



National Center for **Research** on
Rural Education (R²Ed)

2011 Advances and Opportunities in Rural Education Research Speaker Series

Evidence-based Practices for Online Teacher Professional Development

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Session Objectives

Online professional development (OLPD) addresses the problem of increased demands on decreasing teacher time (Chen, Chen, & Tsai, 2009; Dede, 2006; Russell, Kleiman, Carey, & Douglas, 2009).

High-quality, job-embedded OLPD programs take multiple forms embodying:

- community building and sustainability
- ongoing, facilitated support
- application of learning
- reflection on outcomes

The session includes promising, research-based approaches for online professional development, with specific guidelines, recommendations, and examples

Applications for OLPD

Mentoring novice teachers (Dalgarno & Colgan, 2007).

Online courses and workshops for discrete knowledge and skill acquisition (Guldberg & Pilkington, 2006).

Online professional learning community (Sessums, 2009).

Inquiry into effective teaching practice (Dana & Silva, 2010).

Example: online workshop

Online workshop for teachers of students with disabilities at Florida Virtual School (Wayer, 2009)

Welcome!

Instructor: Nicola Wayer, M.Ed., NBCT
Email: nwayer@ufl.edu

Orientation to Exceptional Student Education (ESE) for Virtual School Teachers

This course is designed to provide you, as a virtual school teacher, with professional development in understanding and meeting the needs of students with disabilities and special needs in an online course setting. This training will focus on understanding the needs of SEN students as unique learners but will also include information on making your course accessible.

Get started in this course by participating in the Introductions forum.

Course Resources:

 [Notes on Getting Started – PLEASE READ!](#)



Example: online workshop

June 7 – June 20

Topic One: Introduction to Special Education – Terminology, The Law, and How It Applies to You








Objectives for this module:

1. Teachers will be able to define common terms relating to special education including IEP, AYP, ADA, and IDEA.
2. Teachers will examine a sample IEP and summarize what it tells them about that student.
3. Teachers will explain how ADA and IDEA apply to them as classroom/virtual school teachers.
4. Teachers will identify questions that they would need to answer about a student based on the current IEP and any additional assessment data.
5. Teachers will identify resources for seeking answers to questions about students' needs (the student, parents, learning specialists, online resources, etc)

What to expect:

This module is designed to help you become familiar with special education terminology. As you work through this module, you will watch some videos and online multimedia presentations, complete some e-readings and a reflective writing activity, begin your collection of online resources, and take a brief online quiz. Some additional reference documents will be available for you to download.

Resources & Assignments:

-  Introduction to Special Education Video
-  The Individualized Education Plan & the 504 Plan – Online Presentation
-  Learning about IEPs and ESE students in Virtual Schools – e-Readings
-  Demystifying Special Education in Virtual Charter Schools – eReading
-  Reflective Writing: What you learned about IEPs and 504 plans
-  FYI – Special Education Terminology Reference Sheet
-  Find Your Own References



Example: online workshop

All participants completed the introductory module and specific modules based on teaching assignments

The design promoted community building and sustainability with ongoing, facilitated support

The workshop was flexible to accommodate single participants or groups of varying sizes.

Example: online workshop

Modules were designed with a consistent format.

- Videos or multimedia presentations about the disability
- Readings on how the disability impacts learners and how they are commonly accommodated
- Reflection on how to accommodate students in the disability group
- Discussion forums for exchanging ideas and applying learning
- Listing additional resources
- Supplementary activities
- A culminating activity: modify an existing lesson plan and materials to accommodate a student with a disability, identifying potential problems students might encounter

Example: mentoring novice teachers

UF study of online mentoring of preservice teachers at Florida Virtual School (Kennedy, 2010).

