

TAKING STAFF DEVELOPMENT ONLINE: A THEORETICAL PERSPECTIVE OF BEST PRACTICES FOR THE 21st CENTURY

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Abstract

Professional staff development is a continual process of individual and group assessment where the goal is to inform and improve practice in a school environment. The overall goal is to allow educators and communities of learners the ability to make complex decisions, identify and solve problems; and connect theory into practice to improve student outcomes in the classroom. It is an absolute necessity to ensure teachers continually improve their skills to meet the high standards of learning set for every child. Professional staff development is not only necessary for the benefit of improving instruction but is a requirement by the majority of school corporations in the United States. Continual professional staff development enables educators the ability to offer students learning opportunities to meet outstanding standards in specified content areas and to successfully assume real-world roles and responsibilities for life beyond the classroom.

In today's current economic landscape, with budget cuts at unforeseen highs, professional development teams are exploring alternative delivery modes to ensure teachers continue to learn with effective and efficient methods. This article explores steps for developing teacher professional development for the online delivery systems for K-12 school corporations and best practices, which include second life options, to meet school corporation requirements. We explain the long-range vision and strategic plan necessary for moving beyond the traditional delivery methods and provide an in-depth guide, which leads readers through a step-by-step process of the online instructional delivery.

Key words: *design theory, online, staff development.*

Introduction

The Legislative Landscape

According to the Center on Budget and Policy Priorities (2009), the unprecedented state fiscal problems brought on by the worst decline in tax receipts in decades show no signs of letting up. As of July 1, which was the start of the fiscal year for most states, there were an unusually high number of states still struggling to adopt budgets for fiscal year 2010. Most states had adopted budgets that closed the shortfalls they faced with a combination of federal stimulus dollars, service reductions, revenue increases, and funds from reserves. Unfortunately, these budgets are falling out of balance as the economy has caused state revenues to decline even more than originally projected. According to current reports, many states will continue to struggle to find the revenue needed to support critical public services, such as public education programs, for several years down the road. Additionally, an unusual number of states are still struggling to balance their 2010 budgets even as late as one month following the start of the fiscal year. Five states, including Arizona, Connecticut, Michigan, North Carolina, and Pennsylvania, still have not yet adopted budgets for 2010 (Center on Budget and Policy Priorities, 2009).

Some of the Problems

With dramatic reductions throughout state government, all education levels from kindergarten through college have felt the impact of the current budget crisis. School corporations across the country have lost funding, especially for programs that do not directly impact student-teacher contact hours. In many states with serious budget shortfalls, teacher professional development programming is still required; however, because of their budget crisis school corporations do not have proper funding to support it. Therefore, school corporations are exploring non-traditional methods for continuing teacher professional development because it is still a necessity.

This article will explore steps for developing teacher professional development for the online delivery systems for K-12 school corporations and best practices. The first step in this process was to develop a long-range vision and strategic plan around online learning environment (OLE) needs and development of online learning for teacher professional development with budgetary constraints being one of the key components and considerations. The researchers for this project worked with the Training Specialist in the Office of Professional Development for a large, metropolitan school corporation in a southern state suffering from serious budget shortfalls without a current budget, which affected the county's ability to continue face-to-face (FTF) professional development within their school corporation. The team wanted to create and implement dynamic and high quality learning opportunities for the staff, administrators, teachers, teacher assistances, and support personnel. Due to policy changes and the economic downfall, it was determined that the professional development office must work more efficiently and effectively to deliver above standard learning opportunities.

Assumptions about Professional Development

For many years Title I of the Elementary and Secondary Education Act has required low-performing schools to set aside 10% of their allocations for school-wide professional development. Title II funding has resulted in the allocation of more than \$3 billion to professional development. More than 40 states have adopted standards calling for effective professional development for all educators accountable for results in student learning. And several national studies on what distinguishes high-performing, high-poverty schools from their lower-performing counterparts consistently identify effective school-wide collaborative professional learning as critical to the school's success. As a nation we have failed to leverage this support and these examples to ensure that every educator and every student benefits from highly effective professional learning. (Wei, Darling-Hammond, Andree, Richardson, and Orphanos, 2009).

