significance of this study lies in the problem it addresses, that is, the need for effective strategies to increase the level of democratization of the overall process of sustainable development so that the achievement of the sustainability goals becomes more feasible. This thesis’ proof of concept (abductive insight) doesn’t intend to propose a specific kind of reform but, rather, contribute to the existing discussion (which informs praxis) of the problem of unequal ownership that, by reproducing dependency relations, is hindering educational initiatives' contribution to the sustainability goals.

Although there is plenty of literature – notably that on development aid and empowerment – related to the problematic that this thesis addresses and that reaches very similar conclusions, there is not a consolidated research line that converges the two approaches selected for this study. Neither is there one that incorporates the concept of self-sustainability in terms of the findings of the study for the Barefoot College. This explorative research, thus, contributes to the understanding of the concept of self-sustainability and its implications for development initiatives’ outcomes. With it, a different framework is provided for exploring the problem of intersecting inequalities (which, according to Jamil et al. [2013], is an area that needs to be further explored), centred on the importance of redistributing the political and financial resources among development actors.

Moreover, the thesis voices considerations (gathered from the theoretical and empirical insights) that can be taken into account for designing strategies that help in building a way forward for a development model that is more compatible with long run sustainability, which is the original aims of the Brundtland Report (Stiglitz, et al., 2009).

Additionally, the thesis addresses the claim made by UNESCO’s Report on the UN Decade of Education for Sustainable Development that “more research is needed to document that ESD is quality education. Much anecdotal evidence exists that ESD is
related to academic gains as well as boosting people’s capacities to support sustainable development. Research will provide a solid evidence base and firmly establish that ESD is quality education.” (UNESCO, 2012b, p.5).

On the other hand, just as Morin (2011) has suggested, Nussbaum (2012) has mentioned that while it is important to focus on the implications of development at the individual level, our common destiny requires us to undertake “a deeper systemic reflection about the political structure” (p.211, own translation) that permit us to find an institutional solution to the global problems. She also says that such a solution needs to be decentralized: “We still have much work to do to weigh how much decentralization (and of which kind) would be the ideal…The capabilities approach hasn’t elaborated enough theorization about it yet” (pp. 146−148, own translation). This research hopes it has contributed in the addressing of these concerns. Also, as Clark (2005) points out “more work is required to bring out the policy implications of the capabilities approach” because its informational requirements can be extremely high: “evaluating social states typically depends on acquiring data on multiple functionings. In some cases, however, the relevant social indicators simply aren’t available” (p.6)...moving from functioning to capability complicates the exercise drastically as additional information is required on counterfactual choices (which cannot be observed) as well as actual choices” (p.7). Alkire (2005) adds:

You could think of the application fields of the capability approach, then, as a set of boxes, each consisting of the related technical disciplinary tools, whether of gender analysis or nutritional science or econometrics or decision theory or policy-making. One problem is that the tools inside the boxes are not connected to the capability approach — the information flow between the emphases of the capability approach and the various literatures does not exist; the implications are not driven through...The other problem is that the tools inside the boxes are not easy for those outside to use. (pp.128-129).
These claims to further develop means to make the capability approach more user-friendly make this research significant, as it proposes that its operationalization is more feasible when the decision making process is more decentralized. Power decentralization, the thesis argues, facilitates that the approach's informational requirements are better addressed. That is why certain level of self-sustainability is necessary.

Sen (2000, p.274) also claims the need to "illustrate the role that norms and ideas of justice play in the determination of behaviour and conduct, and how that can influence the direction of public policy", which is addressed by this thesis’ exploration of the relationships among the sustainability factors and their influence on development initiatives’ outcomes (see particularly Chapter 3). It also addresses the problem of corruption that, as Sen also suggests, is a mirror of the role of cultural norms.

Furthermore, some (but not much) work has been done to operationalize the complexity theory in the field of education (for example: Alhadeff-Jones, 2009; Ezechieli, 2003; Geyer, 2012; Jansen, 2012; Kuhn, 2008; Morin, 1999; Mason, 2008a, 2008b and 2009; Nordtveit, 201017). This thesis adds to these efforts in linking complexity and education with the broader sustainable development agenda in terms of the sustainability factors of ownership, relevance, and integration, which has been done by the mentioned sources’ research, but not in the light of the differentiated concerns to which the concept of self-sustainability makes reference. This is also the case for the efforts made so far to operationalize the capability approach.

Moreover, because of the way the present thesis links the academic debate with the challenges of its applicability, the thesis contributes to the translation of the

17 Certainly, there is an increasing number of authors studying complexity and education. However, as explained before in Section 1.3 Thesis Methodology and Analytical Framework, the purpose of the abductive inference method is to justify the selected feedforward patterns of expectation to the phenomena studied, rather than the description of the debates among the theories' proponents around particular phenomena.
consequences of the complexity and capability approaches into educational development practice, helping – even if minimally – in the filling of some of the existing gaps in this regard. Not only does it link Morin’s conclusion on the implications of complexity theory for social development (the Via Proposal) to the problem addressed by the thesis, but it also links the hologramatic and recursive principles with the proposal of strengthening education’s relationship with its context and of addressing the effects that its political economy dynamics have on it – which are conclusions shared by the capability approach. Notoriously, these conclusions have been taken by the recently published concept note for 2016’s Global Monitoring Report (EFA GMR Team, 2014), which places much more emphasis on the relationship between the quality education imperative of the post-2015 agenda and the three sustainability factors as key variables to monitor the development goals and their targets. A new approach that one hopes is influential to the implementation process of the Framework for Action on Education 2015-30 that will replace EFA once adopted in South Korea’s World Education Forum in May 2015 (in which such an approach seems to be quite absent), so that educational policies, by incorporating the sustainability factors into their informational basis, are designed, implemented, and evaluated in a way that renders more effective in contributing with its sustainability objectives.

This thesis’ outputs might be significant to some extent for the funders as well, considering the limited budget available for education that backs Gillies’ (2010) claim that “after more than fifty years of development assistance, with both the rationale and structure of international assistance mechanisms under intensive critical review, meaningful and actionable insight into effective donor support for national education systems has never been more urgently needed” (p.1). Reinforcing dependency relations is certainly, and frequently, the objective of some donors for political reasons. But for some others, it represents a waste of time and money, because their investments end up being more costly now that they cannot be sustained in the long term (as was recognized in the Paris Declaration, OECD [2012]).
It might also be significant for other development practitioners that, as mentioned before, are usually aware of the implications of their high dependency on external political and financial support, and all require strategies to increase their degree of self-sustainability, but, however, their knowledge of the factors that can foster it is limited. While the strategies provided by both the theories and the empirical data for increasing self-sustainability are not generalizable, they certainly provide important insights that educational initiatives can consider for designing their own means apposite to their particular conditions and interests.

On the other hand, the research provides supportive evidence for those trying to operationalize (implement and/or justify) the intercultural education model. This model's principles are already embedded in most countries’ legislations and international frameworks for development and education. Yet, despite its proven effectiveness to address the sustainability factors and its complementary role with the prevailing approach that focuses on improving basic learning skills as a means to improve the quality of education, the model is barely known in regions other than Latin America. In other words, the research provides some new elements to operationalize the complexity and capability approaches as well as the Intercultural Education model – all of them consistent with the sustainability imperative emanating from the Brundtland Report. Therefore, it is illustrative of ways forward for implementing the sustainable development goals; ways that, while inconclusive in content, provide a framework that, by sticking to the non-exchangeability of the 3 sustainability factors, suggest the need for both limits and flexibility to promote sustainability.

Finally, the research is significant because it addresses the fact that the claim for increased empowerment from the bottom to the top has been used to justify the argument that the State should allow and incentivize the privatization of education. This is not the case made here, because, the thesis suggests, the public-sector has a central role (and responsibility) in ensuring the positive enjoyment of the right to education and in balancing and negotiating the diversity of interests that it represents and those that come in the way. Especially considering that, as Nussbaum (2012)
suggests, it is so far the greatest level of legitimate autonomy created by humanity (at least in the case of democratic national states), one that renders critical in democratizing the negotiations and trade-offs between its sub and supra systems (including the private initiatives, the multilateral organizations, and the funders). For that, the degree of self-sustainability that they procure for their internal educational initiatives as well as the one they ensure for themselves (and their State-level educational initiatives) are capital for the effective achievement of the international sustainability goals. In other words, the thesis argues, national states require to build flexibility within their system, regulating the different interests in play, more than controlling them, for which it is important that they centre their attention on the distribution of their own and the others’ political and financial resources and responsibilities, and on the improvement of the mechanisms for negotiation.

5.4.4 Limitations of the Study and Insights for Future Research

Despite the aforementioned strengths, it is important to be reminded of some of the many limitations of this research as well, already mentioned in both Chapter 1 and 4. Methodologically: notably the temporal and geographical constraints on the data collection and the processing of information, which are important because of the inherent unpredictability of social change, which obstructs the reaching of any conclusion about sustainability. The personal bias explained in Chapter 1’s “5 Personal Motivation and Positionality” section also need to be noted. The triangulation of the data and the description of the normative and constitutive evidence that permitted the at least temporary generalization of the findings might address, at least partly, these limitations.

On the other hand, the use of abductive inference reasoning represents both a strength and a limitation of this thesis. A strength because of the benefits of the method in itself which, very much in line with the argument of this study, recognizes that deduction and induction are processes that are unavoidably conjugated in any research process. That “of course, the researcher does not approach reality as a tabula rasa. He must have a perspective that will help him see relevant data and abstract
significant categories from his scrutiny of the data” (Glaser & Strauss [1967, p. 3], cited by Evers & Wu, 2006, p.517). But also, that it is critical to keep an open attitude of wonder about how and why phenomena work in one way or another, empowering the validity of the evidence that empirical data can bring for the reconstruction of the theory. Yet, the method is still quite marginal in the field, and the implications for its implementation are not well agreed or consolidated. Thus, the way in which this author applied the method certainly has a great scope for improvement.

Moreover, the research could have developed much deeper insights by exploring further the literature about autonomies, which could have brought richer arguments to justify (or challenge the idea of) the importance of the non-exchangeability aspect of the sustainability factors for sustainable development — which concurrently addresses sustainability’s both practical and moral concerns, and the literature on autonomies has a long history exploring the limits and possibilities for self-sustainability.

