

Setting the standard for faculty professional development in higher education

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ABSTRACT

Despite the growing body of research into “best practices” of teaching and learning in the information age, many colleges and universities are slow to disseminate these proven practices to their faculty, even as student retention continues to decline. The findings of this literary research suggest that the best way to promulgate these pedagogical and andragogical theories and to ensure ethics in teaching is to provide faculty with readily available, on-going professional development. In sharing these best practices, this research will aid faculty in the creation of a more active learning environment for their students. The research includes contemporary pedagogical and learning theories as they relate to improving student retention and success in first-year college general education courses.

Keywords: online learning, professional development, best practices, undergraduate teaching, student-faculty interaction

INTRODUCTION

New professors of higher educational institutions often begin teaching based on their experiences as students in the colleges or universities they attended. Many have never taken a course or studied theories involving pedagogy or andragogy, thus relegating numbers of students under their tutelage to long lectures, unrelated assignments, and boring classes. These professors are knowledgeable and believe themselves to be dedicated to their chosen field of study but seem oblivious when it comes to how they are perceived by their students. They believe their poor end of course evaluations are due to the caliber of students in their class instead of taking a closer look at what constitutes being a scholar as well as a teacher. In research on how students feel about their college professors, Bain writes that students will, when given the opportunity to evaluate their course, indicate “how much they learned and whether the professor stimulated their interests and intellectual development” (2004, p. 16). This gives the professor a good idea of the quality of his teaching. If the professor knows how to “simplify and clarify complex subjects, to cut to the heart of the matter with provocative insights”(p.16) and bring about their own reflection and the student’s in the discipline, the process of analyzing instruction and evaluating its quality becomes a simple matter. Bain believes that what seems to drive best teaching strategies is the capacity to “think metacognitively”(2004, p.16) and elaborates that there are two kinds of knowledge exhibited in good teaching that continue to surface in various studies. Professors who have that keen sense of “the histories of their disciplines, including the controversies within them”(2004, p. 25) and those professors who are able to convey an understanding of their discipline as important to everyday life are more often able to grasp how other people might learn within their course. This ability is brought about by their own thinking about their thinking, or metacognition, and these professors always seem to be the best teachers in the eyes of their students (Bain, 2004).

Professors are scholarly. Typically, a scholar is someone who exhibits expertise in their area of study and dedicates his or her life to learning everything possible about an area of interest. They share the facts and details they have discovered through their classes and writings excitedly lecturing through each class hour. Teachers, on the other hand, are dedicated not only to the subject they teach but also to the art and craft of teaching the subject they love. Kim (2008) suggests “they see themselves as conduits to learning, and their core focus is on the students, coaching them to help build their skills” (para.3). They too have expertise in their chosen field. However, they concentrate on how to convey what they know in a manner that makes them keenly aware that teaching is an art which means continual practice is needed in developing various skills in order to reach every student in their class (Kim, 2008).

A pressing need, therefore, exists to provide faculty, especially beginning faculty, with on-going professional development opportunities to enable the scholar who teaches his subject to become a meaningful teacher of students, a true educator. Professional development areas should include proven instructional practices and how best to incorporate and infuse these pedagogical theories into undergraduate general education courses to enhance student learning, increasing student engagement, retention, and success (Berg & Haung, 2004). The purpose of the research presented here is to share the “best practices” in current literature, supporting the creation of readily available on-going professional development opportunities thus enabling faculty to learn the most effective and best strategies for improving undergraduate teaching. The research includes contemporary pedagogical and learning theories as they relate to improving student retention and success in first-year college general education courses. Secondary audiences for this paper include high school faculty, especially those that teach dual

credit courses, and students enrolled in undergraduate and graduate teacher education programs.

Professional development needs to be provided for both new as well as experienced faculty who tend to overly use lectures in their courses. According to Scott (2006), most universities have not yet transferred over to teaching in what is known as an active mode. A mixture of active learning modes is considered to be most advantageous to student learning (Scott, 2006). Sullivan and Rosin (2008) also state that real-world practices need to be instigated in addition to active learning. There are many other avenues for teaching and learning in addition to lectures. In the CEQuery study, Scott (2006) described the best experiences students had at universities. Although traditional aspects such as lecture mode are mentioned, many others were listed. Among these were face to face projects, tutorials, class exercises, discussions, seminars; real-world work experiences such as practicum, field work; independent study consisting of completing a research, long distance education; simulations and labs including mock situations, role play, games labs, simulators; information and communication technologies (ICTs) including internet communications and interactive multimedia to engage the interest, interaction, and knowledge found on the internet; and various types of web-based learning, Facebook, Blogs, discussion boards, and Skype. These various methods need to be defined, described and utilized when presenting professional development modules. In addition to what is being taught and how it is being taught, design of assessments are of great importance. Assessments often limit student learning activities; impeding and often restricting student learning activities to only doing their assignments. Assessments should spur motivation and serve to engage the students (McInnis & Devlin, 2002).

