DIGITAL TEACHING PORTFOLIO IN HIGHER EDUCATION
IMPLICATIONS FOR IMPLEMENTATION STRATEGIES

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OVERVIEW

- WHY digital teaching portfolio?
- WHAT have we done?
- WHAT have we learnt?
“A purposeful collection of evidence, consisting of descriptions, documents and examples of what is good teaching...”

De Rijdt Tiquet, Dochy, & Devolder (2006)
WHY DIGITAL TEACHING PORTFOLIO?

The "Always Being Busy" Syndrome
University teaching staff need to learn how to adopt a scholarly approach to teaching and how to collect and present rigorous evidence of their effectiveness as teaching staff. This involves reflection, inquiry, evaluating, documenting and communicating about teaching.

Healey (2000)
**WHAT HAVE WE DONE?**

<table>
<thead>
<tr>
<th>Quarters/Project Milestones</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>Phase 1: Collection of baseline data and construction of a set of mechanisms to support academic and teaching staff in the development of their own digital teaching portfolios</td>
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<tr>
<td></td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
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<tr>
<td>Phase 2: Piloting of the digital teaching portfolios with selected academic and teaching staff</td>
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<tr>
<td></td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
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<tr>
<td>Phase 3: Large scale implementation of the digital teaching portfolio to build a professional learning community of academic and teaching staff</td>
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<tr>
<td></td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
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<tr>
<td>Phase 4: Evaluation of the impact of the digital teaching portfolio in supporting a professional learning community to enhance teaching efficacies and student learning outcomes</td>
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*Fundied by the Teaching Development Grant (TDG)*
WHAT HAVE WE DONE?

Examined the perceptions of digital teaching portfolio among academic and teaching staff to inform implementation strategies.

Research questions:

1. How do teaching staff perceive digital teaching portfolio?
2. How do staff’s teaching experience, prior knowledge, and prior experience relate to their perceptions about digital teaching portfolio?
**THIS PAPER: WHO & HOW?**

**Who?**
- 132 academic and teaching staff from two tertiary institutions (HK = 56; Taiwan = 76)

**How?**
- Completed a 38-item questionnaire on a 7-point Likert-type scale
- EFA, reliability analyses, correlation analysis, ANOVA and t-tests
THE QUESTIONNAIRE

SUBSCALES

Perceived Usefulness for Personal Benefits ($\alpha = .95$)

Perceived Usefulness for Social Benefits ($\alpha = .90$)

Ease of Use ($\alpha = .93$)

Intention to Use Portfolio ($\alpha = .97$)

Concern about Time ($\alpha = .91$)

Concern about Technology and Support ($\alpha = .92$)

Computer Efficacy (Self-Exploration) ($\alpha = .93$)

Computer Efficacy (Professional Guidance) ($\alpha = .94$)

DEMOGRAPHICS

Teaching Experience (Years)

Prior Knowledge

Prior Experience
MAJOR FINDINGS
PERSONAL VS. SOCIAL BENEFITS

<table>
<thead>
<tr>
<th></th>
<th>Personal Benefits</th>
<th>Social Benefits</th>
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</thead>
<tbody>
<tr>
<td>Overall</td>
<td>5.7</td>
<td>5.425</td>
</tr>
<tr>
<td>HK</td>
<td>5.15</td>
<td>4.875</td>
</tr>
<tr>
<td>Taiwan</td>
<td>5.7</td>
<td>5.7</td>
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</table>

*Cohen’s d = .81
Those who had Prior Knowledge reported the higher Ease of Use and Computer Efficacy (Self-Exploration)
*Cohen’s d = .64

The more Prior Experience they had, the higher were their Perceived Usefulness, Ease of Use, Intention to Use Portfolio and Computer Efficacy (Self-Exploration)
*Cohen’s d = .62
**USEFULNESS, SUPPORT & USER BEHAVIOR**

- Perceived Usefulness (Personal Benefits) was moderately and negatively correlated with Concern about Time and Concern about Technology and Support.

- Computer Efficacy:
  
  Professional Guidance ($X = 5.65) > Self-Exploration ($X = 4.48$)

  *Cohen’s d = .82*
THINGS TO NOTE
WHAT HAVE WE LEARNT?

ESTABLISHING BUY-IN

- Prior Knowledge → Promotional Activities
- Perceived Usefulness → Promotional Activities
- Prior Experience → Hands-on Opportunities
- Professional Guidance → Accessible Support
<table>
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<tr>
<th>Year</th>
<th>Event</th>
<th>Region</th>
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<tbody>
<tr>
<td>1994</td>
<td>Initiated initiatives to promote teaching excellence in HE</td>
<td>Hong Kong</td>
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<td>1997</td>
<td>Launched the Information Education Infrastructure Program</td>
<td>Taiwan</td>
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<tr>
<td>2002</td>
<td>Urged to integrate technology for teaching and learning enhancement in HE</td>
<td>Hong Kong</td>
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<tr>
<td>2002</td>
<td>Launched national projects on the use of ICT in HE, alongside other initiatives in 12 other sectors</td>
<td>Taiwan</td>
</tr>
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Chang, Wang, & Chen (2009)

University Grants Committee (2002)

1990-2011

Education technology in teaching and learning - One of the fastest growing and most productive fields of research

Tseng, Chang, Tutwiler, Lin, & Barufaldi (2013)
INSTITUTIONAL POLICIES & CULTURE

- Usefulness = Extrinsic motivators???
- Institutional incentives
- Reward structures of tenure and promotion
Thank you

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