Finally, there are a few important issues in which the research didn’t manage to be conclusive. Mainly, in regards to Nussbaum and Sen’s debate about the pertinence (or not) of making education (due to its crucial role in enabling other capabilities in the future) the only functioning that should be mandatory to all children without giving them (or their families) the opportunity to choose in the consideration that children are not ready yet to make their own decisions and that society has the responsibility to protect them, which represents an important gap for the capability approach. This is particularly significant in the light of the Report of the Open Working Group of the General Assembly on Sustainable Development Goals’ (Goal 8.7 [UN, 2014b]) evidence that ending child labour in all its forms by 2025 is going to be one of the new objectives of the global agenda. In its operationalization, this objective might become another source of debate for the cases of children like the ones served by the SNSP (which are many). Moreover, it demonstrates that the extent to which educational policies can integrate into a particular socio-economic and cultural context is not always the result of the little awareness that policy makers have of the
local contexts in which they are to be implemented. Sometimes, it involves moral decisions – moral decisions that confront controversial ideological standpoints.

An interesting case in this regard (and that is quite relevant to the case of the SNSP) is the current debate that is being held in Bolivia, where recent protests from working children have made legislators discuss the current national legislation in regards to child labour. Organized in a Union, working children have claimed that not only does their families' economic situation requires them to work during their schooling years, but also that working experiences are key for their insertion in the local socio-economic life, and that, in fact, these experiences are enriching for their development. These children’s demands have found an open ear in the country’s current President, Evo Morales, who, himself, used to be a working child. But at the same time, they have been strongly contested by international bodies (including the UN’s International Labour Organization) who maintain that it is in the best interest of these same children to be impeded to work until they finish their primary education, so as to ensure they get the appropriate tools for eluding the cycle of poverty. The issue debated here is not only the extent to which schooling is the only means for improving children's education, but also the setting of priorities for children’s future life opportunities, the issue of to what extent are these local cultural aspects to prevail over broader agreements made on children’s rights, and, finally, the issue of who should decide – the children and their families or the rest of the society. Both being positions of utmost legitimacy, what matters in this example is that, in the case of Bolivia’s unionized children, their points of view on how policies should adapt to their particular developmental context are being received by policy makers and negotiated – which is not the case on most occasions.

The most that this thesis managed to conclude in this regard is that, like with any other capability, education has to be weighted by the multiple stakeholders affected by it through egalitarian negotiations, so that none of the sustainability factors is compromised (which requires of democratic ownership) – an argument that was strongly supported by the case of the SNSP in which local ownership found the way to avoid tragic choices. Yet, because of the moral implications of this topic, further
research should be done to clarify the complex issue of children’s capabilities in the consideration that their judgement is in early stages and that the society has to protect them, as Nussbaum argues, from the fate imposed to them by the conditions in which they are born.

While there is plenty of research into the significance and implications for sustainability, it is clear that the problem of the influence that development initiatives' lack of self-sustainability has, in this regard, is an area that should be further explored. Moreover, there is a need for operational resources that make sense from both the capability and the complexity theory's approaches and, at the same time, from the real challenges that practitioners face when implementing their development initiatives. That is, user-friendly resources for bridging the theoretical developmental frameworks with those of the practitioners in the field are needed. Further investigating the issue of educational development initiatives' self-sustainability (in the terms illustrated by this study) has the potential to produce insights useful to bridge the efforts of researchers, policy makers, practitioners, and beneficiaries in education and development. To reconcile the local and the global, the common and the diverse, the agreed and the debated: the possibility, as Morin said, that the improbable becomes true (1999).
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APPENDIX

COMPARATIVE CASE STUDIES AND THEIR STRATEGIES FOR SELF-SUSTAINABILITY

1. Amigos de Calakmul A.C. (Amigos de Calakmul)

1.1 Details of the Project

Amigos de Calakmul has 12 years of experience protecting the tropical rainforest in southeast Mexico (Calakmul Biosphere Reserve in Campeche State), by providing legal and environmental advisory services and mechanisms to the local communities that own and protect these areas.

1.2 Strategies for Sustainability

*The Capital Fund Scheme:*

Amigos de Calakmul uses a comprehensive scheme that includes several funding mechanisms that allow the organization to create a capital fund that yields interests to be used to finance the project.

The establishment of a capital fund is an option that intends to avoid searching for annual funds but, instead, creates an investment fund that yields interests to be used to finance the project without touching the fund itself. If the fund is enough, there is no need to get more money. If not, or if the interests decrease, it will be necessary to keep up the search for donations. It can represent the whole or only a part of the budget needed for the project, but having a part makes it easy to get the rest because it gives certainty to the donors. This scheme can be discussed with the donors in the teaming contract.
The Parity/Matching Funds Scheme:

Funding comes from a variety of sources in exchange for an active commitment by the communities who own the forests, to take the necessary actions to ensure that the forests are always kept strictly intact – which means not exploiting them and not allowing anyone else to do so. The funds are used to compensate the communities for revenue lost, resulting from their abstention to economically exploit their forests.

Some of these funding mechanisms are obtained through parity or matching fund schemes where, in exchange for the communities’ contribution consisting on their commitment to keep the forests intact, entities such as the National Forestry Commission (Mexico) provides 1 Mexican peso for each peso that Amigos de Calakmul obtains from other financial sources to help the community to achieve the same objective – which is basically to preserve the environmental services that forests provide. Other mechanisms consist of financial contributions on the condition that the said commitment is verifiably met, and that the community engages in undertaking active forest conservation activities.

Like the National Forestry Commission in Mexico, many institutions are concerned about the lack of direct involvement (ownership) that most development projects have on the part of the beneficiaries. Frequently, beneficiaries’ involvement and ownership of the project demonstrates that the donors’ investment has greater possibilities of surviving and leaving a lasting effect.

The Participation in the Carbon Bond Market Scheme:

Donations are possible to a large extent as a result of the project’s intention to participate in the carbon bond market through an intermediary. The carbon bond market is an international instrument to account the emission of greenhouse gasses which are not produced or are reduced as a result of compensatory measures such as the generation of renewable energy, improvement of energy efficiency process, afforestation, avoided deforestation, lakes and rivers cleaning, etc., to voluntarily
mitigate the environmental damage caused. These bonds are translated into carbon emission certificates (CERs), each one equivalent to one tonne of carbon dioxide (CO2) reduced or avoided, which can be redeemed for a price set by the international market rules. The carbon bond market is one of the internationally recognized mechanisms that allow particulars and public and private organizations become conscious of their responsibility towards climate change, and participate actively by selling or buying CERs to comply with the objectives of mitigating the environmental damage caused.

To participate in this market, Amigos de Calakmul hired an intermediary entity – Terra Global Capital (from San Francisco) – for the design and promotion of the project within the international carbon bond market and the payment for the services to the beneficiaries. Therefore, all red tape procedures for this scheme are done by intermediary companies like this one that budget their payment themselves.

*The Banking Trust Fund Scheme:*

All financial resources obtained are deposited in the capital fund, the use of which is subject to control by a banking trust fund mechanism, which provides the project with credibility to encourage donations to contribute with those resources.

Donors, foundations, governments, and international NGOs trying to support the so-called "developing countries" frequently face the same problem: corruption. Money frequently doesn’t arrive at its destination and stays in intermediary hands. It also happens that the money is distributed but the recipient organizations don’t have projects to offer, even if the money is there. With a Trust Fund, the money doesn’t have to go through the organization’s hands but rather goes through the Trust Fund’s hands which gives transparency to the money’s management, and certainty to both the organization and the donors.
a. A Trust Fund is composed of 3 parts:

1. The Trustee (the Bank) that is the one that generates the confidence (the trust), as it is the one that monitors how the money is being spent and ensures that it is used in the way and with the purpose agreed, by contract, between the beneficiaries and the donors.
2. The Donors/Foundations that put money in the trust for a specific purpose.
3. The Beneficiaries (the organization and/or local people).

b. 1, 2, and 3 elect an Executive Board (also called Technical Committee) that supervises/manages the Trust Fund on a daily basis and under the general supervision of the Trustee. It is formed by representatives from donors and beneficiaries.

c. All rules applicable to the operation of the Trust are convened through a contract among 1, 2, and 3.

d. All decisions (the designation of the Executing Board, the use of the money donated, etc.) are settled in that contract. All parts would like to advocate for their own interests but the ideal is to find a balance between them – respecting the beneficiary’s project objectives and the donor’s aims. The donors participate in the model because they accept it, which means that once they sign the contract they cannot make changes to it. That has to be clear in the original contract.

e. The content of the contract is to establish that what is being settled is a Trust Fund, that is, a contract based on trust because there is someone (the bank) that looks after the contract’s compliance (e.g. "We agree to ensure that the obtained money will be dedicated to x and the bank will supervise that it is done that x way"). When, during the implementation process, money has to be spent, the Executive Board decides how to use the money and the bank watches that the conditions are in line with what was agreed both on the contract and in the conditions to which the granting of the funds were subjected, that is, the original objective and destination of the funds.
1.3 Insights into and Recommendations (R1, R2, R3, R4, and R5) for SNSP’s Self-sustainability

Regarding the Parity/Matching Funds Scheme:

There are numerous ways in which the SNSP’s local community is already contributing in non-monetary ways to the sustainability of the Night Schools. The degree to which the local community has appropriated the program (as evidenced in their participation in providing management, supervision, infrastructure, funding for activities and materials, etc.) is a crucial point to note, for at least two reasons:

-It means that almost the only expenses that are not being covered by the community are the teachers’ salaries and some costs for activities that they cannot bear.

-It means that this initiative already bears the hallmarks of sustainability, given that it is well-known that development interventions are generally successful to the extent that they are appropriated by and integrated into the communities where they are targeted (development interventions are generally seen to fail when project funding ceases or when external project advisers are withdrawn, probably because community ‘take-up’ or ‘buy-in’ has been limited, making the project unsustainable without such community investment and ownership).