The need for change is well stated by Scott (2006). Institutions of higher education are being pressured to change the way they do business. Doing business means being in the business of educating students. Colleges and universities must consider the increasing competition for students in both brick and mortar as well as online courses, the growing student consumer demands and expectations, the response to closer scrutiny, and keeping abreast of the latest in instructional technology. In order to do this, they must focus on optimizing “the quality of every student’s experience” and “not only to gain but to retain students – morally, in order to develop the total social, intellectual, and cultural capital” optimizing the “chances of those who are first in their family to attend (a) university (Scott, 2006, p. iv).

Butt and Reutzel (2005) ranked the top ten best teaching practices as the following:

1. Giving clear and well organized lectures.
2. Helping students prepare for exams by offering special study sessions.
3. Collecting student feedback on a regular basis in order to determine what was learned, what was confusing, etc.
4. Carefully explaining course goals, expectations, grading and ground rules at the beginning of the course.
5. Asking for and acting upon student suggestions for improving the course.
6. Promptly reviewing homework, exams, assignments, etc.
7. Providing examples of "superior" exam answers, "excellent" projects and "A" papers.
8. Giving students an opportunity to revise assignments before a final grade is given.
9. Having a formal agenda including a schedule of goals and topics for each class session
10. Incorporating group discussion activities as part of each class session (Table 1, para. 8).

Their paper, *Professor Review Best Teaching Practices*, indicates that these best practices came first from the Total Quality movement initiated by IBM back in the 1990s “as part of quality improvement initiatives in the business sector. While the idea has been extended to the management of educational institutions, it could also easily be applied to the institution's teaching mission” and should be reflected in all on-going professional development (Butts and Reutzel, 2005, “Abstract,” para. 1).

Professional development in undergraduate teaching and learning should include a wide variety of general education courses including but not limited to English/Language Arts, Mathematics, Science, Social Studies, and Cross-Disciplinary subjects. On-going professional development should also include specific examples of applied learning theory in order to enhance teaching across various disciplines. A generalized professional development module should take into account assessments, best practices for teaching undergraduate learners, engagement of students for retention and success, behavior of students, keeping up with students in the digital age including research on what is available and how to use it, social networking in education, best practices out of the classroom, using the internet for teaching and learning, and the Family Educational Rights and Privacy Act of 1974 (FERPA) and the legalities of teaching to college students (Family Educational Rights and Privacy Act, 2011).

Post-secondary institutions often deal with a myriad of student types in their classrooms, including under-prepared adult learners. To deal with the under-prepared learners, according to Smittle (2003), teachers need to commit to teaching this population and utilize any non-traditional method necessary which demands a thorough knowledge of the content. All teaching and learning needs to be structured with all assignments clearly spelled out (Boylan & Bonham, 1998). According to Cross (2000), students need to spend a lot of time-on-task and this can be accomplished by increasing class activities and adding labs and tutorials. In addition, students need to know that what they are studying applies to the real world with hands-on and collaborative learning. Casazza and Silverman (1996) state that information should be presented to developmental learners in small chunks ensuring that mastery has taken place before the student moves on with continuous assessment and feedback. Instructional strategies must be paired to students' varied learning styles (Dunn & Dunn, 2000). McCombs (1991) suggested that students need to be motivated by explicitly defining goals, utilizing student interests, ensuring they have background knowledge in the subject, and demonstrating the real world relevance.

