Self-Reflection on Undergraduate Teaching

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Abstract

This self-report study examines how undergraduate instructors at a northeastern college evaluate their classroom teaching. An evaluation form was developed to rank instructors' "professional" and "personal" teaching qualities. The data found that instructors view differently the value of "professional" qualities, such as subject knowledge or preparation, yet have a more balanced perspective of "personal" teaching qualities, such as respect or caring for their students. This self-reflective process may enable instructors to evaluate their pedagogical strengths and weaknesses in order to become interactive teachers.

Introduction

Since the early 1990s, many institutions of higher learning have been advocating that their faculties develop student-based classroom teaching practices to meet the diverse learning needs of students. How can instructors improve their teaching methods in order to meet these recommendations? The literature reveals that there are two challenges that teachers face. The first challenge is to successfully transition from the traditional teacher-centered model to the learner-centered model. Sauliner, Landry, & Wagner (2008) state that the teacher-centered model mainly focuses on how instructors present course content whereas the student-centered model emphasizes that students must be interactively involved in their own learning. Instead of transmitting information primarily by lecturing, instructors need to know how to involve their students in the learning process. This means that instructors need to possess the teaching qualities necessary to create a student-based learning environment, which includes questioning students, requiring them to solve problems, and engaging them in discussions to evaluate academic material. A primary goal of these student-centered activities is to motivate students to take responsibility for their own learning. Student-centered, rather than teacher-centered, learning is increasingly recognized as "an essential component of a faculty teaching position" (Polacheck, 2006, p. 61).

The second challenge to overcome is the reluctance on the part of faculty to learn student-based instructional practices. According to Bok (2007), many faculty members "ignore" basic pedagogical training and fail to recognize the importance of discussing classroom teaching practices with peers. Instructors' lack of interest in improving their teaching qualities is supported by Weimer's (2002) contention that many faculty members "pay a dismaying lack of scholarly, intellectual attention" (p.192) to their teaching practices. This may prevent many of them from making a smooth transition from lecturing to educating students in a student-centered environment.

Many instructors may know theoretical concepts of the pedagogical skills necessary to actively engage students in the learning process. However, they may be unable to apply course content in a manner that can stimulate students to become actively involved in discussing their ideas in the classroom. Faculty need to develop those teaching practices which can make them effective in creating an interactive classroom environment.

Learner-centered teaching requires that faculty must know how to prepare, organize, and present subject matter in ways that students feel that they are respected and valued for their ideas and opinions. As Bok (2007) and Weimer (2002) suggest, many instructors tend to resist change necessary to develop innovative pedagogical practices; therefore, it becomes necessary for them to take deliberate steps to become more proactive. A way to accomplish this goal is to apply self-reflection techniques

which may enable instructors to evaluate their own effectiveness as teachers. When instructors critically examine their own teaching practices, they attain a deeper understanding of the specific areas of their professional and personal teaching qualities that need improvement. This metacognitive process can help them develop appropriate strategies for creating an interactive learning environment.

Research Question

The self-reflection process entailed in examining the ten qualities described on the Rank Order Evaluation of Effective Instructor Qualities Form (Appendix A), may be a way for instructors to meet the two challenges of learning interactive pedagogical practices. Although the ten professional and personal qualities on the evaluation form are independent of one another, they affect the ways students personally feel about what and how they are taught. Therefore, the study asks the question: What can undergraduate instructors learn about their pedagogical strengths and weaknesses when they evaluate their teaching qualities in order to meet students' learning needs in interactive classrooms?

Literature Review

How can instructors meet the first challenge of making a successful transition from the teacher-centered model to the student-centered model? Chickering & Gamson (1987) state that the way in which course material is taught is just as important as how it is learned. Although the teacher lecture method is the primary means of instruction in higher learning institutions, it is found to be less effective for promoting learning than the student-centered model. Barr & Tagg (1995) contend that when instructors spend too much time lecturing, it results in more student passivity. These authors find that lecturing is "increasingly recognized as ineffective" (p. 13) as opposed to the student-based methods of promoting interactive classrooms. Student-based learning is gradually replacing the predominate lecture method (Sauliner, Landry, & Wagner, 2008) and provides opportunities for students to improve their skills of critical thinking and reasoning. It also enables teachers and students to share personal feelings when they communicate (Arum & Roksa, 2011).