It is general belief that educators need high-quality professional development (PD) to help their students meet academic standards as well as meet the goal of achieving a high-quality educator in every classroom. According to the Standards for Online Professional Development (2009), online instruction provides educators with quality professional through "anytime, anywhere" access to courses and workshops. While there is a plethora of information available about what is required to provide quality PD, the use of emerging technologies to offer educators with access to excellent online PD is new. Building on the research regarding traditional, FTF PD, online PD provides educators, schools and states opportunities which were previously unavailable. PD is a continual process of individual and group assessment where the goal is to inform and improve practice in a school environment. The overall goal is to allow educators and communities of learners the ability to make complex decisions, identify and solve problems; and connect theory into practice to improve student outcomes in the classroom. PD enables educators the ability to offer students learning opportunities to meet outstanding standards in specified content areas and to successfully assume real-world roles and responsibilities for life beyond the classroom.

Key Steps in the Design of Online Professional Development Programs

Once a school corporation has determined that online professional staff development is their preferred method, many organizations find they struggle with the specifics of putting together a quality program, which meets corporation-wide goals and standards for instruction. The following will provide a brief introduction to theory, strategies, and examples of visual pedagogies that incorporate learner-centered instruction, endorse a self-directed, autonomous learning environment, promote collaborative learning while cultivating a community of learners, followed by conversation and activities designed to provide motivational support; develop critical thinking and problem-solving skills; cultivate a supportive learning environment; and encourage participants to set achievable goals for themselves.

The Process

Based on extensive research, practical experience and budgetary constraints imposed, a three-step approach was implemented to move FTF PD to an OLE based on three levels of design decisions: course-level decisions, instruction-level decisions, and pedagogical decisions. Although the course-level and instruction-level decisions are made in a hierarchical order, the pedagogical decisions will be made throughout both decision-making phases; therefore it will be listed in multiple locations throughout the process. Although superintendents and other administrative personnel may be responsible for making some of the initial planning decisions, it is crucial for the online professional development (OPD) instructor(s) to contemplate how these decisions impact the teaching-learning process. By taking the time to thoroughly examine the administrative planning tasks, the instructor(s) will find the course design and development decisions more manageable. Once the decision to move to the online delivery format has been determined, you must begin to look at instructional modalities which are realistic and available to the implementation team.

Initial Course-level Decisions

Determining instructional modality is crucial to the development of the online course because the course mode provides the structure for all other instructional and pedagogical decisions. Bonk, Cummings, Hara, Fischler and Lee, S. M. (2000) provides a framework for integrating three modes of instruction into a course: adjunct, mixed, and wholly online. Following a continuum of online integration, modes of instruction range from primarily informational usage of the online (adjunct); to a blend of occasional FTF meetings, online discussions, and online-based supplemental course materials (mixed); to the entire course taught in an online-based environment (wholly online). This step can either be the driving focus of the course or a step that provides a choice for the delivery framework.

Initial Pedagogical Decisions

1) Envision the purpose of the online course from within each class; school; and the larger school corporation. Determine whether this course is part of a larger distance education initiative or whether it is a single online course. This activity is fundamental to the process. According to Schrum (1998), each instructional experience should be chosen to support the course purpose. She suggests a continuum to help instructors extend the traditional classroom model to one improved by electronic processes and global resources available in the online environment. Clearly defining the purpose of each course within the larger curriculum, really informed all other decisions for this study.

2) Assess learner characteristics and learner context. When evaluating the purpose of each course, it is critical to consider the potential audience for the course, because the demographics can affect motivational strategies used in the course. If possible, identify what type of online

course readiness assessment will be implemented, if any, to determine learner success, even if the courses are part of the teacher's contract requirements. If you have access and its feasible, possibilities include:

- Administer a Meyers-Briggs test;
- Administer a computer skills test;

Guidelines for taking an online course should be developed by the PD team or school corporation to establish guidelines; or they may already have these guidelines prepared in electronic or paper-based format.

3) Identify location of the learners in relation to the administration site; schools or teacher's residence. Assess the course prerequisites, if any, which includes determining what skills or knowledge learners must have before enrolling in the OPD Course. This includes: necessary computer skills to navigate the course in the online environment; and factual or conceptual knowledge. This is a very important activity because there may not have been prerequisites for the FTF version of the course, and / or the prerequisites may change considerably because of the skills necessary to navigate an online course. Identify school corporation calendar constraints. For example, in this case study, the school corporation had already set aside PD days for their academic calendar. Although the time was set aside, the school corporation could no longer pay teacher travel and those days were being used for alternative purposes.