Recommendations made in the Barefoot College Study:

R1: Make a Community Contributions Inventory enumerating and detailing all contributions provided by families, communities, children, mentioning their monetary value in US dollars (e.g. If the place offered by the community for the school were to be rented instead of simply facilitated, how much should they be receiving for that rent; if the children were charging for their supervisory role how much would they be receiving). Additionally, based on that Inventory, find out the percentages of those contributions to be able to show the donors what percentage of each kind of participation is done by whom.
R2: Find a Donor that works with the Matching Funds Scheme, or establish it with one of the current donors using the Community Contributions Inventory (referred in R1) to promote an understanding in which for every X amount of dollars that the Barefoot College contributes, the Foundation commits to contribute, in return, with 2x or 3x (depending on the established parity). This scheme will give the Foundation the security that if Barefoot College stops contributing with x, the Foundation will stop as well. If the College manages to get a matching fund with a 1 for 1 parity it would be already doubling its budget.

Regarding the Capital Fund Scheme:

Night Schools’ incidental expenses are being covered with the interests (FDR) of a capital fund set with an Award won by the Barefoot College, which means that the Barefoot College is already familiar with a sort of a Capital Fund (FDR) model. However this FDR is apparently used more as a strategy to give good use of the money awarded than as a concrete strategy to ensure the financial self-sustainability of the Night Schools. The empirical study indicated that for the last 2 years the Barefoot College didn’t manage to get donations for the SNSP, and that, as a consequence, it is using not only the interests generated by the Award’s fund to sustain it but the fund itself.

Recommendation made in the Barefoot College Study:

R3: Sustaining the Solar Night Schools Program with, exclusively, the interests generated by a Capital Fund could be an alternative for its financial self-sustainability. That would mean two things:

1. That the funding’s strategy objective changes from searching for yearly funds to finding donations for an investment fund (the capital fund) selected with two criteria:

   a. that maximizes the interests; and
b. that minimizes the financial risks.

2. That money gathered from all sources to the SNSP (including the suggested matching funds of R2) is used to pay the Night Schools’ expenses, and what is left invested in the capital fund (FDR) whose objective is to grow as much as possible so its interests can soon become another matching fund: the matching fund of the capital fund, thus attaining true financial sustainability.

Regarding the Banking Trust Fund Scheme:

To arrange a Trust Fund, the Barefoot College would have to prove that if it receives donations it would use them wisely and effectively. This should not be a problem since the College’s current budgeting process is already highly decentralized, which means that there are many actors supervising it at the same time. After receiving a donation or grant, the College’s main office, known as the Tilonia office, sends the money directly (that is, bank to bank) to its branch offices – the Field Research Centres (FRC) and the Associated Partner Organizations – who, in turn, transfer it to the Village Education Committees (VEC)’s accounts. The latter are managed together by a member of the FRC and those of the VEC, which are closer to the communities. A mechanism to ensure certainty on how the money is spent would strengthen the model.

Recommendation made in the Barefoot College Study:

R4: The establishment of a Trust Fund will strengthen the effort of giving certainty to both, the organization and the donors, by increasing the transparency in the money’s management. It will not affect the autonomy of the Village Education Committees because, as members of the Trust Fund, they will be able to ensure their requirements in the agreement between all members of the Trust Fund.
Because of the Barefoot College’s high level of contribution to its own project, it could suggest to be Beneficiary and Donor at the same time, offering its Community Contributions Inventory (referred before in R1) as a contribution.

**Regarding the Participation in the Carbon Bond Market Scheme:**

One of Barefoot College’s main strengths and most well-known contributions in the development field is the Solar Energy Program, which is already greatly intertwined with its other initiatives – including the Night Schools – that are largely possible due the provision of the solar lanterns that allow them to run at night. Moreover, many Night School alumni participate in the Solar Energy Program once they have graduated.

This means that, so far, the Night Schools are already part of the Solar Energy Program, which generates renewable energy and therefore is eligible to participate in schemes such as the carbon bond market.

**Recommendation made in the Barefoot College Study:**

*R5:* To design a strategy to integrate more solidly and consciously the Solar Night Schools Program to the Barefoot College’s UNESCO Learning Centres for Sustainable Community Development (Mason & Maclean, 2011), and find an intermediary (such as Terra Global Capital) that introduces it to the international carbon bond market and deals with all the procedures involved in this funding source. Money collected by this means can also be included into the Capital Fund (see R3) and ensured through a Trust Fund (see R4) as Amigos de Calakmul does to strengthen the financial sustainability of its project.
2 Fundación Escuela Nueva (Escuela Nueva Foundation or FEN)

2.1 Details of the Project

Escuela Nueva Foundation has 25 years of experience in promoting a rural primary education pedagogic alternative that has attracted the attention of 40 countries’ governments (many of whom have adopted it, especially in Latin America, but also as far as Vietnam), and received many international awards for its contribution to improving the quality of education around the world. It was initiated in rural Colombia in 1974 by Vicky Colbert, Oscar Mogollón, and Beryl Levinger.

FEN’s success in raising schools’ quality relates to its achievements in:

a. Academic improvement (higher retention and completion rates, the decrease of dropouts and repetition rates, teaching methodologies, etc.);
b. Equity in education opportunities;
c. Promotion of groups’ collaboration, self-esteem, democratic values, and peaceful coexistence behaviours; and
d. Community involvement.

This has compelled them to test the adaptability of the model with other populations, including urban marginalized areas and migrant communities, promoting and facilitating its scalability nationally and internationally.

2.2 Strategies for Sustainability

Escuela Nueva’s alleged success in improving the quality of education in rural areas (especially multi-grade and poverty-stricken schools) convinced the Colombian government to elevate it on a national scale for a period of 10 years (starting from 1992), and it was implemented in 20,000 rural schools all over the country.
However, governmental support was not stable and the promotion of the model became vulnerable to political struggles/interests. Therefore they decided to create the Escuela Nueva Foundation as a social enterprise that seeks to generate surpluses to reinvest them in their social objective (to strengthen and promote Escuela Nueva pedagogic model’s scalability) and enlarge their impact and mission (Escuela Nueva Foundation, 2012). As a result, their organization has become more self-sustainable because it doesn’t rely on the vulnerable support of the government for the achievement of their social objective.

Nowadays, FEN mainly sustains itself by selling the model (consultancy services) to governments, NGOs, private schools, etc. as a package that includes:

1. The settlement of demonstration schools in already existing schools (pilot schools).
2. The co-participatory adaptation of its prototype guides and learning materials (their methodological structure).
3. Technical assistance (training different stakeholders including teachers – that are educated in the same way they are expected to educate their students, – parents, administrators) for the application and implementation of the model and for the community’s involvement.

This means that what FEN offers to rural schools is, as its founder Vicky Colbert said during the interview, the "translation of complexity into manageable action" through technical assistance based on the organization’s experience and know-how on the adaptation of the model to different contexts, offering an educational solution to improve quality, effectiveness, equity, and sustainability of education.

From FEN’s approach, this can be summarized as: the systematization of the school’s processes to promote stakeholders’ ownership of it.

However, sometimes the payment it receives is not enough, which means that the organization is not a 100% self-sustainable because, failing its consultancy services to
cover all of the organization's expenses, it relies on other financial sources that include:

A. Donations from different agencies.

B. Sponsors. FEN searches for sponsors for specific occasions/projects by publishing particular activities of the Foundation that need donors' support on their website. To that, they explain their projects’ objectives and enunciate the aspects that need financial support.

C. Online donations. These donations are received "in honor or memory of" and gift cards that are offered with exact amounts (also open) to receive single or concurrent support for specific objectives (e.g. workbooks for 5 children, signboards for 18 schools, 5 day training workshop for 30 teachers, etc.). The "donate" button appears on each section of the website (Escuela Nueva Foundation, 2012).

D. Volunteer workers. It has a shortness of staff and hires personnel or volunteers for specific projects.

E. Charging visitors. As a result of the model’s success, FEN frequently receives visits (at their Colombia office) from interested parties. However, FEN is composed of only 30 staff members and they have to subcontract personnel for each project. For this reason, the visits that used to be received without any charge became a heavy burden for FEN, because of all the time and resources (materials, people, etc.) it had to use to attend the guests. As a result, FEN decided to charge visitors and with that money pay the expenses of moving them from school to school. It is planned to build a few demonstration schools in the future.

F. Parity Funds Schemes with foundations like Sosense that duplicate each amount donated to the Foundation by the public with a top fund of 10,000 Swiss francs ($10,843 USD) or, for example, with Global Giving, that increases 30% of each donation that FEN gets.
FEN doesn’t get involved with the school’s financial sustainability because they don’t implement FEN’s model, but only provide technical assistance to already existing schools, regardless of their own financial scheme. In any case, to pay for the adaptation and implementation of the model and ensure its success, they promote co-financing schemes of public-private partnerships between FEN, private business, and local governments, or with appropriate NGOs, etc.

More importantly, they claim their model is in itself a tool to make schools highly self-sustainable because:

a. It is systemic: works with teachers, students, and parents in all educational aspects.

b. Uses the promotion of social participation as its transversal dimension (people’s ownership of the project can sustain it in a large extent even if financial support is vulnerable): all stakeholders participate in educational decisions, which motivates their ownership of the projects. The model has, for example, a children’s and a parents’ government that run the school.

c. It is trans-sectorial because it promotes the formation of skills as the basis of entrepreneurship (including those for pacific coexistence, health, garbage management, environment, etc.). They emphasize on children’s application of their knowledge within their family and community. One of the main successes of Escuela Nueva’s model is that it offers very concrete elements to motivate children’s participation with the community. It is important to say that creating these entrepreneurial skills has been a useful tool to prevent rural children’s migration to the cities.

d. Contemplates the training of local stakeholders to follow-up, and supervises its implementation in creating "microcenters" where they meet once a month to
disseminate innovations and resolve problems together. For this purpose they are currently preparing a virtual platform as a complementary instrument.

e. It is cost-effective because although initial expenses are heavy, future incidental expenses are not (e.g. the materials are re-usable and schools don’t have to purchase books from Editorials).

f. It promotes interculturality: the national curriculum is reinforced but they place strong emphasis on the relevance of education and the appreciation of rural life and local knowledge, which has immediate effects in the life of the community and, as a result, in the involvement of parents in the learning process.

