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The role of online faculty in supporting successful online learning enterprises: A literature review

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This review examines research regarding instructors' perceptions of the online teaching experience and explores ways in which university administrators can better support online faculty as their institutional online learning enterprises grow. The following sections examine how the growth in online education has led to increased interest in the experiences of online faculty. An examination of these issues illuminates many of the unacknowledged external factors that have a subtle, but strong influence on online instructors and their experiences in the virtual learning environment.

Keywords: online learning, online faculty, digital pedagogy, online faculty development

Higher education is in a period of transition. Sixty years ago, young white males dominated college campuses across the United States, but the demographics of the student body have changed. Today's average college student is more likely to be older (25+), female, and enrolled part-time. The student body is also more racially and socioeconomically diverse than ever before (National Center for Education Statistics [NCES], 2013). These students place great value on flexibility and affordability and are seeking programs that meet their modern needs (Layne, Boston, & Ice, 2015).

Colleges and universities are responding to these changing expectations in a variety of ways by offering part-time programs, evening courses, and extended graduation timelines. However, among all of the alterations to the traditional residential model, online courses have consistently proven to be one of the most popular options (Richardson & Swan, 2003). As the number of nontraditional students has continued to increase, university leaders have kept pace by expanding online offerings to meet the rising demand; an unprecedented 7.1 million students took at least one online course in 2014—up from 1.6 million in 2002, and the number of online enrollments continues to grow at a rate that far exceeds the rate of overall enrollments in higher education (Allen & Seaman, 2014). However, the swift expansion of online learning has given some academics pause. Critics question the efficacy of online courses, citing lower retention rates and questionable learning outcomes as cause for concern (Johnson, Aragon, & Shaik, 2000; Johnson, Hornik, & Salas, 2008).

This unbridled growth has prompted researchers to empirically examine successful online learning enterprises in an effort to understand what variables lead to positive learning outcomes. Several of such studies highlight the integral role online faculty play in producing positive learning experiences (Conceição, 2006; Doherty, 2006; Fish & Gill, 2009; Selim, 2004). Furthermore, researchers have established that faculty acceptance and approval of online learning is crucial to the success of such programs (Bolliger & Wasilik, 2009; Brooks, 2003). Yet university leaders are not confident that they have the approval of the faculty. A 2012 national poll of 2,800 college and university leaders showed that only 30% of chief academic officers believe that faculty accept the legitimacy of their institutional online learning enterprises (Changing Course, 2013).

This conflicting research comes at a time when many institutions are looking to develop policies to support their burgeoning online learning enterprises. Although studies have shown that university leaders need the backing of skilled online faculty to produce high-quality online courses, they do not know how to gain faculty buy-in or provide the support that online instructors need (Alexander, Perreault, Zhao, & Waldman, 2009; Betts, 2014; Bolliger & Wasilik, 2009; Giannoni & Tesone, 2003; Major, 2010;). Thus, this literature review examines key factors that contribute to or constrain successful online learning enterprises – highlighting the central role that online faculty play – in an effort to help university leaders create more effective institutional policies regarding online learning, digital pedagogy, and faculty development.

Scope

This literature review explores research that identifies and examines variables which contribute to positive online learning outcomes, focusing on studies that investigate the role of online faculty in producing high caliber virtual learning experiences and successful online learning enterprises. Studies were limited to those examining fully online learning environments, excluding research regarding hybrid and blended learning settings. All cited works have been published in the last twenty years, with the preponderance published within the last decade. The vast majority of the included studies came from peer-reviewed journals; however, a select number of books and doctoral dissertations were also referenced. Several databases were utilized, including: ERIC, EBSCO, Pro Quest, Google Scholar, as well as several institutional databases. The initial search yielded 137 articles. After culling for quality, rigor, and relevance, a total of 86 articles were included in this review.

The following sections delve into the abovementioned research. The first section briefly examines research assessing the efficacy of online courses as compared to their traditional/residential equivalents. The second analyzes literature regarding best practices in the virtual learning environment and the importance of online faculty. The third section delves into research focused on faculty perceptions of the online teaching experience and the discussion section proposes ways in which university leaders can apply key findings to their own institutional settings.

