Highly Relevant Mentoring (HRM) as a Faculty Development Model for Web-Based Instruction

Highly Relevant Mentoring (HRM) (mentorat haute efficacité), un modèle de formation du corps professoral à l'enseignement en réseau

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Abstract

This paper describes a faculty development model called the highly relevant mentoring (HRM) model; the model includes a framework as well as some practical strategies for meeting the professional development needs of faculty who teach web-based courses. The paper further emphasizes the need for faculty and administrative buy-in for HRM and examines relevant theories that may be used to guide HRM in web-based teaching environments.

Of note is that HRM was conceived by the instructional design staff who contributed to this paper before the concept of high impact mentoring appeared in the recent literature (2009). While the model is appropriate in various disciplines and professions, the examples and scenarios provided are drawn from a Canadian university's experience of using HRM, in conjunction with a pedagogical approach called ICARE, in a variety of nursing courses and programs.

Résumé

Cet article décrit un modèle de formation du personnel enseignant intitulé « highly relevant mentoring (HRM) » (mentorat haute efficacité); ce modèle comprend une structure et des stratégies pratiques visant à combler les besoins en formation du corps professoral d'une faculté offrant des cours en réseau. L'article souligne la nécessité d'un appui facultaire et administratif au HRM et étudie les théories pertinentes pouvant servir à guider le HRM dans des milieux d'enseignement en réseau.

On notera que le HRM a été conçu par l'équipe de conception de matériel pédagogique qui a contribué à cet article avant l'apparition, dans les publications récentes (2009), du concept de « high impact mentoring » (mentorat à haut rendement). Bien que ce dernier modèle convienne à diverses disciplines et professions, les exemples et les scénarios fournis ici sont tirés de l'expérience d'utilisation du HRM dans une université canadienne, conjointement à une approche pédagogique appelée ICARE, dans une variété de cours et de programmes de sciences infirmières.

Introduction

In web-based courses in which there is insufficient instructional design support, inconsistent and/or unreliable infrastructure, and varying levels of faculty experience with learning management systems, the problems can be significant (Salyers, Carter, Barrett & Williams, 2010). While universities are responding to these problems through a variety of interventions, the authors of this paper recommend a faculty development model that enables mentoring in the here and now. Extrapolating this idea to web-based courses, faculty who experience such support during the course development process will, over time, to be able to assume greater responsibility in the delivery of their web-based courses and development of new ones.

Choosing a faculty development model that facilitates faculty competence and encourages independence is a complex process. However, after a review of the literature, a model developed by an instructional design team at the University of Northern British Columbia (UNBC) called highly relevant mentoring (HRM) has emerged as an evidence-informed and highly recommended choice. This model builds on notions of faculty development grounded in efficacy (Cravener, 1999; Rickard, 1999); just-in-time-teaching or JITT (Novak & Middendorf, 2002); immediacy and social presence (Kim & Bonk, 2019); the 'necessity' of support for faculty in elearning contexts (Bates, 2005); participatory culture (2005); and relevance (Kember, Ho, & Hong, 2008).

In addition to describing the strengths and opportunities inherent in this model, the paper emphasizes the need for faculty buy-in and situates the HRM within relevant theory. While HRM is appropriate in various disciplines and professions, the examples provided here pertain to nursing education at a Canadian university.

The Literature

Instructional designers and instructional design support staff (IDS) are experiencing a shift away from supporting more traditional teaching methods to more innovative teaching methods as well as the specialized needs of faculty as they implement these methods in practice. In part, these

trends are the result of the need to cultivate a competitive university marketplace grounded in flexible, accessible user-centric learning experiences. As one example, many Canadian nursing schools are actively responding to the need for nurses in Canada and elsewhere through compressed programs that use online teaching and learning methods. Given the relative newness of web-based education, it is understandable that faculty mentoring that is timely, relevant, and empowering is important work.

Theories of Faculty Development Including Mentoring

The literature reviewed for this paper encompassed well established theories of faculty mentoring. As a starting off point, it is suggested that faculty have two sets of learning needs: learning related to a discipline and learning about teaching including course development and delivery issues. Of the two sets of needs, learning about teaching is especially complex since it requires the teacher to have different kinds of knowledge (Eraut, 2000) in addition to skill in critical reflection (Brookfield, 1995).

