Exploring Business Education Technologies

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TEACHERS AND THE GREAT ECONOMIC DEBATE

Registration for our 2014 Emerging Issues Forum is now open! Learn more about how we train, retain, and support world-class teachers to secure North Carolina’s future competitiveness and sign up today!
Webinar Agenda and Format

• Online Teacher Prep & Professional Development
  • Cultivating Communities of Practice

• Trends in Online & Blended Professional Learning
  • How digital tools are transforming learning

• Virtual Internships & NCVPS Teacher Assistant Induction Program
  • Increasing Teacher Capacity

• Approaches to Professional Development in Private Sector
  • How can schools / businesses learn from each other?
Cathy Cavanaugh
Director of Teaching and Learning at Microsoft Corporation
Always Learning

Dynamic Professional Learning Environments
Cathy Cavanaugh, PhD
Microsoft Worldwide Education
New Imperatives in Education and Business

• Change!
• Innovative!
• Be agile!
• Engage!
• Create meaningful experiences for students/customers!
• Dynamic work environments require dynamic learning environments.
Dynamic Professional Learning Environments

<table>
<thead>
<tr>
<th>Static Professional Learning</th>
<th>Dynamic Professional Learning</th>
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<tbody>
<tr>
<td>Group learning</td>
<td>Individual learning in fluid groups</td>
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<tr>
<td>Common goals</td>
<td>Personalized relevant goals</td>
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<td>Leader-to-learner</td>
<td>Peer-to-peer</td>
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<tr>
<td>Emphasis reception</td>
<td>Emphasize creation</td>
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<td>Learners in following role</td>
<td>Learners as leaders</td>
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<td>Event-based</td>
<td>Ongoing</td>
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<tr>
<td>Bound in time and place</td>
<td>Anytime anywhere</td>
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<tr>
<td>Credited in seat time</td>
<td>Credited in effort and outcome</td>
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<tr>
<td>Evaluated by satisfaction</td>
<td>Evaluated by impact</td>
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<tr>
<td>Broad application</td>
<td>Driven by specific context</td>
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<td>Examples: workshops, seminars, classes</td>
<td>Examples: communities, action research, ed camps, teach meets</td>
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Rationale for Online Professional Development

• (OLPD) addresses increased demands on decreasing teacher time, expands professional communities of participants, reduces isolation, and increases potential for innovation.

• High-quality, job-embedded OLPD embodies:
  • community building and sustainability
  • ongoing, facilitated support
  • application of learning
  • reflection on outcomes
**Seven Principles for Cultivating Communities of Practice**

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<thead>
<tr>
<th>Seven Principles for Cultivating Communities of Practice</th>
<th>Affordances of OLPD communities</th>
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<tbody>
<tr>
<td>1. Design for evolution</td>
<td>Build on existing networks in schools and professional organizations</td>
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<tr>
<td>2. Dialogue between inside and outside perspectives</td>
<td>Welcome and invite new members and guests</td>
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<td>3. Differentiated levels of participation</td>
<td>Scaffold members to refine and explore their roles, including sustained and occasional participants</td>
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<td>4. Public and private community spaces</td>
<td>Include forums and members-only project or special interest spaces, as well as open spaces</td>
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<td>5. Focus on value</td>
<td>Emphasize effective practice in the form of student learning</td>
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<td>6. Balance of familiarity and excitement</td>
<td>Establish norms and expectations; encourage celebrations and opportunities</td>
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<td>7. Rhythm for the community</td>
<td>Arrange special events</td>
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Effective Applications for Online Professional Development

Literature and practice support the use of online PD for the following goals:

• Mentoring novice teachers.
• Online courses and workshops for discrete knowledge and skill acquisition.
• Online professional learning community.
• Inquiry into effective teaching practice.
Barbara Treacy
Director of the Education Development Center
Online and Blended Professional Learning for Educators

How digital tools are transforming the possibilities for effective educators' ongoing learning

Barbara Treacy
Director, EdTech Leaders Online
Education Development Center
“Episodic and ineffective professional development is replaced by professional learning that is collaborative, coherent, and continuous and that blends more effective in-person courses and workshops with the expanded opportunities, immediacy, and convenience enabled by online learning.”

-U.S. Department of Education
Online Learning Opportunities

- **Flexibility**: Anytime, anyplace learning
- **Access**: To experts and resources not be available locally
- **Reflection and deeper learning**: Educators participate and interact with colleagues on their own schedules
- **Personalization**: Custom paths for a variety of goals/needs
- **Cost-effectiveness**: Eliminates travel/related costs
- **Extended learning over time**: Opportunities for educators to try things out in classrooms with feedback
- **Scalability/sustainability**: Capacity-building approaches work
- **Data and Assessment**: Increased access to learner data
Online Professional Development Trends: Social, Networked, Online, Collaborative, Anytime/Anyplace/Any Device

“The change we are in the middle of isn’t minor and isn’t optional.”