Novices benefited from a practical, apprenticeship model that emphasized

- (1) Clear and frequent communication with mentor
- (2) Learning environments and teacher tools
- (3) Course content design
- (4) Managing the range of teacher roles

Example: mentoring novice teachers

Recommendations:

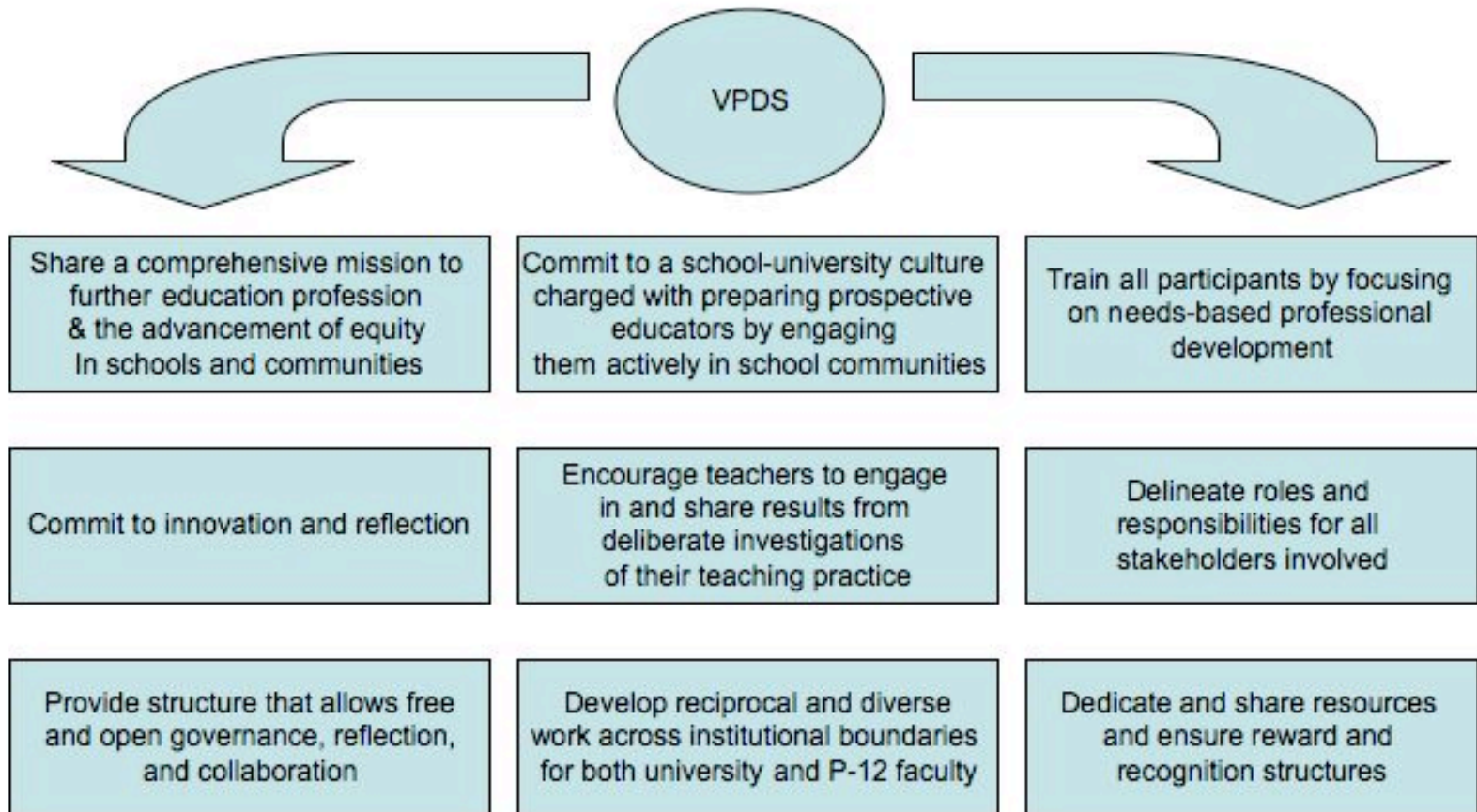
- Allow time for this complex learning
- Integrate reflection and analysis to uncover dissonance between new teaching perceptions and prior learning experiences
- Strive for immersion in the actual setting of practice
- Build opportunities for mentors and novices to bond as colleagues so professional passion may be communicated