The concept of self-regulation has been linked to learning about teaching and faculty development including mentoring. In simplest terms, self-regulated learning is guided by thinking about one's thinking, strategic actions, and motivation to learn (Boekaerts & Corno, 2005; Butler & Winne, 1995; Perry, Phillips, & Hutchinson, 2006; Winne & Perry, 2000; Zimmerman, 1990). While self-regulation may be regarded to be part of professional practice in all domains, in their work, Kreber, Castleden, Erfani, and Wright (2005) suggest that many faculty have minimal experience reflecting on themselves as learners about teaching, despite the many activities and supports available to them: peer consultation programs, workshops about teaching, student feedback, experimentation with alternate teaching approaches, theoretical articles on teaching and learning, and conferences.

Adding complexity to the faculty development and mentoring are language and conceptual issues. Kreber and Cranton (2000) differentiate between and among instructional knowledge (i.e., how to design and the deliver effective courses, classes, etc.); pedagogical knowledge (theories related to how different people and groups learn); and curricular knowledge (knowledge, skills, and attitudes).

In their study of faculty development in higher education, Sorcinelli, Austin, Eddy and Beach (2006) identified three main challenges: the changing professoriate; the changing nature of the student body; and the changing nature of teaching, learning, and scholarship. These challenges, according to the researchers, necessitate a rethinking of faculty development. While many faculty members learn about teaching in formal ways (Knight, Tate, & Yorke, 2006), others learn experientially, more through practice than theory (Kolb, 1984). To maximize experiential learning, the teacher must engage in reflection. Simply put, learning about teaching occurs as the person engages in the act of teaching and reflects on the process. Reflection, as explained by Schön (1983), can involve both reflection in action and reflection on action. If the teacher reflects in action, he or she is making conscious decisions and possibly implementing changes during the act of teaching. Reflection on action occurs after the learning experience and is retrospective in nature. More recently, Cowan (1998) has talked reflection for action. This act is anticipatory in nature and is typically used to establish priorities for subsequent learning situations.

Specific to mentoring as faculty development is Goodland's (1990) perspective that there is a theory deficiency for practice-based models of faculty development such as mentoring. Hawkey (1997) claims there is a lack of solid theory for in the faculty mentoring literature which, in Hawkey's estimation, is either too descriptive or declarative. Of the faculty mentoring theories that do exist, the emphasis is largely on the development of technological and pedagogical skills sets (Diaz et al., 2009; Taylor & McQuiggan, 2008).

While faculty development theories exist in some abundance and mentoring theories have some history, the notion of highly relevant mentoring is an emerging one during a period of considerable change within universities. Today, faculty find themselves navigating a paradigm of exponential knowledge growth and using technologies hitherto unknown twenty years ago. As an outcome, faculty needs in relation to teaching have changed just as the largely group-based approaches of faculty development in the late twentieth century have had to evolve. Most significantly, these strategies are experiencing transformation to ways that are more responsive and relevant to faculty needs in a rapidly changing here and now.

HRM as a Model

As previously suggested, online, open, blended, and other forms of technology-supported learning are at the crux of today's paradigmatic shift in university teaching and faculty development. In some institutions, approaches to faculty development have been reported to be problematic because they are prescribed interventions delivered by apparent experts. Additionally, learning that occurs in "one off" training sessions or workshops may be forgotten when the new knowledge and skills are not immediately required (Taylor & McQuiggan, 2008). There is the further issue of faculty uptake of faculty development activities. Fang (2007), citing Christian (2006), points out that 75% of professional development programs emphasizing instructional design are cancelled due to lack of attendance by faculty.

In contrast with other faculty development models, the HRM model is ongoing and recursive; faculty engage in continuous professional development based on personally-specific goals. In the case of online courses, faculty might be encouraged to modify their courses continuously in order to improve the teaching and learning experience. Mentoring and technical support would be available on a needs basis while the instructional designer might recommend a schedule for implementing changes.

HRM and its Relationship with Just in Time Technology Teaching (JITT)

In virtually every theoretical context relevant to web-based teaching, the tasks of teaching (e.g., knowledge dissemination) need to be combined with the technological aspects of delivery (e.g., use of a learning management system). This act of intersection requires ongoing assessment of the faculty member's needs so that appropriate development activities can be designed to support the process (Diaz, Garrett, Kinley, Moore, Schwartz & Kohrman, 2009; Fang, 2007; Shepherd, Alpert & Koeller, 2007; Taylor & McQuiggan, 2008; Thompson, 2006).

