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# Connecting Instruction to Connected Technologies – Why Bother? An Instructional Designer's Perspective

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## Abstract

This article identifies the disconnect between workplace demands and university teaching. It highlights the importance of providing faculty development related to connected teaching and the role of the instructional designer to assist faculty with the integration of social media tools in their courses in a pedagogically appropriate way. Examples from practice include connected learning utilizing social media within online higher education courses and programs. Using the theory of connectivism, and the idea of connected learning, the article outlines possibilities to engage and support adjunct and distance faculty to embrace social media and networks.

## Keywords

connected learning, connectivism, faculty development, social media, social networking

## *Conectar la enseñanza a las tecnologías interconectadas – ¿Por qué es importante? La perspectiva de un diseñador pedagógico*

### *Resumen*

*Este artículo identifica la disociación entre las demandas del lugar de trabajo y la enseñanza universitaria. Subraya la importancia de ofrecer formación continua al profesorado en el ámbito de la enseñanza interconectada y pone de relieve el papel del diseñador pedagógico para ayudar al profesorado a integrar herramientas de comunicación social en sus cursos de un modo pedagógicamente apropiado. Un ejemplo de este tipo de práctica es el aprendizaje interconectado que utiliza medios de comunicación social en cursos y programas de educación superior en línea. Partiendo de la teoría del conectivismo y de la idea del aprendizaje interconectado, este artículo describe las distintas formas de animar y aconsejar a los profesores asociados y a distancia a adoptar medios y redes de comunicación social.*

### *Palabras clave*

*enseñanza interconectada, conectivismo, formación continua del profesorado, medios de comunicación social, redes sociales*

# 1. The Context

In 2006, the Spellings Report, released by U.S. Secretary of Education Margaret Spellings and members of the Commission on the Future of Higher Education, called for reforms within higher education, among them "a higher-education system that gives Americans the workplace skills they need to adapt to a rapidly changing economy" (2006, p. xi) in order to compete with highly qualified knowledge workers from other countries. According to the report, "Employers complain that many college graduates are not prepared for the workplace and lack the new set of skills necessary for successful employment and continuous career development" (Spellings, 2006, p. 13).

While some concerns in the report are related to underprepared students entering college and the rigor required to complete a degree, the quote regarding skill sets needed in the workplace includes the desirable, globally oriented, collaborative worker. Workers are expected to collaborate across time and location and use tools of the trade to develop their own skills as well as perform their jobs. This includes a demand for understanding and using social media and networking within a variety of professions. Increasingly, industries are using these tools to create a conversation with customers and with various stakeholders (staff, investors, potential employees, etc.) as well as to leverage informal learning opportunities with peers and work groups.

Even though these social media and networking tools are used by many students and are as common for them as the telephone was to previous generations, these tools are not often used as part of our teaching. However, popularity alone is not the reason to embrace them in teaching. Rather, the role of university educators is to ensure that students understand the value of these tools to create learning in the workplace, in professional networking, and as part of personal learning networks (Indvik, 2010; Mackay, 2010; ThinkSocial, 2010). Although students may have familiarity with certain tools, it does not mean that they are prepared to use them for professional communication or to transfer their experience into the work world. Increasingly, the public is demanding that colleges and universities take responsibility to create an environment that not only prepares students for the workplace of today, but also for the students' continued professional development and lifelong learning (Jain, 2010; Mackay, 2010; Quinn, 2009).

Bryan Alexander (2008) points out that if colleges and universities want students to be knowledgeable and capable of interacting critically in the world, institutions need to "rethink literacy" (p. 200) and modify strategies for teaching students accordingly and deliberately. He suggests that while students may arrive on campus with some comfort with technology (or social media), higher education provides the ability to think critically about the technology involved in learning. While educators[1] may be aware of the technologies available and may even use them, administrators and

1. According to a Pew Research Center report, an overwhelming number (93%) of American teenagers and young adults go online, and the number continues to rise each year (Lenhart, Purcell, Smith & Zickuhr, 2010). Similarly the majority of teenagers and young adults (ages 12-29) enthusiastically use social media sites, and a growing numbers of adults are embracing social networking (Lenhart et al., 2010). This is significant because the number of non-traditional and adult students is increasing in higher education, and particularly in distance education. Therefore these tools are equally relevant to all students (Eduventures, Inc., 2008; Lenhart et al., 2010).

faculty are often unaware of how powerful these tools can be for learning. Greater exposure to how and why to use social media within their courses gives faculty the opportunity to reinvigorate their teaching by encompassing new tools that allow them to go where today's students spend their time (Lenhart et al., 2010; *Social Media Revolution 2 (Refresh)*, 2010). The space between formal classroom learning and informal learning is diminishing, and informal learning, whether in the hallway, at work or as part of a social community, is where learning really happens (Hargadon, 2008; Seely Brown & Adler, 2008).