Smittle (2003) reviews six principles for effective developmental education teaching. These include commitment to teaching underprepared students, command of the subject matter, and ability to teach a diverse student population. Her research findings integrate strategies for successful developmental education programs with general principles for effective teaching in undergraduate education. Principal number five on her list of six communicates the need for high standards and reads:

It is important that academic standards in developmental classes be established in cooperation with the college-level curriculum to which students will advance (Boylan & Bonham, 1998). Teachers must have clear understandings of the subsequent curriculum and how it relates to the developmental education curriculum. Otherwise, they may give developmental students false security and preparation that may doom them to failure when they move into college-level work. One measure of a successful developmental education program is the success of the students in subsequent courses, data used by administrators and system evaluators as well. Moreover, teachers can also use this information as one gauge of their own teaching success. (Smittle, 2003, para. 26)

An example of maintaining high performance standards is given by Smittle in her reference to Wambach, Brothen, and Dikel (2000), believe it essential to “discuss the importance of students learning self-regulatory behaviors that help them take responsibility for their own actions and learning” (Smittle, para. 27) suggesting that self-regulation can only be cultivated when students are placed in demanding situations and learn to respond appropriately. Therefore, it seems only natural that instructors hold students to high standards of excellence and expectations (Smittle, 2003).

Some students, especially those who recently graduated from high school, may engage in behaviors that are disrespectful to teachers and other students. A major responsibility of classroom teachers is to maintain a good learning environment for the entire class; they should

not allow disrespectful behavior to disrupt this environment. (Smittle 2003, para.28).

Because the number of adult learners has increased sharply over the past decade both at universities as well as online, specific needs of these learners should be addressed. According to the Council for Adult and Experiential Learning (2000), a high degree of interaction should take place between the student and instructor using a variety of instructional strategies in order to provide successful learning. In addition, instructors who encourage provide opportunities for the student to work together with fellow adult learners reflect what occurs in real life working situations (Council for Adult and Experiential Learning, 2000). Whether it be in a brick and mortar setting or online, their latest survey in 2011 confirms it is productive for “faculty to use multiple methods of instruction (including experiential and problem-based methods) for adult learners in order to connect curricular concepts to useful knowledge and skills” (Council for Adult and Experiential Learning 2011, p.5).

Chickering and Ehrmann (1996) created a list of seven principles for use in online teaching. This list describes some of the most cost-effective and appropriate ways to use computers, video, and telecommunications technologies to advance the Seven Principles. The first principle encourages an increase in student to faculty and faculty to student interactions both in and out of the classroom. This can be interpreted to include online learning where sharing resources and solving joint technology problems strengthens both student and instructor commitment and generates a feeling of trust by the student. Showing genuine concern by the professor enables the student to get through tough periods that occur at some point almost every semester. Simply knowing a few professors personally improves the student’s commitment to their classes and encourages them to stay connected. It also gives them an alternative way to communicate through emails any personal issues and concerns that may be more difficult if asking for help or advice in person. Another point to consideration is online learning provides opportunities for interaction that does not occur when students must meet family or work obligations resulting in coming class late or leaving as soon as class has concluded. The biggest advantage for online success is the time-delayed (asynchronous) communication and doing away with the traditional review of homework in class. The internet increases opportunities for students and faculty to interact through various forms from posting of forum discussions to email messaging, culminating in learning activity assignments being completed in a comfortable and safe environment where distance is no longer a barrier. “Total communication increases and, for many students, the result seems more intimate, protected, and convenient than the more intimidating demands of face-to-face communication with faculty” (Chickering & Ehrmann, para.8). The remaining principles include: student collaboration and a social experience, active learning, immediate and continuous feedback, time on task, high expectations, and differentiation strategies. Principles that are timeless are as important to the progress of students in an online environment today as in 1996 (Chickering & Ehrmann, 1996). Evaluation of the Seven Principles can be seen in a continuing three year effort of the Annenberg/CPB Project “to develop and share evaluation procedures that any campus can use to monitor the usefulness of technology” (Chickering & Ehrmann, para. 30).

Research conducted by Carnegie Mellon University in 2002 includes the following best practices by instructors to engage under-prepared students in their first year of college. These practices included the need for instructors to change their view of student expectations as they transition from a very structured high school system with student-instructor personal relationships and living at home to more independent living, creating and keeping their own schedules; adapting and modify faculty expectations of instruction to fit the maturity level of their students; being aware that making oneself accessible to students increases the chance of student success in their course; developing instructor teaching skills to improve student learning in large lecture settings; increasing student attendance to their class by being proactive and attentive; engaging students in an active and meaningful learning

environment; and using strategies in order to help students succeed by becoming more responsible for their own learning (Ambrose & Freeland, 1997).

Another very important factor to consider is the purpose of the Family Educational Rights and Privacy Act (FERPA). It was written to protect the privacy of student and parent information by defining protected information and providing process for violations. Faculty members must be aware and know what information can be included in a student's educational records, what information can be shared with parents, and to whom FERPA rights apply (Family Educational Rights and Privacy Act, 2011).