It is replicable because:

a. It is highly self-sustainable (as explained above), which is crucial for scalability.

b. Its emphasis on social participation increases its quality in different settings.

c. The model is basically a systematized process that uses prototype and allegedly easily adaptable learning modules and guides (however, further investigation has yielded information in the sense that, since FEN’s model relies on copyrights of its materials and guides, this flexibility and adaptability have faced difficulties in some contexts).

2.3 Insights into and Recommendations (R6, R7, R8, and R9) for SNSP’s Self-sustainability

Regarding the Parity Funds Scheme:

As mentioned in the Amigos de Calakmul’s section, donors’ support can increase if the recipient is able to convince them that whatever donation they make is going to be sustainable, which relates to beneficiaries’ ownership and participation in the projects.
but also to the organization’s capacity of finding means to sustain its programs, regardless of external support. Demonstrating to a donor a high capacity of fundraising certainly ensures their investment to be backed up by other’s trust on the Organization.

Recommendation made in the Barefoot College Study:

R6: Identify institutions like Sosense or Global Giving to establish parity funds in terms that are similar with those FEN has settled with these foundations. That is, besides searching for parity funds established on the basis of the Community Contributions Inventory mentioned within the Recommendations of the Amigos de Calakmul section (see R1), Barefoot College can search for parity schemes that double or increase donations received by outsiders and let people know their support is going to have a scaled effect thanks to the parity funds agreement with the donors.

Regarding the Sponsors Scheme:

So far the Barefoot College Website has a section for specific (lamps, water-tanks, etc.) or general donations (SWRC, 2012a). Searching for sponsors for specific activities such as the Balmela and/or other incidental costs (Children’s Parliament meetings for example) could be another way of finding funding for the whole program or for learning materials and infrastructure.

Recommendation made in the Barefoot College Study:

R7: Barefoot College’s "Donate" page could detail Night Schools’ activities where resources (support) are needed such as the Balmela festival, which in the field research was identified as one of the greatest yearly expenses of the program.
Regarding the Online Donations Scheme:

So far, the Barefoot College Website’s "Donate" section (SWRC, 2012a) accepts donations for specific items (such as mosquito nets, or solar lanterns) or higher, voluntary amounts.

Recommendation made in the Barefoot College Study:

R8: The Barefoot College could incorporate FEN’s website ideas like gift cards (that people can give to others in their name as a Christmas or birthday present, for example) or the option of "Memorial" donations, where people can donate their legacy in the name of their family or the like.

Regarding the Escuela Nueva Model:

Although FEN doesn’t get involved with the schools’ financial sustainability, there are many aspects of Escuela Nueva, both as a pedagogic model and as an organization, that provide relevant insights that could feed into the Barefoot College’s intention to make the Solar Night Schools Program more self-sustainable and replicable.

What makes all this information of greatest relevance is Vicky Colbert’s emphasized interest, during the interview, in joining forces with the Barefoot College.

Just like the Barefoot College, the Global Journal recently nominated Escuela Nueva Foundation as one of the 100 best NGOs in 2012. Also, FEN and the Barefoot College are Fellows of different institutions (including Skoll Foundation) and, according to Colbert, both organizations' leaders have personally expressed their mutual interest for collaboration on different occasions.

The Escuela Nueva model has been applied both in formal and non-formal schools, and the model has been exploring different means to fit diverse contexts and needs.
For example, currently they are interested in adapting the model for a women’s organization, which might be an interesting project for the Barefoot College.

Colbert mentioned that FEN has been interested in "entering" India for a long time but they haven’t found the right partner to do it. For that reason, she is very interested in setting a partnership with Barefoot College to implement the Escuela Nueva Model in the Night Schools.

The idea would not be to bring their organization to India, but rather their pedagogical methodology (they only provide technical assistance but they don’t implement it), testing the model as a pilot in perhaps 10 Night Schools and establishing, as they usually do, a local team prepared by FEN to follow-up and supervise the implementation of the model. Since they usually do this through "microcenters" that reunite local stakeholders monthly to disseminate innovations and resolve problems together, this could be easily adopted by, for example, the Field Research Centres or Associated Partner Organizations of the Barefoot College.

Colbert mentioned that a partnership between FEN and the Barefoot College could strengthen the latter both pedagogically and financially, because their partnership could be partially sustained by selling jointly elaborated learning materials, built on their prototype materials, and adapted to the local context.

Recommendation made in the Barefoot College Study:

*R9:* Undertake a co-responsible study to determine the pertinence of a partnership between FEN and the Barefoot College to start a "research-action project". The alliance could be a win-win situation for both organizations but deeper research and negotiations should be done to determine the conditions of such an endeavour, especially regarding the Escuela Nueva model’s copyright-related issues.

This concept of a partnership could be resorted to:
A. on an ad hoc basis (designed for this particular case and subject matter) following (when applicable) the experiences gained in the model established by the United Nations – examples of which can be found, in a variety of areas, at UNF & UNFIP (2013).

B. within the already existing framework established in 1998 by the United Nations, that is, either:

a) through the United Nations Office for Partnerships – UNOP – established to:

i. promote new collaborations and alliances in furtherance of the 8 Millennium Development Goals, and providing to a variety of entities “Partnership Advisory Services and Outreach” (strengthening the expertise and capacity of the UN to engage corporations, foundations, and individuals, to find sustainable solutions to some of the world’s most challenging problems);

ii. provide support to new initiatives of the Secretary General; and

iii. manage the UNFIP (see below). Or,

b) through the U. N. Fund for International Partnerships – UNFIP – established by the Secretary General to serve as the interface in the partnership between the UN system and the UN Foundation, (which is the public charity responsible for administering Ted Turner’s 1997 $1 billion contribution in support of UN causes). Funds mobilized by the UN Foundation are channelled through UNFIP to the UN system, for implementation of projects focused on a variety of issues, including those covered by the Barefoot College’s initiatives. By the end of 2011, 524 projects and programs were supported by the UN Foundation through UNFIP, which are implemented by 43 UN entities in 124 countries. The UNOP’s priority areas are Children’s Health; Environment; Women and Population; and Peace, Security, and Human Rights. Although "Education" is not specifically mentioned, the comprehensive scheme and impact of both the Barefoot College’s Night Schools and the Escuela Nueva Model would easily justify a deep relation between all their components with UNFIP’s priority areas.
The project could be developed in three phases:

- The exploration and research phase, lasting 4 months, starting with interactions with the UN Partnerships system, in order to decide whether to set up the new partnership within its framework or independent of it, but in any case taking advantage of its accumulated experience;

- The partnership preparation phase, including the drafting of its charter and approaches to potential participants, over the subsequent 3 months; and

- Once the project is approved by both the Barefoot College and the Escuela Nueva Foundation, the implementation phase will commence (preparing the launch of the partnership and the adoption of a charter by a sufficient number of committed stakeholders).

The setting of this partnership, to consolidate, could incorporate some of the funding management and acquisition schemes mentioned in the recommendations of other case studies, such as the Trust Fund, the Parity Funds, etc.

3 Mercado Alternativo y Economía Solidaria (the Tumin Project) and Red de Multitruque Tláloc (the Tlaloc Barters Group)

3.1 Details of the Projects

The Alternative Market and Social Economy Project (better known by the name of its instrument of exchange: the Tumin) has about 3 years of experience and currently has around 200 members, half of whom are residents of Espinal, Veracruz in Mexico (birthplace of the project), and the other from different parts of the region – even other states of the country.

Espinal is a rural area in eastern Mexico, affected by poverty and its cyclical causes and consequences, meaning: the dependence resulting from the lack of means of
production (people work on lands that are not theirs or sell foreign products to survive); the violence permeating the State in the context of the country's war on drugs; and social divisiveness based on class, ethnicity, etc. All this, despite the intervention in the area of various poverty reduction government programs has been extensive.

In order to improve the quality of life of the local population, in 2010 teachers from the Intercultural University of Veracruz created an alternative market project – popularly known as "The Tumin Project" – as a tool to boost the local economy, promote the circulation of goods (which had no buyers due to the absence of conventional money in the place), and thus better address the prevailing economic crisis.

The Tumin is a voucher that is complementary to the peso, the Mexican currency. It seeks to support the family income serving as a means of facilitating the development of an alternative exchange dynamic: the barter (which actually used to be the traditional exchange system in the region). It is inspired, as well, by thousands of the so-called "alternative currencies" that have existed in the world for several decades – all with the aim of reducing external dependence and strengthening local autonomies. But particularly, the design of the Tumin Project was widely supported and inspired by the Tlaloc Barters Group, which has been in operation from Mexico City since 1996 promoting alternative barter markets (of products and services) all over the country.

3.2 Strategies for Sustainability

In an interview with the creator of Tlaloc Barters Group, Luis Lopezllera, he stressed the importance of such projects to solve the problems caused by the lack of conventional money.

The current economic model does not offer a solution to the problems of poverty, but reproduces them. We must create an option that represents an alternative to the
current economy, which creates immense external dependence. Start creating it from
the children, through an education that questions what is produced locally and what is
missing, considering that the local production, however, is never enough. We need a
trans-generational approach to transcend the economic dependence that creates
scarcity, poverty. To exit the well we must stop digging.

The prototype alternative market model promoted by Tlaloc Barter Group and that
inspired the Tumin Project, comprises, according to Luis Lopezllera's "Money is not
enough, what to do?" Manual (2008), the integration of an alternative economic
system that includes at least the following:

1. The granting of memberships for partners.
2. The signing of a letter of commitment agreed on the rules of the exchange.
3. The creation of a user directory based on the planning of a consumer basket (that
defines what kind of partners are needed, including foreign partners, if the locals
cannot fulfil the need).
4. The training in person and/or through a brief Operation Manual.
5. The provision of the barter/exchange vouchers to the partners.
6. The creation of a regular newsletter that accompanies and strengthens the project.
7. The creation and distribution of educational and publicizing materials.
8. The establishment of a promotional team (volunteers).
9. The organization of regular meetings for the project's development.
10. The organization of decisional deliberative assemblies of associated partners
(decentralization).
11. The establishment of cellular stores for the public (that link together, give
certainty, and facilitate the buying of products for those who cannot attend the
market's meetings because of logistical problems).
12. The organization of local fairs, private or public, gatherings, visits, courses, and
workshops (introductory lectures and retreats).
13. The organization of regional or national meetings (with similar networks).
14. The use of advanced communication and dissemination means.
15. The procurement of infrastructure and support resources (property for the shop and office, meeting room, exhibition room, furniture, telephone, computer, projector, transportation, support fund, etc.).