Doubts about the Efficacy of Online Education

While trends regarding the popularity and growth of online education appear to be promising, the accelerated proliferation of online courses has caused skeptics to question the quality and academic integrity of digital learning options. They point to studies that have found online courses tend to have significantly higher attrition rates than their campus-based counterparts, six to seven times higher in some instances (Bos & Shami, 2006; Diaz & Carnal, 2006; Patterson & McFadden, 2009; Rovai, 2003).

In addition to retention, skeptics have argued that online students' academic performance is a reflection of the quality of online courses. Several meta-analyses of the existing literature have been conducted to assess whether online courses are as effective as their residential counterparts (Allen, Mattrey, Bourhis, Titsworth, & Burrell, 2004; Bernard et al., 2004; Johnson, Aragon, & Shaik, 2000; Means, Toyama, Murphy, & Baki, 2013; U.S. Department of Education, 2009). The most extensive analysis was conducted in 2009 by the U.S. Department of Education, which examined over a thousand empirical studies. The researchers concluded that, on average, students in online learning environments outperformed their peers receiving face-to-face instruction as measured by course grades (U.S. Department of Education, 2009). This aligns with the findings of earlier meta-analyses: Students in online learning courses tend to do slightly better than students in campus-based classes. However, critics point out that three of the four major analyses reported highly variable findings and their average effect sizes were significantly heterogeneous; examinations of moderating factors also failed to produce a homogenous solution (Allen et al., 2004; Bernard et al., 2004; U.S. Department of Education, 2009). Furthermore, these large-scale analyses are limited in that they only examine the delivery medium and fail to consider several variables (e.g., the skill-level of the instructor, the quality of the learning materials, the difficulty of the course content, the frequency of online interactions, etc.). Thus, findings should not be construed to establish that online learning is more effective than face-to-face instruction.

Additionally, the vast majority of the analyzed studies relied on attrition rates and grades, which are blunt measures of success that fail to capture the idiosyncrasies of virtual learning environment and the diverse aptitudes of the online student body. As a result, research concerning the effectiveness of online learning remains inconclusive.

Even more concerning is the epistemological problem inherent in much of the aforementioned research. Advocates of online learning argue that the vast majority of online efficacy studies gloss over potentially advantageous differences in the online learning environment in an effort to make it more comparable to face-to-face instruction. Trying to make online learning as good as face-to-face instruction discourages innovation and will likely lead to less-than-optimal learning outcomes because the full potential of the online paradigm is not recognized (Swan, 2003). Thus, in an effort to understand the anomalies of the digital environment, proponents and researchers have begun to examine

various online programs to ascertain what separates successful programs from non-successful ones.

Factors That Lead to Successful Online Learning Experiences

At the most basic level, all students must interact with the course content when they enroll in an online course. Studies have shown that simplicity in the structure and design of online courses has a significant impact on how students access course content (Lee, 2008). Without face-to-face communication, it is easy for students to become confused and get lost in complex online course structures, making interaction with the course content more difficult; as a result, researchers have concluded that simple and standardized course designs help facilitate student-to-content interactions and have a positive impact on students' online learning experience (Lee, 2008; Swan, 2001).

Course consistency—the standardization of design, structure, and navigation across courses—also impacts how students perceive their online learning experiences. Swan (2001) found that greater consistency among course modules increased student satisfaction and perceived levels of learning. One reason for this may be that course consistency allows students to store and retrieve course-related content more effectively (Richardson & Swan, 2003). Palmer and Holt (2009) similarly concluded that students most highly valued elements of the online learning environment that enabled them to access course information, retrieve lecture notes, and access class-related resources.

Although course consistency and design are important, several studies highlight the critical role that faculty play in shaping student satisfaction and producing positive learning outcomes in online environments (Armstrong, 2011; Picciano, 2002; Richardson & Swan, 2003; Swan, 2001). Online students who interacted with the instructor regularly reported higher levels of learning and overall satisfaction with the course (Swan, 2001). Furthermore, students' impressions of their online learning experiences were directly related to the frequency of feedback from the instructor; more frequent feedback was correlated with higher levels of student satisfaction. Bates and Khasawneh (2007) similarly concluded that frequent feedback from the instructor improved students' sense of self-efficacy—which increased their motivation and level of engagement—and improved overall learning outcomes.