Grieve's (2010) study finds that pedagogical cognitive and affective qualities interrelate. When instructors apply cognitive or professional teaching qualities, they affect how students personally feel about them and what they teach. Weimer (2002) finds it is the Knowledge of the instructors that is conveyed to the students by the ways they teach the course material to students. Students are better able to build a knowledge-base when instructors apply interactive strategies to connect subject matter to students' personal feelings. This personal connection helps students become more motivated to think critically about course material. Careful Preparation/ Organization of subject matter is also an essential cognitive process to meet students' concerns about understanding what is taught. As instructors plan to teach their material, Bain's (2004) study finds that they must also think about how course content can be constructed to intellectually challenge students and how they should respond when students experience difficulty with complex concepts, problems, and questions. Since many students have different racial, ethnic, and cultural backgrounds, Banks (2006) describes that instructors' Presentation of subject matter must vary to meet their diverse learning needs. Furthermore, Henniger & Hurlbert (2006) argue that actively engaging students in small groups, having discussions on academic problems, and including role-playing activities help motivate students to take proactive roles in classrooms.

Although Feedback is also essential in classroom learning, how it is carried out by instructors can affect student dispositions. Helterbran (2008) finds that delayed Feedback can cause students to become angry at their professors; Hendry & Dean (2002) suggest that negative Feedback can discourage learning; and Weimer (2002) ascertains that constructive Feedback emphasizes performance and not the person. Constructive feedback by the instructor helps increase students' motivation to accomplish course-related assignments. The surveys of Abraham & Singeram (2016) found that during the classroom assessment process, teachers who provided concrete examples of students' strengths and weaknesses, as well as suggestions to improve academic performance, enabled students to appreciate their instructors. Finally, when instructors demonstrate their commitment to apply interactive pedagogical strategies, they show their students that they not only have high Expectations for themselves but expect their students to achieve course standards. Polachek (2006) states that instructors' Expectations help motivate students to believe that their instructors want them to succeed in the course.

Pedagogical personal qualities affect student perceptions of how they personally feel towards their instructors and the course material that they teach (Banner & Cannon, 1997). Instructors' Respect for students can influence them to be more interested in learning course material (Arnon & Reichel, 2007). In addition, the studies of Eimers, Braxton, & Bayer (2001) and Smith (2000) conclude that instructors' Focus, giving each student undivided attention to classroom concerns and problems, promotes the perception that instructors want to help them. Furthermore, Smith (2000) reports that Caring on the part of instructors indicates that they are supportive of their students and motivates students to become more proactive in the learning process. Furthermore, Heltherbran (2008) finds that when instructors are receptive to students asking questions about course objectives and requirements, they perceive these instructors as having the Open-mindedness to want them to succeed in their studies.

Finally, Ginsberg's (2007) study reveals that interactive Communication in the classroom promotes higher levels of student learning because it shows concern on the part of instructors to connect to the personal needs of their students.

The second challenge for instructors to overcome is their reluctance to be trained in learner-centered teaching practices. Although historical events and interventions of public agencies and educational organizations have influenced leaders of higher education to urge faculty to learn interactive teaching skills, not enough has been achieved. Ouellet (2010) states that the Students Rights Movement of the 1960s and early 1970s played an important role in persuading faculty to become more responsive to their experiences, concerns, and aspirations in the classroom. In addition, Brint (2011) finds that federal and state governments, professional educational organizations, such as the American Association of State Colleges and Universities, and regional accreditation bodies, require faculty to document evidence of how their teaching practices engage students in classroom learning. Furthermore, in response to the accountability standards of public and professional organizations, Border & von Hoene (2010) suggest that since the 1980s, institutions of higher learning established a variety of programs to improve the pedagogical practices of their faculty. Examples of these programs, which began in the 1980s, could be found at the University of California-Santa Barbara, where graduate students with future careers in teaching, learned to design and implement curriculum. Another program, at the graduate school of the University of California-Berkeley, provide for senior faculty to enhance their pedagogical skills by mentoring those graduate students who are preparing to teach in institutions of higher learning.