Based on this structure, *the Tumin Project’s model was organized as follows:*

1. A General Assembly takes place every two months among the partners. Attendance is not mandatory and the participation of representatives of the partners is accepted in cases where they cannot attend. At the end of these assemblies, demonstrative barter markets are mounted for people to learn to use the Tumin. Partners can prepare their participation in the Assembly through subgroup meetings as required. The Assembly, which has (as one of its objectives) the constant evaluation of the project, is made up of Commissions that are in charge of organizing various issues related to the Tumin Project. Thus, there are Commissions on Education (to teach children new economic values such as solidarity), Communication (broadcasting the project), Distribution (which dispenses the Tumin), etc.

Respondents said that, at the moment, not all of the Commissions were working properly and participation was being low. However, proposals would be raised regarding this problem in the next Assembly.

2. To attract members to the Tumin Project, the abovementioned coordination identifies people from the community who could enrich the diversity of products and services offered in the association's directory (Mercado Alternativo y Economía Solidaria, 2013), and presents them with a document on regulations (Mercado Alternativo y Economía Solidaria, 2012), which explains:

   a. That the Tumin Project seeks to promote an alternative market to the capitalist. One where mutual aid, solidarity, cooperation, community, and autonomy prevail.
b. That the Tumin Project is a sealed and numbered voucher used to exchange goods with value equal to (but not worth) 1 Mexican Peso ($0.08 USD approx.), backed up by the goods and services offered by its partners.

c. That the headquarters of the organization is in the Tumin's House, a shop within the same town that also redistributes products from the partners accepting payments up to 100% in Tumin, ensuring the partners that there is always a place to spend their vouchers. A place that enhances their interaction and promotes their products (partners have to contribute with 5% of their profit to the Tumin's House to cover administrative costs).

d. That there is a magazine (called "Kgnosi" and coordinated by the Human Rights Network), which allows the exchange of information and promotion related to the Tumin Project's Market. The journal's contents are varied but cases of self-managed social organizations and reports on participants in the Project prevail. The back always includes a classified section to promote the businesses of the partners.

e. That the deal proposed for this purpose is to offer them 500 free initial Tumins to encourage people to start using the voucher, in exchange for a their commitment to:

- Register as Tumin partners offering either a product or a service to the barter community.
- Help other partners (giving them preference in consumption and offering better prices to them than to the general public).
- Stay informed about the the Tumin Project's organization.
- Support the Tumin's House (buying, attending, etc.).
- Receive at least 10% of the payment for their products/services in Tumin ensuring that other partners do the same and the Tumin circulates.
Note: Irene Castellanos, current Treasurer of the project, said that one of the challenges they face is that many people become associates only because of the attractiveness of receiving 500 free Tumins but once they spend them they don't get involved in its market anymore. Because of that, Tumin's promoters have created a new dynamic in which participants are first delivered 50 Tumins only, to begin exchange activities using the voucher. If this works and they manage to spend 50 Tumins and receive from another partner (or anyone for that matter) another 50 Tumins in exchange for their products or services, the promoters give them another 500 Tumins and a poster, canvas, or credentials showing their businesses' participation in the Tumin's market. Informal interviews with some partners suggested that there are people who apparently increase the price of products in order to comply with their compromise of receiving 10% in Tumin and others instead of using it, keeping it, or accumulating it.

3. The above mentioned directory lists all the goods and services whose purchase accepts payment with Tumin (food, carpentry, tourism, education services, etc.). These businesses are also promoted through the magazine mentioned in subsection "d" of the previous point. The diversity of the partners is a crucial factor, because it allows a balance between the needs and the supply (says Oscar Espino, current coordinator of the Tumin Project).

4. The coordinating team (the coordinator and the promoters), that is elected and governed by the General Assembly, is in charge of printing the vouchers – with their own resources – and managing their distribution. It needs to ensure a balance in its production, that is, not have too many Tumins circulating because there is insufficient production of goods – but not too little either because merchandise can get stuck. Both Oscar Espino and Juan Castro argue that to produce Tumins is cheaper than to produce Mexican Pesos, that they are of a recyclable material, and that they sustain themselves because they don't depend on values imposed from outside. Project promoters do not charge for their services, and neither do they include them in the trading scheme, but themselves participate as partners with the sale of any other items.
5. The community contributes with volunteer work (e.g. the promoters), the payment and collection of Tumins, with facilities for holding the assemblies, with a space for Tumin’s House, with 5% of the value of the partners’ products sold at the Tumin’s House to cover administrative costs, with their participation in assemblies and other meetings, and with the payment of the shop’s (the Tumin’s house’s) staff (which is currently made by a group of teachers).

Some of the challenges facing the project because of its relative novelty:

a. Distrust and little solidarity among the participant population.

The confidence of the people is relevant to the extent that it is what gives value to the vouchers. The lack of it can cause the failure of the project.

b. Fear of people to participate.

In 2011, the Bank of Mexico sued the Tumin Project’s creators who allege they were blamed for challenging the State’s monopoly on emission of currencies in the country (Soberanes, 2012). Litigation proceedings have made minimal progress due to lack of legal grounding. Nonetheless, the involvement of the Bank was enough to dissuade the Intercultural University of Veracruz from supporting its Tumin-associated professors. However, the news spread rapidly because of which there was an increase in interest of foreign people and institutions. This diffusion outside is today intentionally fostered by the partners because it serves as a protection against possible threats from abroad for the development of this project. However, some local people are still afraid of the consequences their participation might carry.

c. Lack of social participation (in the organization and use of Tumin).

Reason for this lack of participants’ ownership of the project is the existing social divisiveness but also (in the words of Juan Castro, Co-founder of the Tumin Project),
the dependence created by the "welfarism" of various government programs operating in the region, and the mistrust created in people by the corruption that permeates them. However, it was also recognized that people could be unclear on how to participate, because of which, in a meeting witnessed during the field study, it was decided to elaborate a list of their concrete needs (financial or organizational) to show people means for supporting the project.

d. Lack of support, which causes the project to be designed, in the words of Juan Castro, “as it can” be done (i.e. simple to use/understand), and not “how it should” be done. That is, it develops as the budget allows it without any risk, so that people have certainty.

3.3 Insights into and Recommendations (R10) for SNSP’s Self-sustainability

Regarding the Alternative Economy Scheme:

Luis Lopezllera, creator of Tlaloc Barters Group, shared a key reflection for the SNSP:

On what are the Night Schools' children going to live when they grow up? What is the economy in which these children are being educated about? Where does this education lead them?....We must create an option that represents an alternative to the current economy, which creates immense external dependence. Start creating it from the children, through an education that questions what is produced locally and what is missing, considering that the local production, however, is never enough. We need a trans-generational approach to transcend the economic dependence that creates scarcity, poverty. To exit the well we must stop digging....The Children's Parliament is itself a model for the exchange of ideas. This could be the basis for the exchange of other valuables (knowledge, things... it would be necessary to define what, from a participatory assessment of what is in the region in terms of credits of trust, alienation. Namely: to go from parliamentarianism to economy with something that
replaces money – or complements it – being careful not to replicate the criticized existing schemes).

An alternative economic model could complement the Barefoot College's initiatives to curb migration and promote autonomy, depending less on foreign aid. Also, it could reinforce the College's beneficiaries' organization and participation schemes, including the Night Schools, supporting, for example, the barter of teaching and learning materials, and complementing, perhaps, teachers' salaries with partial payments in kind or similar measures.

One of the problems facing the initiatives of the Barefoot College is the classism derived from the Hindu caste system. While in its practices the Barefoot College promotes overcoming these boundaries between groups, an alternative market project could provide new reasons for people to transcend these discriminatory barriers and find themselves as partners of a joint project. That happened in Espinal, where some partners have stated that these projects have infringed social barriers by different people sitting in one same place who are not used to sharing, because they are now part of the same organization.

With a well-planned strategy, the introduction of a barter/exchange system with a tool similar to that used in the Tumin Project could encourage the circulation and benefits obtained from the products currently manufactured by the Barefoot College (in general: solar lanterns, sanitary napkins, etc., or by the SNSP in particular: the wooden toys produced by the program’s children, etc.).

The creators of the Tumin Project have observed that, without knowing why, most of its participants are women. This could be considered in the event that the Barefoot College would like to incorporate a similar system, either through its women's association, or the Night Schools, in which mainly women are involved too.

An alternative market system like the Tumin relies primarily on a capital which Barefoot College already possesses to a great extent, as perceived in the interviews.
with its beneficiaries: trust. The extensive experience and impact that the College has had with the participants of its initiatives has created in them a high level of confidence in the Organization and their ownership of the projects, both of which are central elements (as became evident in our visit to Espinal and from our talk with the creator of Tlaloc Barters Group’s initiatives) for the success of a project that encourages the creation of unconventional economic means such as the barters.

Recommendation made in the Barefoot College Study:

RI0: The Tumin Project’s model is not intended to be scalable, but the local autonomous economy model that promotes solidarity and local production is. Retrieving experience from the Tumin Project and Tlaloc Barters Group’s initiatives (or from any other of the many thousands of alternative currencies – economies – that today are being multiplied in the world) can become a tool to reinforce the self-sustainability in the implementation, and therefore the scope, of the programs undertaken by the Barefoot College, by attacking the roots of dependency with a systemic, integral perspective (like the one proposed by Escuela Nueva Foundation).

Barefoot College could detect exchangeable value goods (products or services, existing or potential, between members of the Barefoot College or its beneficiaries) with which an exchange network can be created to complement, rather than replace, the use of the already scarce rupees circulating in the region, strengthening the social organization and all issues arising from a new economy based on trust and less dependent on the outside.

