Learning@Scale Through Partnerships in Teacher Education

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Lead, Digital Learning for Development

Sustainable Partnerships for Transformative Teaching
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Session Overview

• Equity-Quality-Efficiency Issues in Teacher Education
• Learning@Scale and its Potential for Teacher Education
• Digital Learning to Support Learning@Scale: (A) Blended Learning (B) MOOCs (C) E-Portfolios (D) Learning Analytics
• Partnerships as a Key Ingredient to Learning@Scale
  – School-University Partnerships
  – Public-Private Partnerships
Equity-Quality-Efficiency Issues in Teacher Education
Quality, Equity and Efficiency

• Quality: Capacity of teacher education institutions and teacher educators to meet the particular professional learning needs of particular teachers in particular settings. This is most important with the wide ranging and diverse educational contexts within and across countries.

• Equity: Pertains not only to access and participation in professional learning but also to completion and achievement of professional learning.

• Efficiency: Efficiency is an economic measure of the teacher education performance. Internal efficiency involves the optimization of inputs (teacher educators, administrators, facilities, instructional methods, etc.) to produce the desired outputs (professional learning gains). On the other hand, external efficiency relates to the outcomes of the teacher education programme.
Quality, Equity and Efficiency

- Differences in capacity of teachers;
- Differences in learning environments (infrastructure, hardware, resources, and students) of schools;
- Teachers in remote and rural schools;
- Labour-intensiveness of professional learning (beyond a one-off workshop);
- Top-down and bottom-up expectations and professional learning;
- Learning-by-doing; and
- Need for continuous professional learning.
Learning@Scale and its Potential for Teacher Education
Digital Learning to Support Learning@Scale
Digital Technologies

Research studies in teacher education have shown that digital technologies coupled with appropriate strategies engage teachers in professional learning activities and have positive impact on cognitive outcomes (e.g. discipline specific way of thinking), pedagogical outcomes (e.g. design-thinking), technical outcomes (e.g. use of digital technologies), and meta-cognitive outcomes (e.g. task management and self-regulation).
Blended Learning is the deliberate fusion of online (asynchronous or/and synchronous) and face-to-face contact time between teacher educators and teachers, and/or among teachers in a course.
Blended Learning

Traditional

IN-CLASS (15 hours/cr hr) + OUT-OF-CLASS (30-45 hours/cr hr)

Blended

IN-CLASS (X hours/cr hr) + ONLINE (Y hours/cr hr)

X + Y = approximately same learner time as the traditional model
Blended Learning

• Actively engages learners/teachers and enhances learning outside the traditional physical, temporal and interactive limits associated with formal face-to-face learning;
• Provides opportunities for teacher educators to implement active professional learning;
• Develops professional learning communities that work together to build knowledge through processes such as inquiry, reflection and discourse
Blended Learning

• Powerful blended learning may necessitate fundamental change in pedagogy and relationships between teacher educators and teachers.

• There are low impact, medium impact, and high impact blends:
  – Low impact blends involve “adding extra activities to an existing course”;
  – medium impact blends involve “replacing activities in an existing course”; and
  – high impact blends involve “building the blended course from scratch.”
MOOCs

- Massive Open Online Courses (MOOCs) are "massive, with theoretically no limit to enrollment; open, allowing anyone to participate, usually at no cost; online, with learning activities typically taking place over the web; and a course, structured around a set of learning goals in a defined area of study," (Educause, 2013, p. 1).

- The combination of openness and technology-enabled scale that are inherent features of the MOOC make it a uniquely promising mode of learning for addressing equity, quality, and efficiency issues in education.
MOOCs

• The profiling of MOOC participants has shown that the majority of them are from North America and Europe and tend to be young, well-educated, and employed (Liyanagunawardena et al., 2013; Nesterko et al., 2013; Christensen et al, 2013).

• Language proficiency is an obvious discriminator since most MOOC courses are in English (Liyanagunawardena, et al., 2013).
MOOCs

- The requirements for effective participation in MOOCs are similar to those of other forms of online learning: learners need to be self-directed, to be able to balance day-to-day activities with learning in the course, to be able to manage the influx of information, and to have the digital literacy to engage in a learning environment with minimal support mechanisms.

- Many MOOC participants struggle with the lack of structure and support; as a result, a significant number of learners are unable to complete the courses in which they have enrolled for.
E-Portfolios

E-Portfolio is purposeful collection of digital artefacts, that include evidences of learners’ learning process and outcomes.
E-Portfolios

- Empower teachers in monitoring and managing their own professional learning processes and trajectories;
- Engage teachers in critically reflecting upon their professional learning and become lifelong learners;
- Create opportunities for teacher educators and teachers to engage in technology-rich learning environments;
- Support teachers in collecting evidences of their professional learning throughout their career;
- Provide a platform for teachers to showcase their professional competencies.
Profile information

- First name: [Redacted]
- Last name: [Redacted]
- Student ID: [Redacted]
- Display name: [Redacted]
- Email address: [Redacted]

Introduction

Welcome to my consolidation page! This collection is going to show many treasure and crucial experiences in my IEd life which included GE courses, field trip, winter camp, exchange, internship and overseas internship. Having an evaluation after engaged in those, it can help me to think deeper about what should I required to improve in order to having a further development on myself and my career path.

Introduction of strengths and weaknesses

In order to have deep understanding on what am I good for or bad for, I used a generic outcomes to evaluate myself first. After that, I could figure out my weaknesses and strengths are. Choosing generic outcomes as the rubrics is because it represents kinds of skills, attitudes and dispositions required for lifelong learning, it is crucial and comprehensive for me as we should study as much as we can in our life and every second is a part of learning.