Not only is the amount of interaction important but the quality of interaction matters too. Richardson and Swan (2003) conducted a survey-based study to explore the role of social presence – that is, the degree to which a person is perceived as 'real' in mediated communications – and its relationship to students' perceptions of their online learning experiences. By surveying students about their perceived level of connection, community, and comfort as a learner in an online course, they established that higher social presence scores positively correlated with students' self-reported level of learning. Similarly, Dziuban and Moskal (2001) found a correlation between the quality of interactions and students' perceptions of the online learning experience; in-depth interactions (i.e. those with a higher degree of social presence) led to greater student satisfaction.

Research concerning immediacy behaviors has shown that when online instructors use highly immediate behaviors—such as being open and willing to disclose information, giving frequent compliments, and using plural pronouns (“us” or “we”) instead of individual pronouns (“you” or “I”)—they can bring about positive attitudinal changes in their students, increase motivation, and improve student satisfaction (Christophel & Gorham, 1995). The opposite holds true as well. Armstrong (2011) reported that students who perceived the instructor to be lacking in terms of technological skill were more likely to feel that the instructor was “missing” from the educational dialogue and, as a result, the students were less engaged and tended to have more negative perceptions of their online learning experience.

When online instructors were slow to respond to student inquiries regarding course-related issues, students perceived a lack of connection and community and were more likely to feel isolated (Vonderwell, 2003). Lack of communication with the instructor also left some students feeling “disoriented” in the complex online learning environment, lowering their sense of self-efficacy, lessening learning outcomes, and leading to negative online learning experiences (Bates and Khasawnehb, 2007).

Vesely, Bloom, and Sherlock (2007) discovered that students look to instructors for more than just feedback. Students rely on the instructor to provide a cognitive framework (e.g. pedagogical scaffolding, context) to help them access and interact with the course content. Furthermore, Bates and Khasawnehb (2007) found that students reported higher levels of learning when the instructor provided training on how to use the online learning system at the beginning of the course. Moreover, students expect instructors to drive class discussions and build a classroom community (Song et al., 2004; Vesely et al., 2007). The research clearly indicates that the quantity, quality, frequency, and type of student-instructor interaction is directly related to students’ perceptions of their online learning experiences and online faculty play a crucial role in shaping online learning outcomes.

Faculty must also be supportive of online education for their institution’s online learning enterprise to thrive. Anecdotal evidence from early adopters of online education indicates that faculty approval is necessary to build and grow successful online programs (Alexander et al., 2009; Panda & Mishra, 2007). Several empirical studies also show that faculty support (in terms of acceptance, approval and/or participation) is crucial to the adoption and implementation of online learning (Betts, 2014; Bollinger & Wasilik, 2009; Brooks, 2003; Fortino & Wolf, 2007;; Major, 2010;). Furthermore, Alexander, Perreault, Zhao, and Waldman (2009) discovered that negative faculty attitudes toward online education thwart program acceptance and development. From their influence in the virtual classroom to their impact on the online enterprise as a whole, it is evident that faculty are critical to the success of online learning.

Faculty Perceptions of Online Education

In an effort to better support online faculty, researchers have begun to explore the virtual teaching experience from the perspective of online instructors. They have examined instructors' assumptions, expectations, opinions, and perceptions as they enter the virtual learning environment, documenting the motivators and barriers they face as they acclimate. The following sections examine the incentives and inhibitors—both intrinsic and extrinsic—that faculty commonly encounter as they transition to teaching online.

Intrinsic Motivators

Faculty frequently report that teaching online is satisfying because it presents an intellectual challenge (Conceição, 2006; Panda & Mishra, 2007; Rockwell, Schauer, Fritz, & Marx, 1999). The online learning environment provides faculty with the opportunity to experiment with new technologies and explore new pedagogical approaches (Betts, 1998; Bower, 2001; Panda & Mishra, 2007; Rockwell et al., 1999;). Major (2010) found that teaching online presented new challenges that changed the way faculty approached and thought about teaching. Although difficult, faculty reported that working through these challenges was rewarding because it improved both their online and face-to-face teaching practices.