Efficacy-driven teaching as reflected in Cravener's (1999) psychosocial model places emphasis on reconciling the divergence between the task-oriented approaches and group instruction techniques of IDS staff and faculty's focus on the more psychosocial aspects of teaching (Rickard, 1999). As a possible solution, Cravener advocates just in time technology teaching or JiTT. According to JiTT, faculty development is tailored to the faculty member's needs.

Cravener argues that, as much as possible, human resources rather than technology-based resources should be used as the vehicle for meeting faculty's learning needs around technology. One approach recommended by Cravener is to permit faculty with technological expertise to act as peer IDS consultants to less experienced faculty; to actualize this idea, however, institutional buy-in and infrastructure are required. Collective agreements are also a variable here.

Novak and Middendorf (2002) have described JiTT as an approach that blends the best aspects of face-to-face teaching with web-based tools. Additional viewpoints about JiTT when it is used in learning situations with students are as follows: 1) out-of-class assignments are encouraged since they increase study time; 2) structured learning leads to greater benefit; 3) working in teams supports problem solving; 4) gathering insight into student thinking is a valuable way of discovering ways to better meet student needs. While these ideas specifically target the faculty member working with students, they are also applicable to the faculty member-learner in the case of learning how to use technology for educational purposes.

HRM which is essentially a form of JiTT with flexibility in time and space for personal learning needs is congruent with faculty members' pedagogical needs. In the case of web-based course development, when the faculty member identifies a need for guidance and there is immediate and relevant mentoring, the experience is practically meaningful. From a skills acquisition perspective (Benner, 2004), faculty members may progress from novices to experts over time, commensurate with technological development. Cravener (1999) has commented on the need for universities to invest in faculty training programs that consider faculty members' workloads as well as their psychological and social needs. Fang (2007) likewise points out the need for enhanced faculty development.

Other constructs relevant to HRM are instructional immediacy and social presence theory. Instructional immediacy is a construct discussed by Kim and Bonk (2010) in their work. Social presence theory (Short, Williams, & Christies, 1976) draws from educational communication theory and addresses the effects of psychological distance between the learner and instructor. These same authors claim that instructional immediacy is a critical factor for success in on-line learning. Kim and Bonk have also explored the construct of instructional intimacy and found it to be a significant factor in ensuring that learners' needs are met.

Recent history has shown that availability of technology and the cultural impetus to participate in distance and web-based training classes are not adequate solutions to the challenges that faculty face as they navigate the demands of today's technology-supported classroom (Berge & Kendrick, 2005). By contrast, mentoring contexts are distinguished by their organizational, instructional, and professional orientations towards teaching and learning. As a sub-concept of mentoring, HRM is grounded in the world of practical wisdom and holds potential for revolutionizing previous models of faculty development.

Many of today's students and newer faculty have grown up with e-learning. As an outcome, students are often "tech savvy." Frequently, they can multi-task and informally and formally construct their own learning experiences (Reddekopp, 2006). Faculty, on the other hand, may or may not have the same degree of technological and multi-tasking expertise. While, from a generational perspective, younger faculty members may be well positioned for on-line teaching and technological advances, supporting more experienced faculty can be extremely challenging. As Bates (2005) suggests, faculty support is a necessity in present and future times.

Although faculty may rely on tacit knowledge transfer to fill in gaps in their IT competency needs, they do need to learn specific skills from IDS experts. It is this need that drives person-to-person learning experiences. HRM can help to address such gaps when leveraged within formal and informal learning processes. Combining one-to-one, group, and situational mentoring, HRM offers faculty a variety of ways to connect and to learn. HRM encourages the development of what Jenkins (2006) calls participatory culture where informal mentorship provides for individual expression, collaboration, and e-learning skill development. The following section of this paper describes how such skill and competency gaps can be addressed with HRM when there is solid support by administration for HRM.

The Issue of Administrative Support

Many proponents of online education programs have investigated ways to implement and sustain training for technology-supported education. Among others, four factors stand out. They are early support from administration and decision makers in championing such programs; adoption of the right technologies at the right time at the right cost; strategic marketing of training programs; and evaluation of the effectiveness of all programs.