Result of strengths and weaknesses evaluation

After a self-evaluation, I have weaknesses in:

1. Creative and Innovative Thinking
2. Social interaction
3. Global perspective and Multi-cultural Competence
4. Ethical Understanding
5. Decision Making

Strengths and weaknesses (i)

<table>
<thead>
<tr>
<th>Generic Outcome</th>
<th>Brief Description</th>
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<tbody>
<tr>
<td>Problem-Solving</td>
<td>• Be able to identify problems</td>
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<td></td>
<td>• Be able to gather information</td>
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<td></td>
<td>• Be able to analyze problems</td>
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<td></td>
<td>• Be able to evaluate solutions</td>
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<tr>
<td>Critical and Reflective</td>
<td>• Apply critical reasoning to issues through independent thought and informed</td>
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<td>Thinking</td>
<td>determination</td>
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Strengths and weaknesses (ii)

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<thead>
<tr>
<th>Generic Outcome</th>
<th>Brief Description</th>
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<tr>
<td>Effective Communication</td>
<td>• Articulate and express oneself</td>
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<td></td>
<td>• Can express knowledge, ideas and opinions in their professional field, both</td>
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<td></td>
<td>orally and in written form, with confidence, fluency and clarity</td>
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<td>• Be able to engage effectively and appropriately with information and</td>
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<td>communication technologies</td>
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<td>• Be able to actively listen and respond to the</td>
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<td>feedback</td>
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Personal Goals

Short-term Goals
1. Promotion of Creativity
2. Appreciation of diversity
3. Respect of ethics and ethical standards

Mid-term Goals
1. Be more proactive with strangers or new friends
2. Understanding more social and political responsibility

Introduction of the learning outcomes

After engaged in different experiences, I tried to have an evaluation again based on the generic outcomes.

The learning outcomes (i)

<table>
<thead>
<tr>
<th>Generic Outcome</th>
<th>Brief Description</th>
<th>GE</th>
<th>FT</th>
<th>WC</th>
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<th>OI</th>
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<tr>
<td>Problem Solving</td>
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<td>Critical and Reflective Thinking</td>
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The learning outcomes (ii)

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<tbody>
<tr>
<td>Effective Communication</td>
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<tr>
<td>Social Interaction Skills</td>
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**Introduction**

Welcome to my page which share my overseas internship experience in Shanghai with you! At here you can know more about what I have done in N-dynamic, a market research company located in Shanghai.

**Goals for this internship**

Posted by [Name] on 31 May 2014, 1:15 AM

My personal, educational and career goals

After reviewing my personal development, educational and career goals with contents drawn from 'Self-Directed Search' result. I am a person who is conventional, enterprising and social. N-dynamic is a market research company which is suitable for me to be an intern there since I love engaging in marketing and business industry.

**What I have done during internship?**

1. Data Analysis
2. Translation Works
3. Audio Record and Analysis
4. Setting up research and interview questions
5. Proofreading documents
6. Site Visits

**Having a discussion on Kellogg’s proposal**

1. Personal Goals

I would like to boost my self-confident since I am not enthusiastic enough when I present or bring up my ideas with the strangers. Thus, I would like to be more sociable, since I don’t like to move out my confront zone. Start using variety of tactics to improve my social skills, such as posture, eye contact, facial expression etc. Thus, I want to buffer my knowledge in market and business industry since I want to have a better understanding of the job.
Feeling after staying Shanghai for 4 weeks

Posted by [Redacted] on 23 July 2014, 12:04 PM

Feeling before 1-week departure

Posted by [Redacted] on 18 August 2014, 11:46 AM
Overall action plans

1. More voluntary work and internship to promote civil responsibility
2. Application for summer school program to gain chances to meet new friends
3. Talk and high table dinner with some professional to enhance beverage in front of people
4. Extra practice for English and Putonghua as their both international languages which can help me to absorb more from different culture and criticise or think about globalisation and appreciate and care ethnicities

Those plans can help me improve:

1. Promotion of Creativity
2. Appreciation of diversity
3. Be more proactive with strangers or new friends

Feedback

0 comments
Learning Analytics

• Learning analytics refers to the collection, analysis, and reporting of data about learners and their contexts to improve student learning (Aljohani & Davis, 2012).

• It is focused on improving learning quality and efficiency and is distinct from what is termed 'academic analytics', which is concerned with the analysis of organizational processes, workflows, resource allocation, and institutional measurement to improve organizational effectiveness (Siemens et al., 2011).

• The growing popularity of analytics in higher education is driven by at least three factors: the emergence of big data - datasets whose size and variety is beyond the ability of typical database software to capture, store, manage, and analyze; online learning and its systematic collection of user transactional data; and the growing need for measurement to empirically demonstrate learning enhancements (Ferguson, 2012).
Partnerships as a Key Ingredient to Learning@Scale
Partnerships as Key

- School-University Partnerships
- Public-Private Partnerships
Conclusion
Conclusion

Teachers with the support of school leaders and policymakers are the main gatekeepers to education innovations into the classrooms. Capacity building of teachers then is pivotal to ensure the effective implementation of education innovations in schools. To address the challenges of quality, equity and efficiency of teacher education, learning@scale mediated by digital technologies may be the way forward to build the capacity of teachers in schools.
THANK YOU!!!

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