Faculty are also motivated to teach online because Web-based courses afford educational access to a more diverse student body (Betts, 1998; Huang & Hsiao, 2012; NEA, 2000; Rockwell et al., 1999). Online education is an opportunity to reach student populations that have historically been marginalized by the traditional four-year residential model (Giannoni & Tesone, 2003) and embrace a greater diversity of student perspectives in class discussions (Conceição, 2006).

Online faculty also appreciate the way in which the virtual environment alters the traditional classroom dynamic. For example, the online environment gives students space to think, reflect, and refine their responses, leading to higher-quality discussions (Huang & Hsiao, 2012). Furthermore, the asynchronous nature of the online learning environment provides an equal opportunity for all students to participate as compared to face-to-face setting where a few students tend to dominate class discussions (Conceição, 2006).

Extrinsic Motivators

Perceptions of online education tend to be more favorable if faculty have institutional support. When faculty prepare to teach online, pedagogical coaching and technical support are crucial elements that help them persist (Giannoni & Tesone, 2003). Faculty commonly feel overwhelmed when they begin to teach online, thus time release for course development and support from their program director or chair has a positive impact (Bollinger & Wasilik, 2009; Betts, 2014). However, such incentives are not universal. Rockwell et al. (2000) found that faculty are motivated by different types of incentives depending on their appointment status, academic discipline, and years of experience. Senior faculty ranked extrinsic rewards lower in favor of intrinsic incentives while junior faculty members ranked external motivators higher than intrinsic ones.

Intrinsic Inhibitors

Many faculty refuse to teach online because they believe that online education is inferior and they do not want to participate in the cheapening of students' academic experiences (Bollinger & Wasilik, 2009; Ulmer, 2007). According to a national survey of university leaders, faculty acceptance remains one of the biggest obstacles to the adoption and expansion of online learning in higher education (Allen & Seaman, 2013).

Even if faculty are open to online education, new instructors worry that they lack the technical skills necessary to teach online and are intimidated by the online learning environment (Rockwell et al., 1999). Faculty are also concerned about their changing role in the online environment (Coppola, Hiltz, & Rotter, 2002). Several studies have documented the cognitive, managerial, and affective transitions faculty go through as they begin to teach online (Anderson, Rourke, Garrison, & Archer, 2001; Berge, 1995; Paulson, 1995; Rossman, 1999). Coppola et al. (2002) investigated the changing roles of online faculty through semi-structured interviews with 20 faculty members who had prepared and delivered an online course. Participants felt that their cognitive role in the online learning environment was more demanding and complex; their affective role required them to continually find and try new techniques to effectively convey their emotion; and their new managerial role demanded greater attention to detail, structure, and student monitoring. In short, participants had to change both their approach and their attitude to teach effectively in the virtual environment.

Faculty in other studies report having a difficult time accepting their new online role. They oppose relinquishing their expert status to be "a guide on the side" (Conrad, 2004; Conceição, 2006) and resent that they receive little to no recognition for their additional efforts (Fish & Gill, 2009).

Instructors who have successfully transitioned to the online environment report that they miss the in-person interactions (Conrad, 2004; Conceição, 2006; Huang & Hsiao, 2012). Asynchronous communication tools lack the immediacy, spontaneity, and visual cues faculty rely on to connect with students, thus many faculty feel that there is a sense of distance between the instructors and students (Huang & Hsiao, 2012). The online teaching experience can be overwhelming, underappreciated, and unrewarding (Conceição, 2006).