This article addresses the role of the instructional designer in faculty and course development, and possible solutions for providing more ongoing and prescribed faculty development for online instructors, including adjunct faculty. Ideally, this support is a collaborative effort between the academic program and the instructional designer to provide pedagogically focused faculty development related to the use of educational technology, social media and networks in their teaching. After defining the context, the article delves deeper into aspects of the problem of practice, presents possible solutions – including examples in practice – and discusses possible roadblocks related to these solutions.

## Enter connected learning

Connected learning is a term that is thrown around relatively loosely and is sometimes used interchangeably with networked learning, or even e-learning. Connected learning is more than just an online class, and relates to staying current and connected with peers, information and networks for learning through dialogue, interaction and exploration (Siemens, 2008). The following definition of networked learning could be used as a start to discussion about connected learning:

> "learning in which information and communications technology (ICT) is used to promote connections: between one learner and other learners, between learners and tutors; between a learning community and its learning resources" (Banks, Goodyear, Hodgson & McConnell, 2003, p. 1).

However, breaking connected learning down to common language, we could say that connected learning is learning that uses tools such as social media and networks to build relationships, associations and links to information, people and ideas ("Connectivism & Connective Knowledge," n.d.; Gates, 1996; Siemens, 2004, 2005, 2008). Like connected learning, social media and social network are two more terms that have as many definitions as users and their varying perspectives (Boyd & Ellison, 2007; Breakenridge, 2010; Duct Tape Marketing, 2008; Kagan, 2010). "Social media is the use of technology combined with social interaction to create or co-create value," (Duct Tape Marketing, 2008) is a uniformly broad and useful definition. While a marketing company's website may seem to be an unusual source in an academic journal, the concept can be embraced both by industry and education.

The idea of connected learning and the theory of connectivism both see learning as taking place within a community; a community that extends beyond the boundaries of formal education. Participating within a community by exchanging ideas and content, including video, text multimedia, etc., is

where learning takes place (Anderson, 2010; Downes, 2006; Siemens, 2004). Approaching education from this perspective can allow instructors and instructional designers to design more engaging learning experiences for online students and lay a foundation for a student's own lifelong learning.

## 2. Challenges of Connected Professional Development

Opinion, changes in university staffing, methods of course development and lack of professional development often impact on the problem of disconnect between workplace demands and educational outcomes.

Popular opinion, including among academics, has it that distance education is a less effective or easier option, despite evidence to the contrary (Fish & Gill, 2009; Schifter, 2000; U.S. Department of Education, 2009). People may assume that because a class or degree is delivered online, students are engaging in networked or connected learning methods. Or they might assume that because of the increasing popularity of these tools, that students automatically know how to use them for their own learning. This assumption is not necessarily the case either with students or with faculty.

### Growth in online education and use of adjunct faculty

In 2007, the Sloan-C Report[2] "Online Nation: Five Years of Growth in Online Learning" reported that online enrollments have continued to grow at much higher rates (9.7%) than the higher education total enrollments (1.5%) (2005, p. 1). However, during the 2008-2009 school year, more than 4.6 million college students were taking at least one online course, and this represents a 17% growth in online enrollments compared with traditional enrollments (1.2%) (Allen & Seaman, 2009). Growth in online education is mostly coming from traditional schools that are extending their offerings, but across the board, the majority of institutions are seeing demand for both new online courses and existing courses and programs of over 60% (Allen & Seaman, 2009). In order to keep up with the demand for staffing these online courses, as well as keep costs low in these programs, online education tends to rely heavily on adjunct faculty (Bedford, 2009; Carnevale, 2004; Tipple, 2010; Ziegler & Reiff, 2006).

The use of adjunct faculty invariably leads to debates on whether or not part-time faculty members are sufficiently prepared to teach online, and because they often hold jobs outside of academia, if the instructors are able to allocate the time and resources (for professional development and training) to teach online (Bedford, 2009; Ruth, Sammons & Poulin, 2007). While some institutions or programs do reach out and communicate opportunities for faculty development to part-time instructors, part-time instructors often have a time limitation, so this must be taken into consideration when developing online professional development (Bedford, 2009; Puzziferro & Shelton, 2009).