Example: mentoring novice teachers

Recommendations:

- Suggest structures for mentors to scaffold novices
- Prepare mentors by outlining the content and activities most important in the experience and clarifying messages about the school culture

Example: mentoring novice teachers



Example: Online PLC

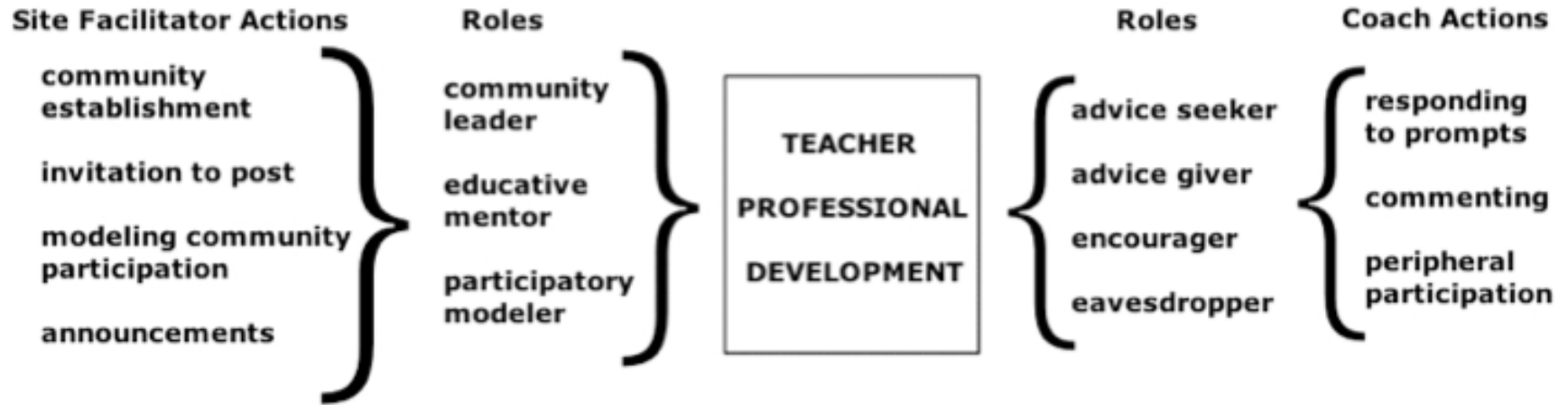
Online professional learning community: Florida PLC for teacher inquiry coaches (Sessums, 2009), UF Center for School Improvement, <http://csi.ufllearn.org/>

- The site facilitator is the driving force behind activity, "the glue" that connected all participants and actions on the site
- If participants did not respond to the facilitator's prompts, did not supply evidence of what techniques and strategies were working for them in either their own posts or in their comments to one another, then there was no benefit or no knowledge gained by the members
- Participants derived value from observing each others' content
- Learning networks require a leader that serves as a role model for the norms and behaviors defined by the community members

Example: Online PLC

- Facilitators assume roles of community leader, educative mentor, and participatory modeler
- All three roles serve the learning community as a means to create and maintain the conditions that "enable productive and innovative relationships" (Anklam, 2007).
- Participant roles were (1) advice seeker, (2) advice giver, (3) encourager, and (4) eavesdropper

Example: Online PLC



Example: online teacher inquiry

Florida EETT teacher inquiry studies (Dawson, Cavanaugh & Ritzhaupt, 2006-2009)

Teacher inquiry: systematic, intentional study of professional practice (Cochran-Smith & Lytle, 1993; Dana & Silva, 2003; Hubbard & Power, 1993):

- (1) defining a question from practice
- (2) developing a research plan for data collection
- (3) analyzing their collective data in relationship to their question
- (4) taking action to implement what was learned
- (5) sharing the results of their work with other professionals



Example: online teacher inquiry

In 2010 (year 4 of a 5-year study) in the EETT program,

- OL inquiry teachers worked with 10,000 students.
- Nearly 59% were in rural school settings and
- Over 79% focused on students of lower middle to low socio-economic background
- <http://etc.usf.edu/fde/>

Example: online teacher inquiry

Inquiry mentors participated in two synchronous training sessions via teleconference by UF online inquiry researchers.