Extrinsic Inhibitors

Many faculty cite workload issues as one of the biggest barriers to teaching online (Bollinger & Wasilik, 2009; Schifter, 2000). Online instructors find the course preparation process to be arduous (Fish & Gill, 2002; Visser, 2000). Conceição (2006) conducted a phenomenological study to investigate the meaning of the online teaching experience from the perspective of novice online instructors. The author found that faculty struggle to construct their online courses because all of the course content must be mapped out, learning materials must be developed, lectures must be recorded, and assignments must be finalized before the course begins. Throughout her analysis, Conceição (2006) showcased a number of impactful quotes from study participants to

convey their sense of fear, frustration, and insecurity as they prepared to transition and began to teach in the online environment. This enhanced the richness of her descriptions, adding an authentic and emotional dimension to her work—something that is nascent in the online learning and faculty development literature.

Workload issues only increase when instructors begin teaching in the virtual environment. Online faculty report that it takes intense cognitive effort to stay engaged in conversations with students, keep the class focused, and pursue a comprehensive class-wide discussion (Conceição, 2006). And teaching online requires intense affective effort to be attentive, personable, and emotionally engaged with students (Conceição, 2006; Richardson & Swan, 2003). New faculty also find the nonstop nature of the online environment to be overwhelming and struggle to keep up with the dramatic change in pace (Conceição, 2006; Huang & Hsiao, 2012). When faculty disconnect from the online learning environment, the course activity does not stop. Students continue to send messages and discussions carry on; faculty return to find an astounding number of course communications to attend to. This intensifies their stress levels and leads them to feel inundated and overwhelmed (Conceição, 2006).

The text-based communication is a challenge for many faculty because it requires significantly more reading and writing than face-to-face courses (Conceição, 2006; Huang & Hsiao, 2012). Many faculty also describe the asynchronous text-based environment as one that creates a more fragmented discussion and puts an unnatural distance between them and the students (Huang & Hsiao, 2012).

Vulnerability

The online environment presents a multitude of challenges that online faculty must contend with. These challenges are complex and involve pedagogical problems as well as philosophical dilemmas that force instructors to reconsider their assumptions about teaching, learning, and authority in the classroom (Conceição, 2006; Fish & Gill, 2009; Dhilla, 2016). Wrestling with these issues puts instructors in a vulnerable position as they search for pragmatic solutions and simultaneously renegotiate their long-held academic assumptions and beliefs (Baran, Correia, & Thompson, 2013). The following sections explore the practical and philosophical challenges instructors experience in relation to their developing digital pedagogical practice, their changing relationships with students, and their evolving online academic identity.

Challenges Related to Pedagogical Practice

Several studies have shown that transitioning to the online environment is a disorienting experience for new instructors because it forces them to reconsider their fundamental beliefs about the teaching-learning dynamic (Baran et al., 2013; Bennett & Lockyer, 2004; Conceição, 2006; Fish & Gill, 2009). On a practical level, new online instructors need to figure out how to navigate their course shell, create digital content, and track student progress; most important, they need to learn how to teach within a learning management system (LMS) (Conceição, 2006; Conrad, 2004). Although this may seem like a relatively simple task, it raises deep concerns for online faculty. Dhilla (2016) found

that many novice instructors felt as though the LMS had usurped their position as the course content provider and struggled with questions such as: What is my role as an instructor in the online environment? If the LMS is the bank of knowledge, what is my part in the learning process? What value do I add to my students' online learning experiences?

New online instructors also commonly assume that their face-to-face content will be easily transferred to the online environment – lectures can be recorded, power points can be posted, handouts can be emailed, etc. However, novice instructors are quickly disabused of such ideas as they discover that their usual methods are not well suited to online learning spaces (Dhilla, 2016). Reconstructing familiar 'tried and true' courses can be a frustrating experience and teaching the content online can feel unsafe (Conceição, 2006; Conrad, 2004).

Challenges Related to Interactions with Students

Online instructors also struggle with issues regarding interaction and engagement as they seek to cultivate a community of learners in the virtual environment (LaPointe & Reisetter, 2008). Several studies have found that new online instructors feel disconnected from their students due to the lack of visual feedback and the more formal nature of text-based communications (Conceição, 2006; Conrad, 2004; Huang & Hsiao, 2012). To help mitigate the digital divide, many instructors begin to experiment with tools that enable them to incorporate more audio and visual forms of media into their courses, humanizing an otherwise sterile learning environment. Though this may seem straightforward, novice instructors tend to find such experimentation to be unnerving (Conrad, 2004; Dhilla, 2016). They are used to being the infallible authority in the classroom and are reluctant to accept the uncertainty, vulnerability, and exposure inherent in experimentation, fearing that it would make them appear inept (Pacansky-Brock, 2012).