2.. This information has been updated in the report entitled "Class Differences: Online Education in the United States, 2010" by Babson Survey Research Group and the Sloan Consortium during the publication of this article and the newest data can be found in <http://sloanconsortium.org/publications/survey/class_differences>.

The instructional designer can serve a multifaceted role with the adjunct instructor: scaffold the instructor through the process of developing their online course; assist the instructor with identifying appropriate technologies including social media; and encourage the instructor to embrace a pedagogically focused use of tools and technologies within their course or research. There is a need for instructors to be able to translate the use of these tools within the discipline they teach and to use them to enhance their own research, learning, and to become a networked teacher (Couros, 2010).

## Models of course creation

Both this growth in demand for online programs and the growth in the use of adjunct faculty also impact on course creation models. Two recent studies found that while faculty are aware of and use social media, they do not use social media to its full advantage. This may suggest that professors are not sufficiently prepared to use these tools in pedagogically efficient ways when teaching or building courses (Faculty Focus, 2009; Tinti-Kane, Seaman & Levy, 2010). Depending on the size of a university or the institution's stage in online course delivery, different models for course creation might be used. While some institutions (or even programs within the institution) may be at the beginning stage of launching online learning, others might be at the course development model stage or in the process of refining their model (Boettcher, 2004). Even within one institution, several methods of course development can be used. Northeastern University, where the author works and teaches, has been delivering online education in some fashion since the mid-1970s. According to Kevin Currie, Executive Director of NU Online, 76% of Northeastern University's College of Professional Studies' courses were delivered in an online or blended format (approximately 2,291 courses) in fiscal year 2010 (Currie, 2010). Northeastern University's College of Professional Studies (CPS) delivers the largest percentage of online or blended courses at the university and has a population (fiscal year 2010) of undergraduate and graduate students of just under 9,500 (Denison, 2010). All of the instructors at CPS must be certified by through the two-week, online asynchronous training program before teaching online or blended courses.

At Northeastern University (all colleges) there are several methods of online course and program development:

- An outside vendor develops course content with a master instructor from NU to create a course that can be run by a facilitator or tutor
- An institution records traditional course and stream video for online students later
- An instructor develops a course, purchased for use across many sections
- An internal group develops a course following the "outside vendor" model (involves an instructional designer, a multimedia developer and an instructor)
- A master instructor develops content and oversees teaching of all sections
- An instructor develops and teaches own content

Each model has advantages and disadvantages, but in general the successful execution of any of these models involves an instructional designer. After initial training for online faculty, the relationship with the instructional designer is crucial to ongoing development. As a team, the instructional designer, working directly with the instructor, creates an engaging learning environment. But through this method, the instructional designer can help the instructor develop skills with new tools for teaching to make a successful partnership for teaching and learning.

Whether an institution is using a "Lone Ranger" model (decentralized, faculty driven) or the "Enterprise Model" (more centralized) or somewhere in between, more and more institutions may look to their own faculty, or their own adjunct faculty, to develop their online courses, often on a volunteer basis, like the recent University of California initiative (Kaya, 2010; Lowenthal & White, 2009; Oblinger & Hawkins, 2006). Collaborative course development and faculty professional development should be considered, since they are two important characteristics of the solutions for approaching connected teaching and collaborative faculty development.

## 3. Working Towards a Solution

While the growth in online courses and programs has increased the need for skilled online faculty, Sloan-C reports that there is no single approach being used for training online faculty across institutions (2009). There is no single solution for solving the problem of helping online instructors become more proficient in using social media or networks to enhance their own learning and teaching. A multi-faceted method that comes closest to best practice includes: leveraging the instructional designer; presenting new ideas related to teaching; involving adjunct faculty in the solution; and identifying the best delivery methods for online faculty professional development.

### Elevate the instructional designer

Often, instructors do not understand the role of the instructional designer. They think that the instructional designer is some kind of technical help or Learning Management System (LMS) help specialist. The role of the instructional designer needs to be elevated so instructors realize that instructional designers are not only technical advisors but also pedagogy specialists. Instructors are specialists in their field, not necessarily specialists in the wide array of technology and social media tools, or even in teaching practice (Austin, 2002; Siemens, 2008). In the era of technology, the instructional designer acts as a facilitator for the instructor to identify appropriate technologies and methods for using them to reach their learning goals for the course (Siemens, 2008). Pairing a faculty member with an instructional designer is more effective for the course-creation process, so each can bring his or her own strengths (Oblinger & Hawkins, 2006). Since few faculty have formal education in training in instructional design or learning theory, this team approach is necessary for the instructor to develop an online course with good pedagogy, technical fluency and sound instructional design (Oblinger & Hawkins, 2006). An instructional designer can act as a guide through new technologies, pedagogies,

and sources of open content for the subject matter expert (the instructor); an instructional designer is the educator to the educator (2008). Even though online faculty are dispersed, this relationship can be developed through online synchronous and asynchronous tools, as well as traditional tools like e-mail and even face-to-face meetings if an instructor is local and wishes to meet.

