New Technologies and Old Professional Development: A Reflection on Emerging Approaches

JIN MAO, PH.D.

WILKES UNIVERSITY

JUNE 16, 2017

Introduction

Six categories of critical change faced by higher education (Wiley & Hilton, 2009):

- Analog to digital
- Tethered to mobile
- Isolated to connected
- Generic to personal
- Consumers to creators
- Closed to open

Changing Views on Learning

Academic performance

Content learning

Memory

Engagement

Motivation

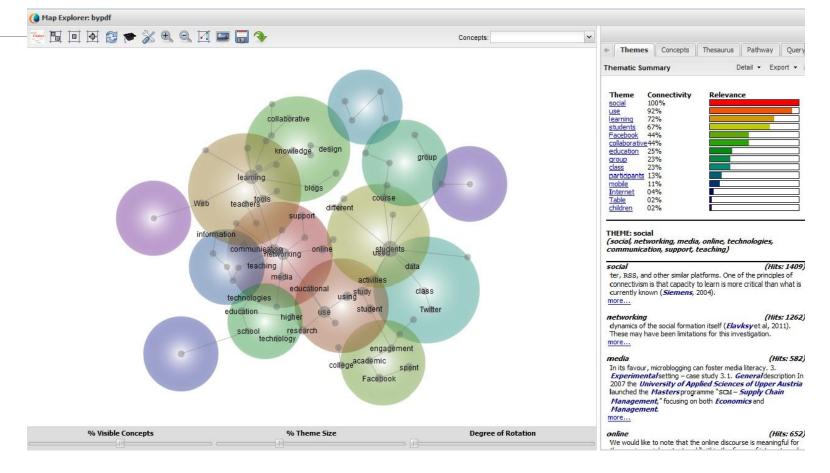
Cooperative learning

Elearning or online learning

Collaboration, interaction,

Metacognitive knowledge

Self-regulation skills



Source: Mao, J., & Chen, B. (2014, November). The social media revolution: A review of research findings for K-12 and higher education. A paper presented at Association for Educational Communications and Technology (AECT) Annual International Convention, Jacksonville, FL.

Effective Professional Development (PD) is key!

Fast changing technologies

Various initiatives in schools

Teacher readiness in integrating technology into teaching and learning

Equal access to quality teachers for students

Does teacher PD make a difference?

"...but does investing in teacher professional development make a difference? If so, what separates effective professional development from ineffective offerings?"

(Center for American Progress, 2017)

Teacher PD can be Effective

"Educators and policymakers are increasingly looking to teacher professional learning as an important strategy for supporting the complex skills students need to be prepared for further education and work in the 21st century. For students to develop mastery of challenging content, problem-solving, effective communication and collaboration, and self-direction, teachers must employ more sophisticated forms of teaching. Effective professional development (PD) is key to teachers learning and refining the pedagogies required to teach these skills."

Darling-Hammond, Hyler, & Gardner (2017).

Teacher PD is a Failed Investment

DESPITE THESE EFFORTS,
MOST TEACHERS DO NOT
APPEAR TO IMPROVE
SUBSTANTIALLY.



Only 3 in 10 teachers demonstrated substantial improvement.

TNTP. (2017). https://tntp.org/publications/view/the-mirage-confronting-the-truth-about-our-quest-for-teacher-development

Characteristics of Quality Professional Development by Research

Lawless & Pellegrino, (2007) and Thomas et al. (2012):

- Duration
- Access to new technologies
- Meaningful and active learning
- Peer collaboration
- Community building
- Personalized assistance
- Practical interventions
- Measurable impact on student learning

Colbert et al. (2008):

 Building professional learning communities, collaboration, and a culture of inquiry are crucial in developing good teachers.

Tondeur et al. (2016)

- An effective teacher professional development model
- Engaging teachers in an ongoing inquiry

Characteristics of Professional Development in Practice

Traditional

- Short-term workshops or seminars
- Coaching
- A top-down approach
- Limited in intellectual challenges
- Discontinuous
- Surface learning
- Irrelevant

Novel

- A variety of forms
- Technology-enhanced
- A bottom-up approach
- Learner-centered professional learning
- Continuous
- Deep learning
- Meaningful

Emerging Approaches

- Online Professional Development Resources
- Professional Learning Communities (PLCs)
- Social-Media-Based Personal Professional Learning
- Open Educational Resources (OER)
- Networked Professional Learning (NPL)
- Other emerging approaches?