4) Define the course learning goals, which entails effectively selecting course goals that support learning within the new environment (Schrum, 1998). Accordingly, Boettcher and Conrad (1999) suggest choosing goals that move away from static content and instead support the production of knowledge through interactive learning environments. 5

5) Identify differences in the teaching and learning environment of the traditional, FTF course and the OLE (Boettcher & Conrad, 1999). This activity requires the instructor to identify teaching strategies appropriate for online. Linear content vs. nonlinear content; static lecture vs. interactivity; learner's perceived distance vs. literal distance; technology to aid instruction vs. technology to deliver instruction; and self-directed learning vs. teacher-directed learning (Knowles, 1990).

6) Examine your philosophy of teaching, which requires the instructor to reflectively examine his or her philosophy of teaching to determine how it directly relates to the course objectives, purpose, and assessment. In this case, it was important that the design and development of the different teaching strategies and tactics within the curriculum were congruent with the original teaching philosophy of the PD team to maintain consistency and comfort of those participating as much as possible. This can be achieved by identifying teaching strategies and tactics to be utilized in the curriculum being adapted online. If differences in philosophies do surface it is important to determine how to create a cohesive environment.

7) Identify faculty resources and financial support necessary for successful adaptation to the new environment. This activity entails identifying what resources faculty will need in order to support effective use of technology for teaching, learning, and research (Boettcher & Conrad, 1999). Before the process began, resources were investigated, identified and obtained along with a determination of funds allocated to the process. It may be necessary at this stage to identify additional funding priorities and obtain supplementary grant availability to support the project. Types of resources to consider:

- Technology resources: what types of technical assistance is available;
- Equipment resources: identify equipment needed to develop and deliver an online course.
- Pedagogical resources: identify what kind of pedagogical support is available for those developing the curriculum and what will be available to the teachers following delivery of instruction.
- Time resources: include how much research will need to be done to prepare for the

- development and delivery of the online course; instructor workload: determine if a reduced teaching load is necessary. If possible, negotiate a reduced teaching load during the development semester and the first semester the course is taught only
- Human resources: what is the availability of teaching assistants for development, grading, and facilitating the online courses and determine how long it will take to adequately train them in the course management tool. If available, and you have financial support, determine what type of support personnel will be necessary to develop and deliver the course.
 - (1) Instructional designer
 - (2) Content specialists
 - (3) Online developer
 - (4) Graphics designer
 - (5) Editor
 - (6) Writer
 - (7) Usability testers
 - Estimate financial resources necessary to design, develop, and deliver the online course and apply for grants to help fund the development and delivery of the online course (corporate or external grant funding sources) and set up a realistic budget, which will be workable within the constraints set by the governing body. Often the budget is very small and limited in nature.
 - Determine instructional support resources; contact several sources and conduct a thorough materials analysis to determine which ones compliment the curriculum and determine if there are any copyright permission needed and obtain those early as these can take a very long time.

Once these initial pedagogical decisions have been made and the process has gotten underway, there are additional course-level decisions that must be considered. The next section attends to the types of communication as well as methods for communicating with the PD team, instructors and educators.

Initial Course-level Decisions

1) It is very important to determine appropriate methods and levels of interaction in the OLE. Determining the types of electronic interaction desired for the course provides the communication framework, meaning the types and depth of communication. The communication framework defines what synchronous and asynchronous communication tools are used within the Online-based environment, e. g., e-mail, electronic bulletin boards, and chat rooms (Boettcher & Conrad, 1999). Additionally, Bonk and Dennen (1999) stress the importance of considering the amount and form of instructor-to-student and student-to-student interaction in a Online-based instructional environment. Several questions arise in the construction of an OLE, and the most important is the nature of the communication system. Pulkkinene and Peltonen (1998) propose three key parts for the question:

- Is communication non-directional or bi-directional? Choice of a one-way information flow will considerably reduce the provision of expert learning support.
- Is the communication synchronous or asynchronous? Types of a-synchronous communication include:
 - i) E-mail
 - ii) Bulletin board/threaded discussions
- Will learners be given the opportunity to enter into dialog with each other through synchronous communication? This question addresses whether the learning process is seen to be an exclusively independent activity, with the learners interacting with the learning materials, or whether it is seen as a socially constructed activity, with collaborative learning and other

dialectical opportunities available. According to Harasim, Hiltz, Teles, and Turoff (1995), small learning communities facilitate learning best in OLEs. Identify purpose for integrating small group discussion, logistics of how learners will be divided into group. According to Carlson and Everett (2000), the ideal small group size is 5-10 members. If the purpose of the group is to collaborate to complete a paper or case study, the smaller group is better.