Although there have been efforts to encourage faculty to learn interactive teaching practices, progress of these teaching programs has been limited. Border & von Heune (2010) further suggest that future faculty still need to learn student-based teaching skills, such as knowing how to prepare and present lesson plans, conduct small group activities, and facilitate teacher-student discussions of course content. Why has progress been so slow? There are three possible explanations. First, as Diamond (2005) argues, many faculty members resist teaching innovations because they are satisfied with institutional policies which reward their aspirations to be promoted and given tenure. They want to maintain institutional and classroom practices as they currently exist. Second, as Weimer (2002) states, when instructors shift some of their classroom power to students, they feel their authority is threatened. In an updated edition, Weimer (2013), reviewed several surveys which found many undergraduate instructors continue to rely on the traditional lecture approach. These instructors believed many students lacked the motivation to be involved in activities requiring initiative, preventing them from taking responsibility for their own learning. Finally, Bok (2007) finds that the publication of faculty research enhances the faculty's institutional reputation and their institutions' national ranking more than being recognized for teaching excellence.

The literature reveals that one way for instructors to meet the challenges of transitioning effectively to student-centered learning and overcoming their reluctance to acquire student-based teaching practices is to have them reflect on their classroom teaching qualities. Although the American Psychological Association (APA) (1997) principles of learning are written for students, these concepts are also applicable to teachers. When instructors apply APA principles to evaluate the quality of their teaching practices, they can achieve a more meaningful understanding of their strengths and weaknesses. In addition, the National Council for Accreditation of Teacher Education (NCATE) (2002) establishes that the application of self-reflective skills enables faculty to more effectively solve problems occurring in their instructional practices. Furthermore, Polachek (2006) suggests that as instructors inquire about the ways they teach, they can determine which knowledge and skills are required to improve their teaching practices. Finally, Weimer (2002) states that when instructors self-reflect on their teaching qualities, they can acquire more accurate and complete knowledge of how their practices impact student learning. This metacognitive process allows instructors to challenge their assumptions of whether one teaching method is better than another or which method is needed to motivate students to be more actively involved in the learning process. Although McAlpine & Weston, (2002) find that there are teachers who refuse to change their teaching or fail to value self-reflection as a way to improve their pedagogical practices, Sullivan & Rosin (2008) propose this valuable reflective process should be a part of this century's educational agenda for faculty training in institutions of higher learning.

Procedure

Ten qualities for effective teaching are selected from research studies. The researchers present these teaching qualities into two categories: five Instructor Professional Qualities and five Instructor Personal Qualities. These qualities are listed on a researcher-designed Rank Order Evaluation Form. During a faculty development workshop, thirty seven undergraduate instructors from various academic disciplines volunteered to rank their preferences of these ten teaching qualities. For example, the qualities in Category A included Knowledge, Presentation, Preparation/Organization, Expectations, and Feedback. The same procedure is followed for the five personal qualities listed in Category B from the lowest to highest values. The combined qualities of both categories are arranged from the lowest to highest values. The Evaluation form also directs instructors to write an explanation for their choices. Finally, respondents are required to provide reasons for their choice of the category they believe to be more effective for their teaching.

The data from the evaluation forms are tabulated based on the individual frequencies for these teaching qualities and their corresponding assigned values for both categories A and B. For example, for the five teaching qualities of Category A, the total value of 120 is assigned for the quality Knowledge and is determined by counting the tallies of the corresponding values. Since there are 17 occurrences for the highest assigned value of 5, 5 occurrences for the value of 4, 3 occurrences for the value of 3, 3 occurrences for the value of 2, and zero occurrences for the value of 1, the total value of these frequency outcomes is 120. The same scoring method is used for the remaining nine teaching qualities.