It is important that key players including university administrators participate in and model successful distance training and education experiences, create partnerships with training experts to ensure realistic planning and follow through, and communicate frequently and positively with the larger learning community about programs (Albright & Nworie, 2008; Baker, Boggs & Arabasz, 2003; Hitch & MacBrayne, 2003). It is not enough to simply buy or license a technology, design instruction, provide access, conduct training, and continue with "business as usual." An organizational philosophy that supports technology, lifelong learning, and change is foundational to the success of distance training (Berge & Kendrick, 2005).

An Up Close Look at the HRM Model

Relevance has been recognized as one of the strongest motivators for learning (Kember, Ho & Hong, 2008). In the HRM model, learning is defined as accomplishing the tasks that hold the greatest relevance for faculty. What this means in practice is that faculty learn as they work in contrast with learning through formal training, participation in learning communities that do not provide practical opportunities to build skills, and/or being shown how technical tasks are accomplished after the fact.

The HRM model relies on the skill of the mentor to provide support in order to maximize the benefit for each instructor. Instructional design individuals who use the HRM model actively profile instructors. A key assumption of the model is that the faculty member has subject-specific knowledge while the IDS staff person has technical knowledge.

The goal is to identify and support each instructor just enough to get the job done while incrementally improving the instructor's technical skills. In each HRM scenario described later in this paper, IDS staff mentored the faculty member on an "as needed" basis while encouraging the faculty member to master his or her skills in the next round of work. Figure 1 represents the goal of developing a faculty member's technical knowledge. A point worth mentioning is that the IDS mentor may also complete, if required, work that is just beyond the instructor's skills. In

this situation, the intent is to transfer skills to the instructor in a future session should it not be possible in the present session.
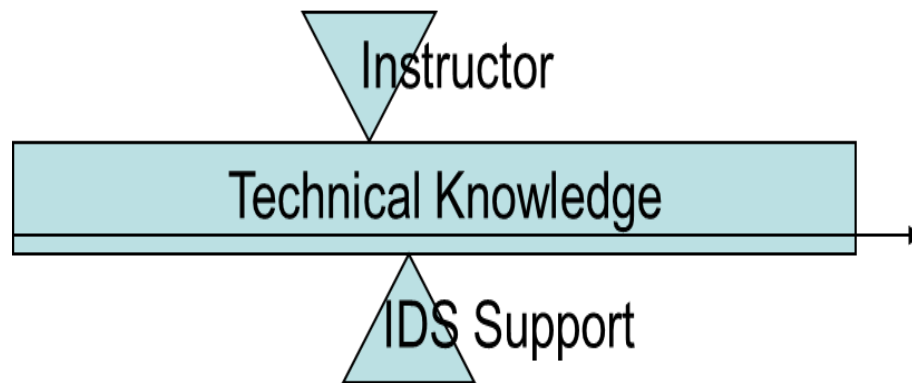

Figure 1. *Goal of Developing Faculty's Technical Knowledge through the HRM Model*

According to the HRM model, the IDS individual has three tasks to perform:

1. To identify the instructor's limitations and important skills that the instructor should learn next.

2. To perform, when necessary, work that is just beyond the instructor's ability.

3. To actively coach the instructor to surpass previous limitations and to achieve autonomy in relation to the next important skill.

Three critical aspects of the HRM model contribute to its effectiveness as well as its challenges:

1. IDS individuals must possess superior interpersonal, mentoring, communication, and analytical skills.

2. IDS individuals must be willing to provide sufficient support with the understanding that, as faculty become more autonomous, they will spend less time with faculty.

3. Faculty need to "buy into" the model rather than resist the need to assume tasks on their own.

Actualization of the HRM Model in a Canadian School of Nursing

The university described in this paper has four campuses in British Columbia. The main campus is located approximately 10 hours by car away from Vancouver. Three regional campuses are located throughout British Columbia in rural and remote areas of the province. The university has a student population of approximately 4, 200 (Salyers, Carter, Barrett & Williams, 2010).

At the undergraduate level, the School of Nursing offers a bachelor's degree in nursing (BScN) in partnership with two regional colleges; a post-diploma BScN; and a Rural Nursing Certificate. At the graduate level, two options, the Master of Science in Nursing (Family Nurse Practitioner, MScN-FNP) as well as the Master of Science in Nursing (MScN-Thesis Stream), are offered. Total enrolment across all programs and campuses is approximately 650 students. Courses are offered utilizing face-to-face, web-enhanced or blended, and fully on-line formats at all campuses (Salyers, Carter, Barrett & Williams, 2010).