Online Professional Development Resources

Different from online professional development activities or initiatives such as PLCs

Knowledge management

Participatory

Collective intelligence

Evolving

Professional Learning Communities (PLCs)

Collaboration

Student Learning

Support deep inquiry into practice

Support various professional missions

Mandatory vs. voluntary PLCs

Different findings about the effectiveness of PLCs

Social-Media-Based Personal Professional Learning

A transition from a broadcast approach to a consumerist approach

Personalization

Connectivity

Personal Learning Networks (PLNs)

Personal Learning Environments IPLEs)

High level of motivation

Access to experts

Open Educational Resources (OER)

The notion of openness

Massive Open Online Courses (MOOCs)

OER Commons

Wikimedia

WikiEducator



Networked Professional Learning (NPL)

Research-based, collaboration-focused NPL

Corporate-Education partnerships

University-School collaborations

Local or global collaboration

Opportunities for situated learning and knowledge construction

Issues Related to Current Tech-Supported PD

Teachers' perceptions of teaching and learning

A disconnect between professional development and actual classroom practices

The design of professional development

Sustained support

Communication

Professionalism

Discussion & Reflection

What are the characteristics of an effective educator in today's connected world?

How to be selective in collaboration in today's connected world?

What does an innovative PD mean?

What is the true meaning of professionalism?

What is the role of emerging technologies in PD?

What does professionalism mean in PD?

Characteristics of Effective Professional Development

Learning Policy Institute (2017):

- Tailoring to teacher's specific academic content focus
- Actively engaging participants
- Focusing on collaboration
- Modeling best practices
- Individualizing coaching
- Providing feedback and opportunities for reflection
- Sustaining the programs over time

Concluding Thoughts

Consider all variables involved in the learning and change processes when designing PD sessions or programs;

Teachers should align what they believe philosophically and what they practice in classroom teaching;

Recognize that every individual is a learner and a contributor in a learning environment;

Recognize the culture of teaching as a profession;

Propose meaningful research questions and adopt innovative research methodologies that help investigate and explore the issues related to PD.

References

Center for American Progress. (2017). Does investing in teacher professional development make a difference? Retrieved from https://www.americanprogress.org/events/2017/05/25/433019/investing-teacher-professional-development-make-difference/

Colbert, J. A., Brown, R. S., Choi, S. & Thomas, S. (2008). An investigation of the impacts of teacher-driven professional development on pedagogy and student learning. Teacher Education Quarterly, 135-154.

Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). Effective teacher professional development. Retrieved from https://learningpolicyinstitute.org/product/effective-teacher-professional-development-report

Lawless, K. A., & Pellegrino, J. W. (2007). Professional development in integrating technology into teaching and learning: Knowns, unknowns, and ways to pursue better questions and answers. *Review of Educational Research*, 77(4), 576–614.

Learning Policy Institute. (2017). Retrieved from https://learningpolicyinstitute.org/products/reports

Thomas, C. N., Hassaram, B., Rieth, H. J., Raghavan, N. S., Kinzer, C. K., & Mulloy, A. M. (2012). The integrated curriculum project: Teacher change and student outcomes within a university–school professional development collaboration. *Psychology in the Schools, 49*(5), 444–464.

TNTP. (2017). The mirage: The Mirage: Confronting the hard truth about our quest for teacher development. Retrieved from https://tntp.org/publications/view/the-mirage-confronting-the-truth-about-our-quest-for-teacher-development

Tondeur, J., Forkosh-Baruch, A., Prestridge, S., Albion, P. & Edirisinghe, S. (2016). Responding to challenges in teacher professional development for ICT integration in education. *Educational Technology & Society, 19* (3), 110–120.

Wiley, D., & Hilton III, J. (2009). Openness, dynamic specialization, and the disaggregated future of higher education. *International Review of Research in Open and Distance Learning*, 10(5), 1–16.