2) Recognize operational issues. Operational issues include learner requirements for computer hardware and software, and availability of technical support. Ensuring that learners acquire the hardware and software required to actively participate in learning communities is another key issue to consider. Schrum (1998) suggests bandwidth, speed of communication lines, and cost of materials as operational issues to consider. Course management software for learners' submissions or information distribution should also be considered at the beginning of the process (Boettcher & Conrad, 1999). Determine the optimal content management system (CMS) for the modality chosen for the course. A CMS is the software used to provide the electronic resources necessary to teach the course via the WWW. You will need to determine:

- Knowledge and/or skills the course designer will need to build the site;
- Availability of site-building tools;
- Instructor's time commitment for design and development activities;
- Availability and type of technical support for CMS;
- Availability and type of pedagogical faculty support to assist in learning the CMS;
- Minimum hardware system requirements necessary for instructors and learners to connect to the CMS;
- Minimum software requirements necessary for instructors and learners to connect to the CMS;
- Current bandwidth available, and whether the CMS can be adequately supported by it;
- Lowest communication speed used by learners to log into the CMS, in order to establish download times for instructional materials; and
- Location of electronic storage space for learner documents.

In a linear process such as this, instructional decisions and pedagogical decisions can be made simultaneously, depending on the number of people involved in the PD team. If the PD team has limited personnel involved to complete these tasks, it will be important to follow the steps more closely. If the PD team has quite a few members, many of the tasks can be divided up and completed at the same time in an effort to efficiently meet school deadlines.

Subsequent Pedagogical Decisions

- Recognize course administration issues to evaluate and monitor university policies and standards regarding adapting FTF PD courses to the OLE.
- (1) Establish the role of the course facilitator and *identify instructional activities they will be responsible for, such as: maintain virtual office hours, email responsibilities, assessment, grading and evaluation.*
 - (2) Determine course enrollment size.
 - (3) What will be the grading scheme, if any.
 - (4) What level of technical support will be available, if any, especially technical support for computer problems not associated with the CMS as well as hours of operation for the computer support center. Since the course is online and learners access the course throughout the day and night, identify hours of available service (24/7 support service if preferable but probably not realistic unless it has been contracted out).

The following instruction-level decisions address course objectives, learning outcomes and critical content, which are a key step in the process. The pedagogical issues which follow those decisions provide information to support those decisions.

Subsequent Instruction-level Decisions

- Identify online course objectives. This activity requires identifying what types of skills and concepts the learners will be learning, describing desired learner behaviors, defining the conditions under which the behaviors are to be performed, and determining the criteria by which the behaviors are to be judged (Mager, 1997).
- Identify online course learning outcomes. This activity necessitates establishing content standards for the course. Specifically, the instructor must determine what skills the learners will be able to perform at an indicated level and identify what content learners will be expected to know at the end of the course. The learning outcomes may change or remain the same compared to the traditional FTF course (Bell & Kaplan, 1999).
- Identify online course critical content. This activity involves defining the essential core concepts and principles of the course and eliminating extraneous content (Bichelmeyer, Misanchuk and Malopinsky, 2001).

Additional Pedagogical Issues

1) Establish practices to ensure academic rigor is maintained and ensure that critical content is taught at an acceptable level for the course.

2) Recognize which concepts and principles are essential to the course even though they might not be considered core concepts.

3) Identify types of learning learners will encounter throughout course. This activity entails exploring the types of learning that learners will encounter throughout each component of the course.

4) Identify instructional methods. This activity requires the identification of instructional methods that best teach the core concepts and principles, foster the types of learning identified, and allow the instructor to maintain the intended purpose of the course (Boettcher & Conrad, 1999).