Challenges Related to Academic Identity

Teaching online also affects instructors' relationships with their colleagues. On a practical level, moving to the digital learning environment put distance between online instructors and their campus-based colleagues. Dhilla (2016) found that online instructors complain that the face-to-face faculty at their institutions do not understand the struggles related to teaching in the online arena, nor do they care to. The lack of a shared experience created a disconnect that bred misunderstanding, alienation, and even discrimination (Velez, 2010).

On a more profound level, this causes online faculty to feel insecure about their place within their department, institution, and academia as a whole (Dhilla, 2016). They questioned: Do my colleagues still see me as a serious academic? Does my institution respect the work that I am doing online? Do my campus-based colleagues understand my online reality? Do they even care to comprehend it?

Discussion

These challenges can engender feelings of vulnerability because they force instructors to reconsider the traditional norms that have come to define their educational experiences and self-conception as an academic. They raise questions related to authority, control, power, and respect as instructors try to renegotiate their evolving online academic identities. Because of this, vulnerability is a pervasive theme throughout instructors' online teaching experiences and is something even the most expert instructors continue to wrestle with. However, the way in which instructors view and respond to vulnerability in the online environment changes throughout their teaching career and has a significant impact on their pedagogical practice and progression.

From the start, novice instructors feel as though their academic authority has been impugned and are no longer seen as an academic authority by their students or their colleagues (Conceição, 2006; Fish & Gill, 2009). This perceived prejudice exacerbates their insecurities regarding their new role as an online instructor and further alienates from traditional academia. This puts novice instructors in a vulnerable position as they navigate their new online realities and many fight against this perceived loss of authority in various and repeated ways. For example, Dhillia (2016) reported that novice instructors commonly felt as though their role as the course content expert had been diminished by the LMS and attempted to reclaim their lost authority by reasserting their control via strict classroom management. They saw their deposition in the virtual learning environment not only as a threat to their authority, but also as an attack on the traditional norms that had come to define their academic experiences. Giving up their authority as an instructor was unthinkable, even alarming.

However, as faculty continue to teach online, they come to realize that clinging to their face-to-face approaches in an effort to resist the vulnerability in their new online realities is futile, creating more work for the instructor and producing an uninspired learning experience for students (King, 2002). As such, more experienced instructors begin to embrace certain vulnerabilities in an effort to redefine their authority in the online environment.

As online instructors continue to experiment, they come to understand that these moments of vulnerability are rife with opportunity. By yielding some of their control, instructors create space for students to become co-authors and have an equal say in creating parameters for their individual and collective learning. By removing the rigid structures built into and around the online learning environment, faculty can allow new ways of learning, new ways of doing, and unexpected synergies to emerge. This emergence has the potential to take instructors to new and unpredictable places while also helping them find unexpected solutions to the complex challenges that have hampered their digital teaching practices. By embracing the messiness, complexity, and uncertainty of teaching in an environment that is not yet fully researched or understood, online instructors can promote exploration and creativity, allow for more connection and personalization, and encourage students to achieve their highest educational expectations (Collier, 2015). Thus, the most expert instructors understand that vulnerability is an integral part of the online teaching experience and embracing it is necessary to

pedagogically excel and provide the highest-quality online learning experiences.

University leaders and instructional designers who interact with online faculty need to not only understand what challenges they face in the virtual environment, but also recognize the sense of vulnerability that instructors contend with throughout their online teaching careers. Technical training and instructional design support are crucial for new online instructors, but it is not sufficient for more experienced online faculty. These instructors face increasingly complex challenges and need robust pedagogical, social, and institutional support to progress and develop as online instructors. The following sections discuss how each of these sources of support contribute to instructors' digital pedagogical development and explore ways in which institutions can better provide such assistance.