In the early days of web-based learning at this university, several priority challenges were identified. The first challenge related to faculty experience and expertise with e-learning formats. The second challenge related to inconsistent delivery of courses by faculty (e.g., one faculty member might deliver his or her course using a face-to-face format while another might utilize a web-enhanced or fully online format). Some faculty were avid users of the university's learning management system and provided students with a variety of learning experiences including engagement through discussion boards, on-line tests and examinations, links to on-line resources, and so forth. Other faculty used the learning management system only to host course syllabi and general resources (Salyers, Carter, Barrett & Williams, 2010).

The School of Nursing employed an instructional designer and three instructional design support staff (IDS). These four individuals comprised the IDS team which was responsible for supporting the professional development needs of all faculty teaching in the various programs offered by the School of Nursing. Skill levels with technology and e-learning varied among the instructors. In general, the IDS team knew more about technology (technical knowledge) than the faculty; faculty possessed knowledge about their subject areas and teaching.

During 2009-2010, the university was using both Moodle and Blackboard CE 8 (Blackboard) as their LMS platforms. This situation led to a number of problems as instructors were sometimes unsure of how the two platforms worked. The fact that some instructors were using both systems also caused problems for instructors and IDS staff.

In response to these needs, the HRM model was implemented. Through HRM, faculty were provided the tools and knowledge necessary to develop and offer their courses with reduced reliance on IDS staff over time. A further reason for implementing the HRM model in the School was the substantive number of distance, regional, and sessional faculty teaching the various programs. As a result, many of these faculty members were not available during regular office hours as they had other employment responsibilities external to the university. HRM services were delivered at agreed upon times while communication with this faculty group carried out by teleconference.

In order to maintain a degree of consistency across the School's web-enhanced and fully on-line courses, a pedagogical framework called ICARE was adopted. This framework was developed by staff and faculty at San Diego State University in 1997 to structure and organize course modules, modules being natural sub-sections of courses. Table 1 provides an overview of the ICARE framework. Research on the ICARE framework has demonstrated moderate to high levels of student and faculty satisfaction and its value in structuring face-to-face, blended, and fully on-line courses (Salyers, 2005; Salyers, Carter, Barrett & Williams, 2010). The ICARE framework can be also be used for preparing course pages in HTML format.

Table 1. The ICARE Framework

I		Introduction	Module overview, learning objectives, and assignments associated with the module
C		Connect	Content that supports the module, e.g., PowerPoint presentations, video and audio clips
A		Apply	Assignments and/or self-tests
R		Reflect	Information the students are required to reflect on in relation to the learning outcomes for the module; this information is examinable
E		Extend	Extra information that may be of use to the students but is not examinable (e.g., evidence-based articles on a particular concept)

In the following paragraphs, further detail is provided about the use of HRM in two varying contexts. The first describes HRM when there was strong support and buy-in for HRM. In the second scenario, buy-in was problematic and/or limited.

Scenario One: HRM with Buy-in

In all instances of HRM involving the School of Nursing, considerable planning and use of technology was required. When the faculty member was at a distance from the IDS expert, this was particularly the case. For example, one member of the IDS staff working with a regional instructor to maintain courses in both Moodle and Blackboard met with the faculty member for weekly telephone meetings to review the various requirements the faculty member had identified as relevant. These conversations usually lasted for one hour with changes being made directly to the LMS course during the calls; sometimes, the discussion would generate a list of tasks and "to dos" for the instructor and the IDS member.

Prior to the 2010-2011 academic year, the decision was made to migrate from Moodle to exclusive use of Blackboard. This meant that, during the summer of 2010, the IDS team was kept busy migrating courses from Moodle to Blackboard, in addition to mentoring instructors on the new system using the HRM approach. Once the courses were migrated to Blackboard, the process of mentoring instructors began in earnest. The benefit of standardizing courses using the ICARE framework within Blackboard was that it was generally simpler for instructors to edit their ICARE pages with limited assistance from the IDS staff than otherwise. Given these circumstances, instructors tended to be very receptive to the HRM model and became much more autonomous with course development than before the HRM process had been implemented. In addition to many practical benefits, the HRM model expanded instructor confidence. IDS personnel noted that instructors were more willing to work through basic problems themselves than call for help immediately. This situation reduced stress on IDS staff.