4 ChildFund International (ChildFund)

4.1 Details of the Project

ChildFund International has 75 years of experience working with marginalized children and their communities in 31 countries (approx. 17.8 million children and their families participated by 2012) subsidizing the scarce local resources to
"empower a cycle of improvement that touches every member of society" and "create the environments children need to thrive" (ChildFund International, 2013). They also work with local groups and parent committees to identify key local problems and possible solutions, all of them family oriented, such as:

a. Trainings/awareness programs about child protection (e.g. for parents).
b. Early childhood psychosocial, health, and education support.
c. Youth unemployment skills training.
d. Health care and sanitation (nutrition: establishing renewable resources of food and safe water).
e. Basic education (building schools, vocational skills)
f. Micro-enterprises/jobs for generating family income.
g. Emergencies programs for children that are victims of wars and natural disasters.

The funds they collect are used to support both the sponsored child (basic needs such as nutrition, medical attention, clean water, educational books, materials, teachers, etc.), and the whole community (clean water for drinking and health care). This means that all funds collected are combined and used to benefit all children and their community, and not only the sponsored children.

4.2 Strategies for Sustainability

*ChildFund’s financial sustainability strategies include:*

1. Working through partnerships with organizations already working in its target communities to save money and energy.

2. Offering transparency: They offer supporters a hotline where a Sponsor Care Representative offers information about the funding process and management. Also concrete details of local personnel in charge of the NGO’s financials.
3. Placing emphasis on the need for connecting donors with their recipients emotionally, by:

a. Exposing clearly not only what ChildFund’s programs do and how they do it but their results (with statistics – quantitative – and sponsorship testimonials – qualitative).

b. Making a one-to-one connection between sponsors and sponsored children (ChildFund’s philosophy is: "connect one person who wants to help, with one child who needs it"). Phrases such as "sponsorship changes the lives of children and their sponsors"; "an encouraging letter will mean so much to keep him or her enthusiastic about school"; "you will receive regular annual updates on his or her performance in school"; and, "your sponsorship serves as an ongoing reminder to your child that life can be different and better" (ChildFund International, 2013) are used.

4. Allocating an ample percentage of their income in fundraising work.

5. Securing diversity of funds through:

a. Finding children sponsorships: Sponsors are offered to pay $28 USD/month to sponsor a boy/girl of their choice, and are explained how their contribution is going to be used, and that it is going to be combined with others to attend to all children in the area and their community. Strategies to secure sponsorship include concerts, sending trained fundraisers to streets and malls to solicit sponsorship face to face, setting community funds for all children where children sponsors can also donate, etc.

b. Establishing win-win partnerships with enterprises (e.g. The One for One Program with Toms Shoes where for each pair of shoes purchased, a new pair is given to a child in need. Benefits for the enterprises: publicity. Benefits for the
community: footwear is introduced into the holistic health and education programs).

c. Creating local cooperatives: ChildFund promotes that an enterprise invests in opening a local cooperative where an agreement is made with the participants that they will take care of their families and communities (e.g. bring their children to school), provided that a job is being offered to them and that there is already a buyer for their products (with fair prices). The cooperative’s surpluses are used to reinvest in the cooperative, cover the organization’s operation costs, pay the salaries of the cooperative’s employees, and invest in the community – e.g. on one of the NGO’s initiatives in that same community. With such a model, enterprises benefit with the tax deductions (Corporate Social Responsibility), and this ensure suppliers. The community, on the other hand, benefits by settling cooperatives that could stimulate local production, promoting employment to the families and reducing migration rates to the cities (as happens with the Tlaloc Barter Group and the Tumin Project). It also benefits from the agreement made with the participants on taking care of their families and communities, and form the investment that is done of the surpluses into initiatives that help improve its overall living conditions.

d. Requesting (like FEN) online donations in various modalities (e.g. fix amounts donations, “In honor or memoriam” donations "committed to honor any stated preference”, and "Gift Catalogues”) where they detail concrete items or services for the children explaining to whom it will be addressed and for what (ChildFund International, 2013).

e. Looking for grants.

f. Making investments at fair value and searching for beneficial interests in trusts.

g. Finding enterprises whose employees match the donations collected for community sponsorship. Differently from the matching/parity schemes used by
Amigos de Calakmul and FEN, ChildFund usually uses this scheme with enterprises that work permanently with one particular region/population (e.g. a coffee enterprise that buys most of its coffee from one region). The scheme ChildFund uses is to link the enterprises’ employees with the communities they work with is implementing a dynamic where each employee donates a certain percentage of his salary to the NGO’s initiative/program in the community, and the enterprise doubles that amount. This strengthens the wellbeing both of the community and the company’s employees. The employees are invited to inquire in their enterprises’ Human Research Department if their company already has a "matching gift program" and join it. The sponsorships are intended to a specific target: ensure the community’s self-sustainability in an agreed period of time. The money to find the partner enterprise comes from the ChildFund’s main branch, and it is recovered from the money the enterprise provides in the sponsorship budget. This budget is allocated into capacity building programs for the community. ChildFund is a Civil Association and each of its local offices are Civil Associations as well, and not a part of ChildFund’s main office. So the budget goes to increasing the community Civil Association’s self-sustainability (training them on getting funds, managing programs, establishing cooperatives, increasing social participation, etc.). The Enterprise and ChildFund make an agreement where the local Civil Association (the community organized) ensures results over a certain period of time (10, 20 years), and if there are not results (periodical evaluations) the funding is stopped. In short: the partnership contemplates an Exit Plan of both the enterprise and ChildFund’s main branch with the intention of ensuring a decentralized development program.

4.3 Insights into and Recommendations (R11, R12, R13, R14, R15, and R16) for SNSP’s Self-sustainability

*Regarding the creating Local Cooperatives Scheme:*

ChildFund has managed to create alternatives for the mutual support of its initiatives. Although it may vary depending on the context (they work in 31 countries), the
Barefoot College could consider their overall experience in integrating different development agendas, and, particularly, in this case, allowing the creation of a local economy that can become a sustainable source of financial support for the Night Schools.

Recommendation made in the Barefoot College Study:

R1I: To explore enterprises that are relevant for the kind of products that the Barefoot College already produces or that are present in the region (and thus, care about the local community), and make "win-win" partnerships of the kind mentioned in this case study with them. The settlement of cooperatives, such as the ones mentioned in this case study, could stimulate the regions’ production, empower local citizens, and reduce the migration rates to the cities offering local economic alternatives to the people. If parents of Night Schools’ children have extra income, perhaps they could afford to send their children to school. If there is a cooperative in the town, perhaps the children of the Night Schools would have greater job expectations in their own community, as also suggested by Lopezllera from the Tlaloc Barters Group. Moreover, if the cooperative surpluses are used, at least partially, to fund the Solar Night Schools Program, its financial self-sustainability would increase.

Regarding the Enterprises’ Communities Sponsorship Scheme:

The Barefoot College already has a strong organizational structure but the field research gave light that, although social ownership of the project (participation) is strong, the Village Development Committees (including the Village Education Committees) and/or the Field Research Centres still rely heavily on the support from Tilonia’s Office (the organization’s headquarters).

Recommendations made in the Barefoot College Study:
**R12:** Considering possible associations with partners (public or private) that can create a legal personality (as Civil Associations perhaps) to the local offices of the Barefoot College (e.g. at a village or regional level), therefore further decentralizing the Barefoot College.

**R13:** Determining an exit plan for the Barefoot College’s intervention in the Solar Night Schools Program through local organization’s capacity building programs around the initiatives that Barefoot College already has on the communities, to ensure not only the SNSP but other Barefoot College’s initiatives a higher degree of self-sustainability.

*Other Recommendations made in the Barefoot College Study:*

**R14:** Increasing the capacity of the Barefoot College to attract funding by putting emphasis on connecting the donors with the beneficiaries by creating a portfolio for the donors of the Solar Night Schools Program (in specific) that includes concrete information about:

1. The problem that the Night Schools address.
2. The Barefoot College's mission, vision, and organizational scheme – personnel, programs, etc.
3. The Solar Night Schools Program (a systematization of the model and how it works).
4. The results obtained so far from the Solar Night Schools Program — qualitative (case studies) and quantitative (statistics) information that can connect the donors with what their funding might support and explain to them how was the region before the Night Schools started and how is it now.
5. The organization's financials.
   a. How does the College collect money for the Night Schools, how does it use it, and how is it distributed.
   b. Barefoot College’s financial self-sustainability (here could be included the Community Contributions Inventory suggested in Amigos de Calakmul’s R1).
6. A "Gift Catalogue" where options are offered to the donors about means to contribute with items, activities, or services for the children and explaining how are they going to be used.

7. Emotional connection with the donor: a conclusive text that concretely explains to the donor how their contribution is going to benefit the Solar Night Schools Program, and more importantly, the children and their communities.

R15: Allocating an ample percentage of Barefoot College’s budget into fundraising work.

R16: Creating win-win partnerships with enterprises such as the One for One program that the ChildFund runs (with aims at diversifying funding sources).

5 Centro de Estudos Avançados de Promoção Social e Ambiental/Projeto Saúde e Alegria (Project Health and Happiness or PHH)

5.1 Details of the Project

The Project Health and Happiness has 26 years of experience working with socially and geographically excluded populations, many of them of the caboclo indigenous-descendants group, in the Brazilian Amazon region of the Western Para state.

These communities inhabit environmental conservation areas because of which they have hardly received the benefits of public services. PHH emerged as a response to that vacuum, focusing in what communities initially claimed as their priority: health services. After many years of work in the region, the organization gained credibility among people, which allowed it to expand its area and purpose of intervention with a more comprehensive agenda for an integrated and sustainable community development. As a result, PHH claims to have reduced infant mortality and illiteracy by half within the 150 Amazon coastal communities inhabited by approx. 30,000 people in marginal conditions with whom it works.
Over the years the organization has worked with 16 pilot partner communities and the surrounding areas, constructing a methodology for sustainable development that is in the process of systematization and that has gradually replicated in the Amazonian region and aims for a greater scaling. Their reference model, although it relies on external funding, is allegedly cheap and offers quick results (Eugenio Scannavino, cited by Osava, 2013).

**PHH model for Integrative Development**

PHH initiatives are divided into Territorial Development, Health, Education, Culture, and Communication, and they are all structured through a permanent process of Institutional Integration.

**Territorial Development**

The Territorial Development Program is the basis of the social and political support of all of PHH’s work, since it enables people to manage their own development by strengthening their self-management capacities and adapting the program to local conditions.