For example in this case, types of instruction are categorized within three methods of instruction:

Learner-directed instruction

- (1) Reflection
- (2) Learning-by-doing
- (3) Problem-solving

Instructor-directed instruction

- (1) Group facilitation of Team Study Hall Discussions
- (2) Virtual office hours
- (3) Bulletin Board Discussions

Small-Group Collaboration

- (1) Peer-to-peer interactive communication – creates diverse opinions
 - (a) Collaborative learning
 - (b) Group problem-solving
 - (c) Cooperative learning

5) Ascertain media selection. This activity involves ascertaining which media will be accessible, what hardware and software will be available, and how connection speed will impact media selection. It also includes choosing which textbooks best support learning of critical content and core principles within the Online environment (for example, supporting self-directed, independent learning) (Kirkwood, 1994). Additionally, Bell and Kaplan's (1999) approach entails selecting media alternatives that foster the different types of learning identified.

6) Identify the feasibility of including streaming audio and video excerpts.

7) Develop instructional materials. This activity entails decisions about how the instructional materials will be formatted and displayed within the OLE, such as in modules where course information is chunked together. It is important to combine materials in print, video excerpts, voice, and audio excerpts to develop non-linear, linkable content supported by the online are

hypertext (Kirkwood, 1994; Carlson & Everett, 2000). Additional considerations include:

- How the independent materials within each module will be arranged;
- Navigational scheme of modules;
- Level of detail;
- Types of supporting resource materials learners will need to succeed in the course.
- Determine which software applications, if any, learners need to purchase prior to the start of the course, availability and distribution of software, price of required software, and need for plug-ins for multimedia if there is streaming audio or video excerpts.

8) Determine and develop introductory course materials. This activity requires thoughtful consideration to determine the types of documents learners will need to get started in the online course. *Suggested* documents include:

- (1) Syllabus;
- (2) Policies and procedures;
- (3) Guide to navigating the course management system;
- (4) General guidelines of how to succeed in an online course;
- (5) Course-specific guidelines how to get started in the online course;
- (6) Instructions for navigating the course on the online. For example:
 - (a) Provide an explanation of each component of the course such as how to:
 - (i) complete group discussions;
 - (ii) participate in discussion forums;
 - (iii) upload completed assignments and projects;
 - (iv) upload/download test documents.
 - (b) Provides learners with list of terms associated with CMS.
- (7) FAQs;
- (8) Comprehensive course calendar;
- (9) Hot link entries.

9) Select online-appropriate instructional activities. This activity entails shifting the focus of instructional activities from simply delivery of the information to how learners engage with the information. Therefore, when selecting online-appropriate instructional activities, it is important to do the following:

- (1) Determine what types of instructional activities will motivate learners to learn best in the online environment.
 - Integrate instructional activities with a balance between: individualized learning; peer-to-peer learning; and instructor-to-student learning.
 - Integrate drill and practice of hands-on exercises to gain competency in new skills.
 - Analyze options for promoting deeper understanding of concept comprehension.
 - Evaluate how much time learners will need to commit to complete instructional activities.

11) Identify learner support resources. Determine the types of technology resources learners need, and how learners will get them as well as the amount and type of motivational support learners will need to meet deadlines. Decide how you will help learners cope with developing organizational skills within an autonomous environment. Identify where learners typically experience problems, and develop possible solutions. Encourage open dialogue between instructors and learners, and learn to avoid making judgmental decisions when dealing with learners' lack of technological savvy. Instructors and learners should work together to solve course related problems.

12) Evaluate course accessibility for learner with disabilities. Accessibility issues require the evaluation of the course and its materials to accommodate learners with disabilities such as:

- Physical disabilities
- Learning disabilities
- Vision or hearing impairments
- Neurological impairments
- Psychological disabilities

At this point in the process, many of the key decisions have been made and you will be faced with determining sequence of instructional materials being used. Some of these decisions may be imposed by the school administrators. If they are left up to the PD team, there are lots of important things to consider so that instruction is presented in a clear and concise manner for the learners.

Additional Instruction-level Decisions

Determine sequence of instructional materials. This activity includes establishing the order of topics that will produce the best results for presenting the instruction. There are several options to consider when choosing the sequencing of instruction, including beginning with the:

- topic or task that creates the most learner interest;
- topic or task with which learners are most familiar; and
- easiest topic and make the transition to more difficult topics.

The final activity to tack in the process is how the program, each course and the learners will be assess and evaluated. There are a number of activities and decisions which will take place during this phase of the process, which is outlined below.