As evidence of the effectiveness of the HRM model, one instructor was asked to provide a short description of the experience. The instructor wrote:

> HRM trained me according to what [I] needed to know now. I was able to identify when I had reached my capacity to absorb more information, and [the IDS member] would take over when I reached my limit. As I became more proficient at the basics, the more advanced processes became doable. I never felt pressured to learn more than I could take in. Now that I can more independently navigate through Blackboard, [the IDS member] helps me polish my course by offering suggestions that I may, or may not choose to embrace.

The above is only one example of the effectiveness of the HRM model as used in the School of Nursing. In almost all situations where HRM was adopted, it was reported to be very successful from the perspectives of both IDS staff and faculty.

Instructor buy-in for HRM, however, was not always forthcoming or possible. For instance, an instructor may not have had the time or means to participate in scheduled mentorship meetings. Or, he or she may have chosen not to participate. The next section of this paper describes the kind of issues that can develop without HRM buy-in.

Scenario Two: HRM without Buy-in

In this situation, a member of the IDS staff worked with an on-campus instructor to upload reading materials into a Blackboard course shell. Because work had not been done in the course site prior to the start of the term due to had other commitments by the instructor, HRM meetings were brief (10-15 minutes) and occurred based on the availability of the instructor. Due to time constraints, the IDS member often completed the task for the instructor without further faculty mentorship.

Because the instructor had previously taught on-line courses in Moodle and had found the layout intuitive and easy to work with, he did not see the value of HRM. While there are significant similarities between Moodle and Blackboard, there are also key differences, especially in the creation of ICARE HTML pages. In this instance, the instructor found creating and editing HTML pages in Blackboard difficult but had little time to learn the process. The outcome was pressure for the IDS member to make modifications to the course.

Unfortunately, instructor knowledge and confidence were not enhanced in this case. As the term progressed, the instructor called for help as soon as a new issue occurred. This circumstance meant that IDS staff needed to be available to "put out fires" without knowing when the instructor might require help and when important deadlines might be approaching. Unlike situations where there was buy-in, both the instructor and the IDS member were unable to plan for and deal with issues as they arose.

Discussion

In the case of the School of Nursing's use of the HRM model, three critical aspects associated with HRM were met. IDS staff quickly learned how to analyze and mentor faculty using superior interpersonal and relational skills. Second, IDS staff recognized the practical and confidence-related wisdom in facilitating faculty independence in the course development process. Third, in general, faculty were eager to learn but sometimes under too much pressure to commit to low-relevance training; they were, however, motivated to learn "on the job" as they set up actual

courses and processed student input. Thus, in the overall, there was substantial buy-in by faculty for the HRM model.

Not insignificant is the fact that the lead instructional designer had years of experience teaching online and supporting faculty. As a result, her assistants were quick to acquire the skills they needed for HRM. It is further worth noting that, under different circumstances where instructional designers are not full-time employees, IDS individuals could view the HRM model as a threat to their long-term employment. In this case, IDS staff may need to be reassured that greater faculty autonomy means that their time, expertise, and energy can be used in different ways and on new projects.

As a contribution to the literature, the experiences with HRM recounted here are in line with the principles and practices of JiTT (Cravener, 1999) and instructional immediacy (Kim & Bonk, 2010). While these accounts of HRM do not represent formal research, they do suggest that HRM is an effective and appropriate means of supporting faculty as they develop web-enabled courses. Moreover, the accounts point to the value of HRM in a cross-section of web-assisted learning situations included blended learning. Finally, they underscore the need for web-based education and related faculty development initiatives to be embraced by a wide variety of stakeholders including faculty and administrators. The level of buy-in by these groups has a direct effect on the success of the HRM experience and, more significantly, on the competence and confidence of faculty as web-based teachers and facilitators.

Conclusion

Given the evidence that web-based learning is here to stay in university education and the need for universities to offer superior learning experiences in a competitive learning market, the need for effective and efficient faculty development in relation to web-based teaching and learning is clear. Both the literature and the experiences described in this paper suggest that HRM holds considerable potential in ensuring that faculty have the skills they need to be independent, competent, and confident stewards of their web-based classrooms. With further use and research, the HRM model can assist universities as they develop and support faculty in the ways of web-based technologies for new and increasingly complex educational purposes.

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