The program assists local leaders seeking to ensure ownership of popular initiatives implemented by the project as a whole, and works primarily to consolidate the process of land use and land tenure...strengthening regional representations in the social control of public policies in defense of their land, and good stewardship of their natural resources for economic, social, and environmental viability (Saude e Alegria, 2013c).

For this purpose they use participatory mapping, a methodology through which the communities sit together to draw a map of their region, and:

a. Document the territory where they live;
b. Gather all their information to construct geographic databases;
c. Determine the most relevant problems;
d. Visualize business opportunities in the region; and
e. Use them as a basis to program both PHH’s and the government’s developmental intervention in the region, and to manage their own lands, enable territorial regularization, and promote the sustainable use of local resources.

The mapping serves as a "document of reality" that allows not only PHH but also government bodies to better design their policies and programs in the region in different areas.

The Sustainable Entrepreneurship Program, for example, implements demonstrative initiatives for resources’ management and the acquisition of legal certifications to increase family income generation, increase food security, and reduce the impact on the environment, as socioeconomic strategic components to improve the quality of life, environmental conservation, and regional development (e.g. the communitarian ecotourism or the crafts production with local forest’s resources).

This program responds to the fact that the Amazonian communities live in an extremely vulnerable region where land occupation and resources mismanagement are the prevailing practices, and also that the government conditional cash transfers' development model Bolsa Familia have resulted in the disappearance of local production and extreme dependency from the communities to external subsidies.

Health

As mentioned earlier, PHH started as a health delivery program, providing adapted technologies such as micro-systems for the provision and treatment of water, house filters, wells, and rustic pits.

In the year 2006, the organization acquired a boat (the Abare Ship) that, making regular rounds from community to community, approached people with an
interdisciplinary team presented as Mocorongo Great Circus teaching people means to take care of their hygiene and prevent diseases with fun and participatory games. Personnel from the boat also offered basic medical and dental attention, vaccinations, family planning trainings, minor surgeries, etc.

The success of the project resulted in its absorption by the Brazilian Ministry of Health and in its escalation to State level in 2010.

Nowadays, Caetano Scannavino, PHH’s general coordinator, considers that the organization’s health mission is accomplished because it has not only achieved its objective of providing health access to the populations in the area it serves, but it has been escalated in the whole state thanks to the organization’s pragmatism and its acknowledgement that the State’s delivery and funding capacity is bigger. Therefore, PHH’s role in the area of health has changed. Now it is focused on training communities for the management and social control of these social policies to monitor the State intervention’s quality, which has implied a great detachment effort for the organization.

*Education, Culture, and Communication*

PHH has never had schools. Compulsory Education’s coverage in the area is almost 100%, partly because of PHH’s advocacy efforts in the last 20 years. It rather had focus on complementary activities to the work of public schools. Since more than 53% of the local population is below 19 years old, PHH mainly works with children and the youth with programs for community and environmental education, cultural promotion and diffusion, digital inclusion, and complementary actions for schools. During the latter, local education-related actors (communities, schools, and multiplier of actions) are trained to create supporting regionalized learning materials with participatory methodologies. This counteracts the lack of relevance of local schools’ curricula.
As with the health program, while PHH’s efforts were concentrated until not long ago into complementing schools’ activities, they are now focused on a partnership with 5 schools, the Carlos Chagas Foundation, and the Education Ministry of Santarem municipality, to work on a pilot project for making education for the Amazonian populations more relevant.

For this purpose, they also use the participatory mapping methodology. Children draw maps of their communities that include not only their inhabitants, but also their institutions, geographical conditions, resources, etc. This methodology helps both PHH and educators to identify the perception children have about the place they live, what is important, whose concepts are embedded into their mindset, etc. Based on these concepts and images, PHH helps educators and school authorities to sensitize teachers about what is relevant in the region (many teachers are not from the communities where they work), and adapt local materials and the curricula with images, subjects, and methodologies that are more familiar to the children.

The objective of this partnership is to set an example of how to improve the quality of the public schools in the region that, if successful, is to be scaled to the whole municipality. That is, as the case of the health program, to serve as a demonstrative experience that aims at being escalated by the State, with the argument that it is the latter's responsibility to provide access to quality education for all. The project so far has been stopped because the Carlos Chagas Foundation cancelled all of its funding this year.

5.2 Strategies for Sustainability

PHH is a non-profit organization that receives two kinds of donations: resources proceeding from covenants and/or projects (which operating revenues are recognized after the realization of expenses), and third parties’ donations – usually non-refundable.
According to Caetano Scannavino, the "economy" is PHH’s greatest challenge because of the difficulty of acquiring funding in a sustainable way for all their projects, especially for their long-term initiatives (Osava, 2013).

All PHH’s financial and asset management is performed by its Administrative Division with the sectorial coordinators. Although PHH’s Audit Committee, which is elected by its General Assembly, oversees all the organization’s accountability and the implementation of its agreements, an independent service audits the organization’s finances.

Since the project relies completely on external funding, it is currently discussing the possibility of creating a parallel for-profit enterprise that can serve to fund its social objective.

Meanwhile, PHH uses a few interesting strategies to ensure its financial sustainability, which are in charge of its Area of Institutional Integration. This area is responsible for integrating the organization’s diverse programs, determining institutional articulations and policies, planning the dissemination, expansion, and replication of the model, and ensuring their sustainability.

The strategies that this area uses for integrating the work of different areas, consolidating the model’s impact, and escalating it are detailed below.

1. Gain international visibility by bringing famous figures to attract funding.

2. Get funding from many and diverse sources, both public and private, that usually support concrete initiatives.

3. Allow online donations of materials, equipment, or others.

4. Work with partnerships both with the communities and with institutions abroad, from the public and the private sector, and with diverse development agendas. This
enables the organization to expand these communities’ access not only to primary health but also to a wide variety of social programs that support one another with the transference, adaptation, and application of appropriate social technologies and also in terms of funding (Saude e Alegria, 2013c). It also benefits the foreign partners because they make good use of PHH’s experience, know-how, and credibility in the region to access it.

Concurrently, PHH works in partnerships with the communities, creating or strengthening local organizations that are independent from PHH itself, thus limiting its financial and administrative responsibility and ensuring their autonomy (Osava, 2013).

5. Include a space on their website to receive ideas and experiences in their collaborative network.

6. Accept and incorporate volunteers from abroad.

7. Offer consultancy and advisory services to the public and private sectors, including NGOs and social movements (capitalizing on their experience).

8. Promote the beneficiaries’ ownership of its programs.

Based on the social technique (mentioned before) called "participatory mapping", PHH makes, altogether with the communities it serves, a diagnosis of local conditions, challenges, problems, and priorities and, based on them, it uses art, games, and communication as means for each of its programs. The participatory mapping not only allows the communities to visualize themselves and their context but to become agents of their own development, and define strategies and roles. The above is particularly important because the local population lacks an entrepreneurial mindset, most probably as a consequence of a governmental intervention that has not been particularly keen to include them in its development programs (Davide Pompermaier, cited by Osava, 2013). Although it is not voluntary, the social
ownership and participation created with PHH’s participatory methodologies functions as its model’s basis and source of sustainability, "because this way the communities become part of the projects’ developers and not only their beneficiaries" (Saude e Alegria, 2013c).

PHH also ensures that all its programs are supported by training to form "multiplier" agents, that is, local leaders that can manage and disseminate the programs independently.

9. Further integrating its different development initiatives.

PHH’s development model is integrated because of the interconnections that exist amongst its various interventions, which are emphasized in the understanding that attending the communities’ needs in an integral way implies recognizing that community life is integral itself; that all age sectors have to be attended; and, that one area can support another because it is frequently the same people that are involved. PHH’s institutional integration process consists of consolidating each area’s relevant institutions and trying to establish a transversal project.

However, to achieve this level of integration is very difficult, as many factors work against it: The responsibilities of PHH’s staff are distributed by areas and each area’s responsible has to be accountable for the programs at his/her charge, to ensure maintaining donors support. While all personnel are encouraged to be involved in all areas of work, they can only do it superficially because they have to concentrate on their own projects. Most importantly, the donors support very concrete/thematic agendas. Their funding criteria are not integral and they expect concrete results in concrete areas. So each area coordinator is generally responsible for the results of its domain and not the other.
To counteract these effects, PHH:

- Ensures all its personnel are at least aware of the purpose and situation of PHH’s other initiatives.
- Distributes the funding collected across initiatives.
- Searches for partnerships that not only expand the amount of services provided to the communities it serves but the support of one initiative to another.
- Uses participatory mapping as the departing point of all of its programs. This methodology not only enhances people’s ownership but also enables the description of people’s integral perspective about their community, its components, conflicts, resources, problems, needs, as well as the possible strategies to respond to all of them.
- The circus integrates the way people learn, conceptualize, and appropriate PHH’s initiatives because it uses different languages (dancing, singing, talking) to interrelate knowledge.
- Articulates different initiatives (e.g. people from the craft program receive tourists from the eco-tourism program and incentivize the territorial management organization; the renewable energy program provides energy to the Telecenters; the education program supports health prevention participative activities and environmental endeavours, etc.).
- Uses PMES annual cycles (planning, monitoring, evaluation, and systematization) to ensure the organization’s initiatives are working transversally. So, for example, in January and February the organization devotes itself to define and publish its annual plan (which includes objectives, activities, indicators, expected outcomes, and funding administration and sources). In June and July, they do a mid-year evaluation and adapt the plan accordingly. And finally, in December they make an annual evaluation and plan the next cycle.
5.3 PHH’s Strategies for Scalability

Not only the vision but also the strategies of the organization intend all to create replicable models of action whose objective is to serve as demonstrative references for the State (not the government) and/or the private sector, so they learn better and cheaper ways for designing and implementing public policies/projects and adopt them.

Caetano Scannavino argued that the organization’s mission is to create links between communities and partners from abroad rather than monopolizing the former; meaning that their objective is to create development models that can be further scaled by agents that are capable of implementing and funding them sustainably. Once this mission is achieved, the organization’s aim is to change its role from implementing the programs to creating management capacities in the communities, to oversee their continuous persistence and quality after adopted by either the State or the private sector.