Continued and Comprehensive Pedagogical Support

Online faculty development programs need to include both technological and pedagogical instruction (Chen, Voorhies & Rein, 2006). Researchers have found that most existing programs provide adequate technological training, however pedagogical instruction is severely lacking (Pankowski, 2004). Teaching techniques that are effective in a traditional classroom (e.g. lecturing, hands-on activities, etc.) setting may not be effective in the online environment (White & Weight, 2000). Although faculty could independently experiment to determine what will work online and what will not, many instructors do not want to waste time reinventing the wheel and would rather receive the pedagogical training they will need to become successful online instructors (Pankowski, 2004). Dhilla (2016) found that online instructors frequently complained that their institutions failed to provide them with anything beyond the most basic online training and, as a result, felt uncertain, insecure and anxious; they wished they had more support, resources, and opportunities for development. These feelings inhibited instructors' pedagogical development and slowed their progression as online faculty.

Researchers have found that faculty are more easily able to shift their traditional views of instructional roles if they learn about alternative teaching methods better suited to the online environment (Barker, 2003; Gallant, 2000). Thus, digital pedagogical training will help mitigate some of the insecurities online faculty contend with in regards to their evolving online academic identities and role in the virtual learning environment.

Online faculty developers should also engage instructors as adult learners (Eib & Miller, 2006). Mezirow's Transformative Learning Theory posits that adults bring a diversity of life experiences, assumptions, and expectations to the learning process; for online faculty, this includes their previous educational experiences and preconceived ideas about online learning. According to Mezirow, these expectations and ideas will inevitably influence how instructors approach the online environment as well as how they teach and should be taken into account when creating professional development programming (Lawler, 2003). Findings from Dhilla's (2016) study support Mezirow's theory and show that novice instructors' initial strategies for teaching in the online environment were largely born from the instructor-centered methods they encountered as a student. Having

little or no formal pedagogical training at the postsecondary level, most instructors defaulted to such methods and began to teach as they were taught (Gallant, 2000; Layne et al., 2015).

Furthermore, Dhillia (2016) found that instructors who engaged in critical reflection came to realize that many strategies that worked in a traditional classroom setting would no longer be helpful or reliable in the virtual learning environment. This prompted them to develop and adopt new views of teaching and learning that were more appropriate to the digital learning environment. However, McQuiggan (2007) found that online faculty development initiatives rarely prompt instructors to engage in pedagogical reflection, question their prior beliefs and assumptions about teaching, or rethink their educational philosophies. Such critically reflective thinking is an integral part of Mezirow's transformative learning process and essential to instructors' development as online faculty. Given the importance of reflection in spurring pedagogical development, online faculty development programs should aim to provide ample opportunities for instructors to reflect on their evolving digital pedagogical practices and make critical reflection an integral part of their programs.

Social Support

Online faculty development programs also need to include a social focus. Transitioning to the virtual environment can be a difficult and jarring experience for faculty (Conceição, 2006; Conrad, 2004; Fish & Gill, 2009). The unfamiliar terrain makes them feel inexperienced and unknowledgeable, challenging their self-conception as experts (Diekelmann, Schuster, & Nosek, 1998; Gallant, 2000; King, 2002; Lawler, King, & Wilhite, 2004). Often, these changes leave faculty feeling bewildered and overwhelmed (Alley, 1996) or disembodied and disempowered (Cowham & Duggleby, 2005). Dhillia (2016) found that many online instructors report feeling "disregarded", "ignored", and "stripped of their academic identity" when they first started teaching online. They feel as though their institution viewed them as inept amateurs, which engendered feelings of demoralization due to a lack of agency and ownership.

Here, again, approaching online faculty as adult learners would be beneficial. Engaging them in the learning process and taking past experiences, current needs, and future concerns into account will make new online instructors feel less overwhelmed and disempowered. Such an approach also provides a supportive environment where they can interact with similarly inexperienced online instructors, providing a supportive social network as they redefine their online academic identities (Lawler & King, 2001).