In preparation, mentors reviewed online materials based on “The reflective educator’s guide to classroom research” (Dana & Yendol-Hoppey, 2003).

Some mentors organized face-to-face, large group meetings while others met with small groups or used technology to support synchronous meetings in support of around 10 teachers in a school year.

Example: online teacher inquiry



AARTI

Action Research for Technology Integration

Main Menu

My Proposals

Introduction

Identify Inquiry

Context

General Questions

Hardware Questions

Software Questions

Teaching and Learning Questions

Data Collection

Data Analysis

Implications and Actions

EETT Action Research

Action Research Context - General Questions

Proposal Title: *Dawson Example*

Save

The action research context area is divided into four sections: 1) General Questions, 2) Hardware Questions, 3) Software Questions and 4) Teaching and Learning Questions.

Please provide information about the context within which your inquiry will take place. Remember, respond to these items based on your inquiry question only.

General Questions

Indicate the type of school:

- Public
- Private
- Special school
- Charter
- Mixed
- Other

Please specify:

Indicate the type of community:

- Urban
- Rural
- Suburban
- Mixed
- Other

Please specify:

Example: inquiry strategies

Instructional Strategy	Primary		Secondary	
	N	%	N	%
Higher-level instructional feedback	53	15.82	82	24.48
Integration of subject areas	46	13.73	69	20.60
Project-based learning	106	31.64	48	14.33
Higher-level questioning strategies	16	4.78	44	13.13
Teacher as coach/facilitator	102	30.45	79	23.58
Parent/community involvement	7	2.09	7	2.09
Other	5	1.49	6	1.79
Total Inquiries:				335



Example: inquiry outcomes

Outcomes	N	%
Conditions that lead to learning (e.g. Enjoyment, motivation, engagement, on-task behavior, positive school experience, etc.)	107	24.65
Instructional benefits of using technology (supporting individual differences, providing multimodal instruction, supporting repeated practice, providing instant feedback, use as a data collection device, tool for independent learning, etc.)	96	22.12
Twenty-first century/information skills (e.g. collaboration, computer skills, work force skills, students as producers, communication skills, leadership, innovation and creativity)	58	13.36
Student achievement (e.g. higher level thinking skills, retention, transfer, knowledge acquisition, etc.)	102	23.50
Impact on different learners (e.g. high achieving, low achieving, etc.)	55	12.67
Other	16	3.69
Totals:	434	100

Example: inquiry implications

Implications	N	%
Changes in teaching practices (e.g. teacher becoming a learning partner, enriched teaching, new instructional practices, etc.)	175	53.85
Teacher leadership (e.g. shared with colleagues and/or other administrators, took leadership role in school, etc.)	19	5.85
Professional advocacy for technology (e.g. conference presentations, publications, professional development leader, grant writing, etc.)	14	4.31
Feelings of professionalism (e.g. renewed energy for teaching, etc.)	23	7.08
Sustainability (interest and plans to pursue technology use, etc.)	82	25.23
Other	12	3.69
Totals:	325	100

Example: online inquiry

Recommendations

- Prioritize school-based research
- Support job-embedded PD to empower educators to examine impacts of reforms on student learning
- Provide online tools for community and sharing
- Integrate tools measuring outcomes of technology use into a system of professional development that affords opportunities for longitudinal data collection/analysis to inform statewide and district level improvement plans.

Example: online inquiry

Recommendations:

Focus PD on differentiated instruction to meet diverse learning needs, support synthesis, interpretation and evaluation skills and promote problem solving and creativity.



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A comprehensive bibliography for
OLPD is located at

<http://online-educator.pbworks.com/>

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