PHH is currently requesting an independent agency’s help to systematize PHH’s intervention model to be able to scale it, providing that it considers itself as a low cost and high impact sustainable development alternative whose construction is based on the know-how gained from more than 20 years of working with marginalized populations in the Amazon.

In collaboration with PHH, Ashoka and McKinsey & Company (2010) made a noteworthy multi-annual strategic plan for scaling-up PHH’s program (hereafter referred as the Strategic Plan) to envisage the perspectives and recommendations to expand PHH and achieve, in 5 years, a “community integrated development participative model, with proper socio-environmental technologies, with low cost and high impact, consolidated in all direct attention areas and ready for replication in other regions” (p.11).
The Strategic Plan explores the characteristics of PHH’s model and its principal strengths and weaknesses before making some suggestions to the organization – all of them very illustrative of the factors related to its level of self-sustainability.

It describes the organization’s value chain: the inputs it receives (e.g. financial resources, social demands, human resources, data, and information), the means through which the organization works to create value (e.g. participative processes, democracy, partnerships, strategic planning, trainings, exchanges, inter and multidisciplinary approaches, adaptation of international social technologies into the local context, and methodologies for the strengthening of community groups), and its outputs (e.g. learning and information, trust relationships, reference models for development initiatives, self-esteem, autonomy, social inclusion, influence in public policies, social work, trained professionals).

The Strategic Plan also evaluates PHH’s strengths (e.g. proper and replicable social technologies, measured benefits, co-management capacity, team’s expertise, knowledge on the region, capacity to propose and adapt, network of partners, visibility and credibility obtained, both locally and abroad), its opportunities (e.g. work in a region with global visibility – the Amazon – network of contacts, scope for gaining scale because of the interest that public administrations have on PHH’s work), its weakness (e.g. spread of energy and resources in too many actions, non-satisfactory working conditions, insufficiency in the system of management and systematization of experiences, little participation of the Associates’ Council), and its challenges (lack of stability in the funding sources, limitedness and lack of flexibility of the resources available for institutional strengthening, lack of appropriateness of national policies for the Amazonian region, Amazonian predatory occupation processes).

Correspondingly, some of the recommended strategies contained in the Strategic Plan for PHH’s sustainability and scalability are:

- The formation of a network of multipliers.
- The expansion of communication tools.
• The inter-institutional exchange of methodological processes of expansion.
• The transfer, dissemination, and replication of environmental technologies.
• The cooperation with the public and private sector.
• The methodological reorientation to ensure a greater interaction with public policies and both public and private institutions, identifying common demands and possible cooperation initiatives, using information technologies for gaining scale.

To enlarge PHH’s reach without compromising its quality, the Strategic Plan recommends dividing the 5 years into 3 stages. During the first one, the areas that are currently intervened are consolidated as a permanent laboratory, its results are more comprehensively systematized, and priority is given to the Institutional Integration (which includes developing its communication means, inter-institutional agreements, methodological exchanges and consultancies, adapted socio-environmental expansion, transference, dissemination, and replication processes).

During the second stage, the area of dissemination is gradually expanded, starting with PHH’s more consolidated social technologies, especially 1) the health initiative – which includes preparatory actions for scalability (systematization of the Basic Attention Model that PHH has implemented and is offering now to the new beneficiaries, consultancy services portfolio, prospective of potential regions and actors for the replication of the model, etc.). And, 2) its integrative development practices: also needs preparatory actions. Start with strategies of participative diagnosis and planning (conjecture, identification of local actors and their perceptions, research about priorities for short, middle, and long terms, sectorial competences, etc.) culminating with a Development Plan with Recommendations for the application in the area of work.

Finally, stage 3 is suggested to be about articulating the Amazon with other regions around the globe, attracting proactive and strategic connections.
5.4 Insights into and Recommendations (R17, R18, R19, R20, R21, R22 and R23) for SNSP’s Self-sustainability

Regarding the Model:

PHH’s project, although its different context, covers similar areas with those of the Barefoot College. Because of their similar objective with the Night Schools, particular attention deserves the education programs aimed at increasing the relevance of local schools' teaching methodologies, curricular contents and learning materials design. The schools’ lack of relevance for rural children is a problem to which the Night Schools of the Barefoot College offer an alternative, and the use of PHH’s participatory mapping technique could complement its efforts greatly.

Recommendation made in the Barefoot College Study:

R17: It would be interesting for the Barefoot College reviewing the participatory mapping technique used by PHH (see Figure 6) for developing and adapting local materials and training teachers.

Figure 6 Example of a Community Map Created by Children

Regarding the Strategies for Financial Self-sustainability:
Despite a great degree of ownership, PHH relies heavily on external funding. However, they have set a few strategies that help them attract funding easier and lower the organization’s financial burdens.

As PHH is implementing (and the Tlaloc Barters Group, and the Tumin Project, and ChildFund), the Barefoot College could profit by innovating new means to motivate local production and vocational trainings to create long-term economic autonomy both for the people and for the SNSP. Working with partnerships has also served to distend the organization’s financial constraints.

Moreover, the participation promoted by the Children’s Parliament and the whole organizational structure of the Night Schools has probably one of the most sophisticated structures in the world. Capitalizing on the agency capacity created in those children through the Parliament’s experience could have great social effects that, ultimately, might result in sources of support for the Night Schools.

Most important of all, a programmed consolidation of the existing integration among the Barefoot College’s different development initiatives could strengthen the financial self-sustainability of them all – one program supporting another – and create greater perspectives for the Night Schools’ students after their "graduation".

Recommendations made in the Barefoot College Study:

\[R18: \text{Consider the option of creating local entrepreneurship initiatives (like PHH’s communitarian ecotourism) that provide children with future options for employment, help the organization to disseminate its programs abroad, and function as parallel enterprises that not only incorporate Night Schools’ alumni into the local economy but help in the funding of the Night Schools. If programmed well, this specialized tourism could also help to diversify the Night Schools’ funding sources.}\]
R19: Explore partnership options for the Night Schools either as independent projects or for their social events (the Children’s Parliament for example), to diversify sources of income and the offer of services for the Night Schools.

R20: Consolidate a network of "multiplier" agents with the Night Schools alumni, especially those that participated in the children’s parliament.

R21: Define a program for institutional integration that:

a. Designs and systematizes a long-term a transversal project that increases the existing interconnections amongst Barefoot College’s development initiatives and the Night Schools.

b. Settles partnerships between internal and external agents for the concrete purpose of increasing the Barefoot College model’s integration with the Night Schools and the mutual support of its initiatives.

c. Departs from a diagnosis of Barefoot College’s current intervention model, and defines a short-term pilot project area to begin the integration process using, perhaps, participatory mapping as a methodology.

d. Uses PMES annual cycles (planning, monitoring, evaluation, and systematization) to ensure the organization’s initiatives are working transversally.

e. Uses the already existing information-communication technologies (ICTs) in the Night Schools to integrate them into the Barefoot College’s other initiatives.

R22: Open a for-profit section in the Barefoot College that supports the Night Schools.

If done with the UNESCO Learning Centres for Sustainable Community Development's products, for example, local employment could be stimulated and, at
the same time, production for profit could gain funds for Barefoot College’s social objectives for the Night Schools (like Escuela Nueva Foundation does), contributing, at the same time, to the global fight against climate change (as suggested in the recommendations of Amigos de Calakmul’s case) that ultimately affects Barefoot College’s beneficiaries as well.

Given that the Solar Mamas project is intrinsically related to the Solar Night Schools Program (provides it with solar lanterns and some of the Night Schools alumni work with them), a scheme like this could pay, for example, for the solar lanterns. This possibility could also be combined with the cooperative scheme of ChildFund.

*Recommendations made in the Barefoot College Study:*

*R23: Design a strategy to consolidate the Solar Night Schools Program and evaluate the possibilities for scaling it up contemplating:*

**In the short term:**

-Participative diagnosis and planning (conjuncture, identification of local actors and their perceptions, research about priorities for short, middle, and long terms, sectorial competences, etc.) culminating with a Development Plan.

-The systematization of the SNPS’s model (done by an independent and external institution), clarifying what it offers that the public schools don’t, how is it able to resolve the problem of access to education for its children and the State is not, and why is its model more relevant to its children and their communities than that of public schools. That is, systematize the models’ contents and its results.

-A plan for institutional integration (which includes developing its communication means, inter-institutional agreements, methodological exchanges and consultancies, transference, dissemination, and replication processes).
-Strategies to integrate further still the Barefoot College’s already existing initiatives with the Night Schools.

-The SNPS’s potential optimistic and pessimistic scenarios, which includes financial constraints.

-The consolidation of a network of multipliers with the Night Schools’ alumni.

-The inter-institutional exchange of methodological processes of expansion.

-The cooperation with the public and private sector.

-Barefoot College’s value chain (the organization’s inputs, means to create value, and outputs).

-Barefoot College’s strengths (including the abovementioned systematization of its achievements, its co-management capacity, credibility obtained, and the extent of social participation with which it works), opportunities, weaknesses (including the lack of systematization of its model, the working conditions, and the management of the organization’s energy and resources), and challenges (including the lack of stability in the funding sources, the limitedness and lack of flexibility of the resources available for institutional strengthening, etc.).

-A permanent pilot project development area.

-The definition of general strategic directions (that serve as objectives) in stages, each program’s objectives, initiatives, key activities, and their indicators for each stage, that could be useful indicators for regular evaluations of the program (such as the number of beneficiaries, percentages of child mortality, etc.).
- A possible model for articulation with other regions in the world, attracting proactive and strategic connections.

In the mid-term

Once the Night Schools reference model is consolidated and systematized, design a pilot project that can be proposed for a partnership with the local ministry of education, and an external donor (that ensures impartiality in the process, like the trust suggested in Amigos de Calakmul’s case) to seek for possible ways in which the State could absorb the responsibility of the Night Schools, respecting their model and principles and scaling it up in partnership with the Barefoot College.

In the long-term

Once a reference model is agreed between the Barefoot College and the local ministry of education, start the scaling up of the Night Schools to all regions where the model is needed as the State is not able to ensure all children’s access to quality schooling.

From this stage forward, the Barefoot College’s role would change from implementing and managing the Night Schools to creating management capacities in the communities to oversee their continuous existence and quality after being adopted by the State.