Dhillia (2016) reported that their intra- and inter-institutional online teaching communities provided an invaluable source of pedagogical, professional and emotional support as they navigated their new and evolving realities. Thus, faculty developers should consider hosting regular monthly meetings and online discussions to encourage online faculty to connect with one another. Such programs would enable instructors from different departments to discuss their experiences, share ideas, and provide encouragement as they navigate the challenges of the online environment (Hinson & LaPrairie, 2005). They would also help build a robust institutional online community based on collegial collaboration, reducing feelings of isolation and alienation.

Institutional Support

Numerous studies have found that teaching an online course takes more time and effort than teaching the same course face-to-face (Cavanaugh, 2005; Conceição, 2006; Green, Alejandro, & Brown, 2009; Lao & Gonzales, 2005;), however many colleges and universities fail to adequately compensate their online faculty. In fact, many pay their online instructors less than their campus-based colleagues (Allen & Seaman, 2012). Institutions should revisit their compensation policies that ensure online faculty are paid the same as their face-to-face counter-parts, in addition to being offered appropriate rewards for the increased time and labor demands; these may include stipends, course release time, or professional development funds for research support (Orr, Williams, & Pennington, 2009). Doing so will send a clear message that online faculty and the work they do is highly valued by their institution.

Researchers have also found that faculty who continue to teach online do so largely because of intrinsic motivations; they want to feel that are adding value to their institution, making an impact on their students or contributing to “the greater good”(Orr et al.). Colleges and universities can increase online instructors’ sense of value by making efforts formally acknowledge and recognize the work of their virtual faculty; this can include articulating the importance of online learning in their institutional missions, inviting expert faculty to participate in online instructor mentoring programs, and giving advanced instructors more latitude in designing and facilitating their courses.

Areas for Future Research

Nearly all of the studies examining faculty perceptions of the online teaching experience were limited to instructors at a single institution. Future studies could extend this research and examine faculty perceptions in different institutional contexts, providing a more holistic depiction of the digital teaching experience. Furthermore, overwhelming majority of the abovementioned studies utilized a cross-sectional design. Researchers should consider employing a longitudinal approach to capture how the online teaching experience evolves over time as faculty become more proficient in the digital learning environment.

Finally, the studies cited here have explored various ways in which higher education institutions can best support faculty as they confront and attempt to overcome obstacles in online learning environments (Barker, 2003; Betts, 2014; Conrad, 2004; Fetters & DUBY, 2011; Eib & Miller, 2006; Green & Brown, 2009; Giannoni & Tesone, 2001; Hinson & LaPrairie, 2005; Kidney, 2004;). However, these studies almost exclusively focus on faculty who teach at large (+15,000 students) institutions and their proposed solutions assume that faculty have access to extensive technological and pedagogical resources. Researchers have neglected to examine the particular challenges that faculty at small, teaching-focused colleges face – both in terms of available institutional resources as well as prevailing institutional attitudes and norms towards technology. Future studies should examine the particular challenges that faculty at smaller institutions face.

Conclusion

The popularity of online learning has grown tremendously among postsecondary students over the past decade and with such growth has come increased scrutiny regarding the efficacy of online programs. Previous studies have shown that online faculty are crucial to creating high quality online programs; however, the research regarding online faculty development is relatively nascent. While researchers have thoroughly documented the transitional period as instructors move from face-to-face classroom settings to the virtual learning environment, they have neglected to examine the experiences of more advanced instructors who have persisted in the online environment. This review examined the development of online faculty throughout all stages of their careers—from novice to expert—in an effort to provide university leaders and faculty developers with a better understanding of the online teaching experience from the perspective of their instructors.

Findings show that teaching online has a profound impact on instructors and directly influences their pedagogical practices, academic identity, and interactions with students. These changes present challenges that engender feelings of vulnerability as faculty are forced to reconsider the traditional academic norms that have defined their educational experiences and academic identities. Thus, to effectively support online instructors, faculty developers need to not only understand the challenges online faculty face in terms of teaching, identity, and student engagement, but they also need to appreciate the sense of vulnerability faculty feel as they navigate their evolving online realities. Providing continued pedagogical, social, and institutional support in a way that engages online instructors as adult learners will go a long way towards addressing these issues. Ultimately, such support will enable institutions to cultivate a stronger online faculty and build the high caliber online programs that today's student expect and deserve.

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