Assessment and Evaluation Activities

Assessment and evaluation includes determining learner assessment policies and procedures, instructor evaluation, and course evaluation. Online learners are often anxious about how they are doing in the course. They need frequent and thorough feedback on their progress to maintain momentum and gauge learning (Angelo & Cross, 1993). Instructors should use formal and informal assessment methods throughout the course to help learners monitor their progress (Schrum, 1998).

1) Issues to consider for learner evaluation include:

- (1) Determine role of testing and how testing materials will be presented.
- (a) Identify what format will be used to test learners. Determine how objectivity grading hands-on, skills-based projects will be maintained while establishing construction guidelines and grading rubrics.
- (2) Identify feedback guidelines.
- (3) Identify how learners will evaluate their own performance.
- (4) Establish guidelines for maintaining the integrity and security of testing.
- (5) Maintain academic honesty.
- 2) Establish guidelines for how learners will evaluate the instructors.
- 3) Course evaluation. Discuss who will evaluate each course and how and when the evaluation will take place. For example, will it take place after the PD course has been delivered or while it is still going on? Will the learners be the only evaluators or will the building administrators have an opportunity to evaluate each course.

These decisions will help you to build a successful, high-quality online PD program, which will enhance learning and move your school corporation into the 21st Century. A three-step approach was described to shift traditional, FTF PD to the OLE based on three levels of design decisions: course-level decisions, instruction-level decisions, and pedagogical decisions. Although the course-level and instruction-level decisions were laid out in a hierarchical order, the pedagogical decisions were described throughout both decision-making phases. One of the biggest questions facing PD teams is, what will the environment look like? Second Life is a viable option for implementing PD to the OLE.

Exploring Second Life: An Option in Teacher Professional Development

The idea of using an online environment for teaching professional development has become a realistic alternative to FTF PD. There are many choices one has to offering PD online. One choice is the use of virtual worlds. One virtual world that has become popular in education circles is Second Life (SL). Second Life is an online, 3D virtual world imagined and created by its Residents hosted by Linden Lab that offers both free and paid accounts. Individuals will create an avatar to represent themselves as a resident in the SL world. The avatar can interact with the world and other residents through the use of texting, voice chat, or the use of gestures. Residents can also learn to build objects which in turn can be used by the resident or sold to or given for free to other residents. Education institutions have begun creating environments for teaching and learning purposes. These environments use a mix of media-rich course materials for engaging learning experiences (Calongne, 2008). There are already hundreds of universities and thousands of educators from all over the world that are using SL for educational purposes that are engaging, media-rich, and meaningful (Baker, Wentz, & Woods, 2009; Calongne, 2008).

So how does one begin to offer PD in an online virtual world? To begin the process, a virtual world needs to be chosen that the organization believes will be safe, allow for meaningful educational experiences, and offer engagement for the learners. Second Life is one such virtual world that has shown it can offer such an experience. Second Life offers individuals the ability to:

- Customize their appearance in world,
- Explore the environment without restraints,
- Communicate through voice chat and texting,
- Navigate 3-Dimensional content,
- Interact with objects and residents,
- Build 3-Dimensional objects to use in classes,
- Deliver assignments to instructors,
- Assess other students' work, and
- Provide feedback (Calongne, 2008, pp. 40, 42; Bers, 2008).

As more course materials become media-rich, their use in Second Life will be increased. Video players, slide show players, and audio players allow for the immersion into a classroom to be engaging and interactive. This agrees with Schrum (1998) who indicated earlier that the virtual world allows the traditional classroom to be extended into the electronic realm of resources available.

To be successful at using a virtual world for PD, you must have an educational purpose and goal in place. If there is no purpose or goal, then the use of a virtual world will not benefit an organization or its intended participants. As with any educational endeavor, Second Life has both positives and negatives for its use in PD. To begin, one positive of SL is that it will expose the PD participants to new technologies. Research has shown that virtual worlds are beginning to become very popular as a means for social networking and participants of these online virtual worlds are experiencing media-rich interaction (Baker, Wentz, & Woods, 2009). The use of SL will increase participant engagement by providing opportunities for synchronous FTF student avatar-student avatar and student avatar-faculty avatar interactions. These interactions can be formal or informal and both can lead to richer experiences for PD participants.