In addition to the more generalized best practices listed above, a more content-specific, in-depth approach is required for the various courses with the largest number of first-year college students. English/Language Arts undergraduate learners need to have some say in choosing reading materials; they need to be exposed to a wide collection of literature; faculty need to model and talk about the processes they utilize when either reading literature or writing; develop real world purposes in writing assignments, and study editing in context (Ambrose & Freeland, 1997).

Best Practices in Developmental Mathematics developed by the Mathematics Special Professional Interest Network National Association for Developmental Education has several essays written by various authors. According to Tobias (1987), there is a misfit between the instructor's teaching styles and the majority of students who are not "math minded." Tobias suggested that students need to be given choice and be given different strategies for solving problems. Bakal (2003) suggested a constructivist approach. According to Clark (2003), giving students extra time to learn concepts and assessing with no time limits helped to ease math anxiety. As in the global best practices above, hands-on learning and interactive multimedia were espoused as best practices (Mathematics Special Professional Interest Network National Association for Developmental Education, 2002).

Zemelman, Daniels & Hyde (1998) listed eleven best practices in science. They write that students need various opportunities to explore the significance of science in their lives. The study of science should involve actually doing science, which means, doing experiments in the classroom setting, looking closely at what is happening and question in order to discover the mysteries of science. Science classes such include effective hands-on inquiry which involves a series of steps that builds students' investigative skills to include questioning, observation, organizing data, explanation, reflection, and taking action often referred to as the scientific method of study. Meaningful science study should aim to develop thinking, problem solving, and stimulate attitudes of curiosity including a healthy skepticism of theory. This allows the student to question and permits a risk free environment where modifying and adjust explanations is common place. Science education should build a knowledge base that is focused on the vary essential concepts instead of trying to teach too many disconnected topics with little in depth information. Students should be free to explore fewer topics in depth, rush through concepts superficially. Students' inquisitive nature should question misconceptions and naive theories and then thoughtfully engage in investigation resulting in discovery. Learning science also means integrating the study of science with reading, writing, speaking, and math skills so that students understand the value of each within the discipline. Students need to be taught to consider applications of science and technology as essential. Good science teaching involves facilitation by the instructor allowing multiple opportunities for collaboration with other students and professors and provides only limited yet judicious use of information giving. It also means there must be meaningful assessment of students' learning in science that promotes and not undermines the objectives of a good science (Zemelman, Daniels, & Hyde, (1998).

Ideas and best practices in Social Studies can be found in many state curriculum documents. The Wisconsin Department of Public Instruction lists the following best practices (2011) as: increase

in-depth study of topics or content by selecting the most important content, the most representative case studies, the most precedent setting events thus creating a deeper understanding and enabling students to learn the subject matter more readily, retain information, and apply learned skills and knowledge to their everyday lives; increase activities that engage students in inquiry and problem solving about significant human issues; increase student decision making and participation opportunities in school and in wider social, political, and economic affairs enabling students open opportunities to practice and participate, exhibiting skills necessary to become proficient in carrying out our democratic republican form of government; integrate social studies disciplines within other school activities and subject areas; enable elementary students to build on their prior knowledge from their experiences, television and the internet by providing content that moves beyond the traditional curriculum focus on solely family, neighborhood, and community; increase knowledge and awareness of global issues, ethnic groups and religious groups to help students understand the environment that surrounds them locally, nationally and internationally; use multiple kinds of authentic assessment throughout instruction to evaluate and assess student understandings and skills spotlight "what the student has learned" not on "what the teacher has taught"(Wisconsin Department of Public Instruction, 2011).

In order to share and promote the tenets of "best practices" included in this literature review, and to keep new and experienced faculty members informed and knowledgeable in the best ways to promote student learning, it is necessary to be proactive and provide continual professional development in an asynchronous and synchronous environment that encourages lifetime learning. Knowing these "best practices" are missing from many of our university and college classrooms, we have a moral and ethical responsibility as educators to teach in a manner that provides the best learning environment and provide the best learning opportunities for every student we teach. This can best be accomplished by developing a comprehensive professional development series that is easily accessible to all university professors, high school teachers with dual credit courses, as well as undergraduate and graduate teacher education students. The best way to share the above mentioned practices and principles is to incorporate them into professional development modules readily available for faculty. These research-based, best practices will contribute to and aid in the faculty's creation of a more active learning environment that is so essential to the improvement, the engagement, the retention, and ultimately the success of today's college students.

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