## Introduce open teaching/connected learning

Promoting ideas such as connected learning or open teaching may be part of the solution, and instructional designers can help introduce these ideas with online (adjunct) instructors. Open teaching is facilitating open, transparent, collaborative and social learning (Couros, 2010). Essentially, it eliminates barriers for students and creates an environment of shared creation and learning. Introducing instructors to some of the ideas surrounding open teaching and using social media and networks can develop teaching quality while encouraging a connected, student-centered approach to teaching. These ideas include: utilizing free or open tools and content in teaching and learning; assisting and supporting collaborative learning and development of student personal learning networks (PLNs); creating student-centered learning; utilizing diverse and thoughtful instructional strategies that encourage reflection; modeling openness, connectedness and appropriate use of copyright/copyleft use and licensing (Couros, 2010). While all online faculty may not be able to embrace truly open teaching (because of the constraints of an LMS or philosophy of their institution), incorporating the spirit of this approach can help instructors support students in skills such as producing, linking and synthesizing knowledge. As instructors feel more comfortable using social media or networks and connected teaching methods, they will begin to develop fluency with them.

## Involve adjuncts in the solution

Puzziferro and Shelton (2005) point out that the make up of online adjunct faculty is changing. While some may be professionals in their field, others may be professional online instructors that teach at several institutions to make a full-time position (2005). They suggest finding creative ways to engage online faculty in a community of practice both within their discipline and across disciplines. Frequent contact and communication with online adjunct faculty can equal "presence", and this allows instructors to feel connected and accountable, and can enhance outcomes and satisfaction (Puzziferro & Shelton, 2005). One way to do this could be through mentoring programs. Some institutions, like Lesley University in Cambridge, MA, are beginning to create unique models for their adjunct faculty development (Ziegler & Reiff, 2006). Ziegler and Reiff (2006) maintain that this change in dependence on adjuncts means that institutions have to provide a new type of support since, as they note, the use of adjuncts generally causes concerns about quality of instruction, pedagogy and the impact on students.

Creating a culture of collaboration could be established by leveraging peer review. This would establish faculty connections as well as provide an environment to share ideas, critique and gain practical strategies (Puzziferro & Shelton, 2005). Involving online adjuncts in identifying both the types and the delivery methods of professional development that works for them (whether asynchronous

or synchronous) allows another way to connect with the institution and feel part of something larger. Faculty professional development should relate to both their discipline as well as to the modality, and leverage the collective experience to enhance the quality of the online courses and programs for the students. Faculty professional development for online faculty (adjunct and full-time) needs to foster excellence, recognition and reward, and provide an opportunity to share ideas and mentor each other (Puzziferro & Shelton, 2005).

## 4. Examples in Practice

These examples are drawn from Northeastern University and can serve as an example of elements of a cohesive approach that can be replicated by other institutions.

### Blog it, you might like it

An instructor involved in the online master's degree in Public Administration program began teaching online in January 2010. As he became more immersed in the online environment, he began incorporating one or two new tools each semester through discussion with his instructional designer. Soon, he was utilizing screen capture software and blogs as a tool to enhance discussion within his online courses. By using student blogs as a tool to reflect on case studies or other readings prior to joining the discussion, he has found that the quality of the online discussion is greatly improved compared with his first online course, and his students understanding of and engagement with the content is at the level and rigor that he feels is appropriate. Similarly, the program manager for this program works with the instructional designer to communicate across all the instructors (all adjunct) about different methods and approaches within the online courses throughout the program.

### Guided discovery

A new graduate education course had an adjunct instructor co-develop and co-teach a course called "Information and Communication using Social and Conventional Networks". Both instructors were interested in social networking tools; one had more experience in traditional methods of communication and networks, and one was more familiar with technology. In preparation, the "novice" went to her instructional designer to gain more knowledge about the topic as well as doing her own reading and research. The instructional designer helped guide her towards topics and tools that would be most relevant for the educators she would be teaching. To tie theory to practice in networks and communication for the K-12 (primary and secondary) educators and administrators, the course ended up incorporating these tools through assignments: Google Docs, Wikis, Ning, and Twitter/TweetDeck. Additionally they brought in three "experts" in the field via a web conference to give greater depth and understanding to the use of social media and networks in education and administration. They found that students were very positive about the fact that the applied use of

the tools helped them learn and that using these tools was one of the most valuable aspects of the course (Anonymous, 2010).