However, SL can have its negatives as well. There is a learning curve involved in learning and understanding how to control an avatar and interact in the environment. According to Baker, Wentz, and Woods (2009), most students and instructors report that this takes about an hour to learn to navigate and communicate within SL (p. 61). Hardware requirements also cause some participants to have to invest in new hardware to be able to participate. Individuals may be unable to financially upgrade their own hardware to use SL. Another area to consider is whether PD participants are willing to try virtual worlds. Some participants may be anxious in having to learn

to use SL which can lead to a negative experience of doing PD online. Instructors will also need to develop new strategies for managing discussions due to delays in typing comments can occur depending on an individual's typing speed. Finally, students need to be warned about appropriate behaviors and safeguarding privacy in the classroom and in the realm of SL due to some areas having mature adult themes.

Using Second Life

There are many ways to use SL effectively for learning to occur in its virtual world. The following are a list of suggestions to ensure a successful educational experience:

1. There must be an educational objective for using SL for PD;
2. Organizations must be prepared for unexpected challenges and have a contingency plan set in place;
3. Participants must be prepared for the social experiences that will occur within SL;
4. It is best to begin small and build up to larger assignments. Having participants succeed at engaging the SL environment will give them motivation that they can be successful;
5. Using group work can be beneficial in allowing individuals to work together and help one another with the SL environment;
6. Involve PD participants in developing learning experiences in SL;
7. Instructors of the PD must spend time in SL themselves in order to be effective for their PD participants; and
8. Second Life can be considered for use synchronously and/or asynchronously.

The only warning that the authors can give to shifting FTF PD to SL is that the FTF PD must be adapted to the virtual world environment of SL. This means that most likely it will not be a one-to-one shift, but require the investment of time and resources to establish a successful PD experience. By considering the above suggestions an organization should be able to begin the process of successfully offering PD online in SL.

Advice for Professional Development Teams Moving to an OLE: Summing PD Up

The authors have introduced strategies and recommendations for moving K-12 PD from a FTF environment to an OLE. While these strategies and recommendations are not the only means of accomplishing this transition, they do offer an alternative way of offering PD. Moving to an OLE allows for anytime and anywhere PD. This is advantageous especially during economic hardships.

To accomplish the transition to an OLE, the PD team needs to concentrate on the following:

- Determining the aims, goals, and objectives of the PD training course;
- Conducting a thorough learner analysis including the geographic locales of the learners;
- Perform a comparison of FTF PD to an OLE and using the findings to determine if an OLE is a good fit for offering PD; and
- Creating a resource allocation strategy. This strategy is critical in a successful transition from FTF to an OLE for PD.

After the PD team has accomplished these top-level items, it can move to working on the PD training course. This will involve the following:

- Developing a communication strategy for the OLE which involves determining what areas need synchronous communication and what areas need asynchronous communication; and
- Developing an operational strategy for the PD training course.

Once the communication and operational strategies are finalized, the PD team will then move to the administration of the course. This leads to the final phase of the transition to an OLE which will involve the following:

- Developing course-level objectives;
- Developing learning outcomes;
- Developing critical content;
- Ensuring rigor;
- Choosing core concepts to cover;
- Identifying learning styles;
- Choosing appropriate instructional methods;
- Making media selections;
- Choosing audio and video instructional items;
- Integrating instructional design;
- Creating administration course documents including:
 - Syllabi;
 - Policies; and
 - Guidelines;
- Choosing instructional activities;
- Setting up support services;
- Making the training assessable to learners with disabilities;
- Sequencing the course; and
- Performing evaluation.

All of these tasks will allow any PD team to successfully transition PD from a FTF environment to an OLE.

Finally, the authors wish to encourage PD teams to think uniquely (outside-the-box) and consider new ideas and methods for offering PD. This includes the use of virtual worlds. Second Life is one virtual world that meets the criteria for being an OLE that successful PD can take place. Looking at these strategies and the opportunity that SL can offer for PD teams, it is realistic for FTF PD to be transitioned to an OLE. Professional development teams need to seriously consider the benefits that these strategies, suggestions, and opportunities will provide when making the transition to the OLE versus the low costs of such a transition. Given what we know about the status of PD opportunities for educators in the United States, and the current financial crisis and lack of infrastructure of many school organizations to provide the types of powerful learning opportunities that educators need to support student learning, the question still remains – how can states and school districts build their capacities to provide the types of high quality professional development which is effective in building teacher knowledge, improving their instruction, and supporting student learning? The authors believe we have outlined a viable plan for implementing an online PD plan which will meet state and local requirements. The benefits should outweigh the financial shortfalls that the current economic crisis is causing.

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