- Clay Shirky, Author and Professor, NYU

http://www.personalizemedia.com/media/socmedcounter.swf
“The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn.”

-Alvin Toffler
Trend 1 - Social Networks: Personal, Connected, and Collaborative

“Social media is learning media.”
- Patrick Larkin, 2012 Digital Principal of the Year

http://www.slideshare.net/courosa/open-connected-learning?from_search=9
Trend 2 - Online Courses: Collaborative, Connected, Focused, Scalable

Exploring the Common Core Standards for Mathematical Practice

During this course, participants will:

1. Understand the Mathematical Practices as habits of mind.
2. Understand that the Mathematical Practices are developed throughout all the grades.
3. Gain strategies for developing a classroom culture that promotes and values this kind of thinking.
4. Explore rich math tasks through the lens of promoting the practices.
5. Identify evidence that students are using the practices in their work.
6. Gain a model for the structure and interrelatedness of the practices.
7. Create a lesson that promotes one or more practice.

Leading Schools in a Web 2.0 World

This course will enable participants to:

- Enrich their abilities to communicate and collaborate with school and district staff, community, students and parents;
- Investigate key issues and policy needs related to the use of Web 2.0 tools in schools;
- Actively explore useful Web 2.0 tools, including Google Docs, podcasts, and blogs;
- Develop a personal action plan to improve communication and collaboration using Web 2.0 tools; and
- Create a pilot project using one of the Web 2.0 tools covered in this course.
Trend 3 - Online Communities: Collaborative, Purposeful, Ongoing
Trend 4 - MOOCs: “Massive,” “Open,” “Online” “Courses”

MOOC

Every letter is negotiable.

2013 @mathplourde - #digedcon #moocposter
Teacher Voice: Professional Learning in a Digital Age

“If we want our students to succeed in a global environment, then we, as educators, must be engaged in 21st century content, context, tools, thinking skills and assessment. Thanks to online learning I am a 21st century life-long learner!”

-JoAnn Nuzum, teacher, online facilitator and online course developer
Leslie Fetzer
NC Virtual Public Schools
Professional Learning Coordinator
2012 SREB/iNACOL National Online Teacher of the Year
NCVPS Teacher Assistant Process

1. Structure & Format
2. Content
3. Outcomes
WHO IS THE NCVPS TEACHER ASSISTANT/INTERN?
Structure & Format

Teacher Assistant Process
18 Weeks

1. Coursework (9 Weeks)

2. Practicum (9 Weeks)
Content

Teacher Assistant Process
It’s not just about the technology... It’s about the Teaching
NC VPS Course Offerings, Structure, & Account Set Up

Course Design

Scenario Based Learning

Reporting

The Three Pillars

- Daily posts (instruct, celebrate, inform)
- Grading & Feedback
- The Teacher-Student Relationship/Communication

Accessibility & IEP/504

Electronic Learning Communities

Evaluation & Support

Individualizing Instruction
Outcomes

Teacher Assistant Process
Increasing Teacher Capacity

Training received during the TA Assistant Process has changed the way I teach in my f2f classroom.

- Yes: 89%
- No: 11%
“I’ve become more aware of how to really individualize for my students. I’ve increased the ways that I present material to them. I also use more ways to assess what they know.”

“It’s inspired me to be more active in developing relationships with each and every one of my students.”

I finished an M.Ed. last summer and our work together throughout the spring and summer was equivalent to a second Capstone Project. Thanks!!
What the teachers are saying:

“The TA training experience is one of the best training situations I've personally ever been involved with. A lot of the training experiences we have in the face to face environment are very tedious and not very useful or practical to apply in the face to face classroom. The type of training I received through NCVPS was very practical and useful. I could make connections with this process that have been missing in my face to face setting.”
Leslie Fetzer
NCVPS Professional Learning Coordinator
2012 iNACOL/SREB National Online Teacher of the Year
leslie.fetzer@ncpublicschools.gov
Julia Carpenter
Senior Instructional Designer at General Dynamics
Approaches to Professional Development at General Dynamics IT

Julia Carpenter
Opportunities – New Hires

- Orientation
- Mentorship
- Hands-on systems training for specific tools used to design instruction
Opportunities – Experienced Employees

- Attend and present at brown bag workshops (in-house)
  - Lessons learned
  - Demonstrate completed instruction (web-based, instructor-led)
  - Research relevant to field (ISD, training)
  - Share information acquired through attendance at conferences

- Attend and present at local and international conferences (for example, Society of Applied Learning Technology)
  - Approval required from customer and manager
Questions?
How do we train, retain, and support world-class teachers in every classroom to ensure NC’s future competitiveness?
For reference slide or webpage