### Collaboration from scratch

The master's degree in Education program had decided to examine its offerings to ensure that the program was providing a master's degree program that was preparing educators (and their students) for the 21st century and everything that this implies, from skills to technology. All graduate faculty (full-time and adjunct) and the associated instructional designer were invited to take part in a conversation on the overhaul of the program, the changing needs of the students and a look at program outcomes across the board. This involvement in the discussion not only gives adjuncts a voice for their opinions on the educational program goals, technology and professional development related to technology and teaching, but also provides the program with valuable information from instructors who are practitioners in the field. While not an example of implementing social media within a course or curriculum, this is an example of leadership, involving adjuncts in the solution.

### Team up and lead

A former adjunct online instructor was hired as a full-time online instructor to oversee an online master's degree program in Communications. He used his existing relationship with his instructional designer to develop an online resource center for the instructors within that program and to leverage existing online best practice reports to work with each instructor. He has also planned ongoing online web conferences for the faculty in this program to address specific professional development needs for this group, with the help of the program instructional designer.

## 5. Factors that Limit Success

There are several factors that limit success with providing faculty development to online instructors: communication, content, delivery and incentives. An individual, or an individual program, frequently drives innovative approaches to teaching or administration. Often these innovative approaches go unheard of within the online program or college, and there is little opportunity to share teaching techniques and methods between faculty and programs. Communication across the faculty is generally limited to administrative or operational issues (new policies, procedures, etc.), hires, changes in role or awards, and events, some of which may include professional development opportunities. This communication is often too frequent, rarely read and generally ineffective. There needs to be targeted communication to establish a connection among online faculty in disciplines and across disciplines.

There are some difficulties introducing instructors to technology or social media in their teaching. Frequently, instructors receive technical training on software, tools and how to transition to teaching online, but not on the pedagogical approach to teaching at a distance, teaching with technology or the benefits of a particular tool (Schifter, 2000). Many instructors, even though they may have a

doctorate, have never had any formal professional development in teaching (Austin, 2002; Pearson, 1999). Professional development should be crafted to address both sides of the problem: technical how to and pedagogical how and why.

Generally, there is no real incentive for faculty to participate in professional development or opportunities to learn innovative teaching methods. Research has found that apart from intrinsic motivation, common professional development incentives (or desired incentives) include release time, money, mentoring and grant opportunities, technology or software, and recognition towards promotion and tenure (Panda & Mishra, 2007; Schifter, 2000; Taylor & McQuiggan, 2008; Yang, 2005). Kathleen King, discussing the future of higher education, noted that there is no motivation within the university setting for engaging with social media (Berkowitz, 2010). Online adjunct instructors have even less opportunity or incentive to embrace innovation in teaching or professional development.

Due to the distributed nature of online faculty, any outreach and professional development requires a delivery mechanism that allows dispersed online faculty to participate. It also needs to be extremely practical, with clear applications and benefits in terms of how social media or networking can enhance teaching and learning (Taylor & McQuiggan, 2008). However, there are many online resources and networks that could provide this kind of support, and some individual instructors may take advantage of them, but the problem still remains, what will drive an instructor to a source and keep that instructor coming back? Using social media and networks provides an opportunity for professional development that is available to faculty anytime, anywhere, and can actually provide the framework for a learning community within and across institutions: a collaborative support network.

## 6. Conclusion

Why bother with connected professional development? Because, in addition to the potential for creating better instructors, professional development can create better learning experiences for students. While there is no single solution (and even in one college there may be no single solution), if the institution and the administration support the importance of ongoing professional development that is technically and pedagogically focused and collaborative, it may encourage innovation in teaching. Faculty will immediately recognize the value. Developing engaging learning experiences online takes time, effort and the ability to take risks with one's teaching, as well as the help of an instructional designer. Similarly, institutions need to communicate resources to all instructors (including online adjuncts) and ensure that they have access to instructional designers. Institutions also need to establish online synchronous and asynchronous professional development opportunities that introduce the concepts of social media and networks, since these tools are connecting to the needs of a growing population already familiar with social media (Puzziferro & Shelton, 2009). Clearly, more research needs to be done to find out what development methods will be best for instructors and institutions to encourage online adjunct faculty to bother to connect with their resources and peers.

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