Results

Based on our sample of the 28 respondents (9 incomplete response forms are excluded), the assigned scores and percentages for each of the five professional and the five personal teaching qualities are as follows: The total scores and percentages of the corresponding professional qualities in Category A are represented by a bar graph (Figure 1). The highest rank score, for the professional quality Knowledge, is 120 (29 percent), followed by Preparation /Organization 110 (26 percent), Presentation 73 (17 percent), Expectations 73 (17 percent), and the lowest score for the quality Feedback is 44 (11 percent). In Category B, the total scores and percentages for the corresponding five personal qualities are represented in a second bar graph (Figure 2). The highest rank order score, for the quality Respect, is 91 (22 percent), followed by Focus 89 (21 percent), Caring 86 (20 percent), Communication 82 (20 percent), and the lowest score, for the quality Open-mindedness, is 72 (18 percent).

In Figure 3, the ten teaching qualities including both categories are presented in rank order. The two highest professional values are Knowledge and Presentation/Organization, followed by the four personal qualities of Respect, Focus, Caring, and Communication. The next two qualities are the professional qualities Expectations and Presentation, followed by the personal quality of Open-mindedness. Finally, the lowest ranked value is the professional quality Feedback.

The 28 respondents displayed in Figure 4 are asked to decide whether the teaching qualities in Category A are more important than those in Category B. It is found that ten respondents prefer Category A, for instructors must have "sound and deep knowledge of the subject," while ten others believe that Category B is more important. One respondent indicates that personal qualities are the most valuable "because if it was all about professional qualities we could assign a textbook." Furthermore, seven respondents are unable to decide which of the two categories is more valuable, as evidenced by one respondent who states that "professional qualities are essential, but without personal motivation, the class will not thrive and meet its goals." One respondent does not express any opinion on this topic.

Limitations of the Study

There are two limitations in this study. One is the small sampling of 28 participants, which makes it difficult to generalize to similar populations. The second focuses on only ten research-based qualities that are found to characterize effective instructors. For example, Heltherbran's (2008) study finds that there are professors who have the professional teaching quality to challenge their students and the personal teaching quality of having a sense of humor during instruction. Therefore, caution is necessary when generalizations are made when evaluating the teaching qualities of both categories.

Discussion

There are three findings from this study and the related literature that may help faculty become more aware of the importance of their professional and personal teaching qualities in order to meet students' learning needs and facilitate interactive instruction.

1. Three fundamental qualities of teaching

Why are there such wide score differences between the teaching qualities Knowledge and Preparation/Organization as compared to Feedback in Figure 1? One explanation may be that the written responses on the Rank Order Evaluation Form (Appendix A) provide the reasoning for respondents' choices in the rankings of the five teaching qualities. Of the 28 respondents 21 gave written justifications for each of the five teaching qualities. On the one hand, 18 of the respondents indicate that they understand the importance of instructor Knowledge and 17 indicate that they are aware of the significance of Preparation/Organization during instruction. For example, respondents write that instructor Knowledge reassures their students that "their instructors know what the course is about" and the quality of Preparation/Organization helps students know that their course is "systematically organized." Another possible explanation why most respondents highly value the teaching qualities Knowledge and Preparation/Organization is that their experiences as undergraduate and graduate students and

presently classroom teachers allow them to recognize the importance of instructor expertise and ability to effectively plan the course material. On the other hand, five respondents give the importance of Feedback as a valuable instructional practice which helps "teachers to implement necessary changes," whereas 14 respondents indicate this teaching practice in a general sense which tells instructors "how well students are doing."

Formal pedagogical training could enable respondents know that Chickering & Gamson (1987) describes Feedback as one of the core seven principles of learning. Moreover, this training may direct respondents to gain insight into the multiple options when Feedback is used. Feedback has the potential to improve teaching practices and promote student learning. Instructors inform students of their course progress in 3 concrete ways: what specific academic knowledge, skills, and dispositions are performed effectively, ineffectively, and the areas which need improvement. Based on the responses of their students, instructors can continue, add, or modify their necessary teaching practices to accommodate students' learning needs. Specifically, students expect their instructors to provide accurate evaluation, citing strengths, weaknesses, and recommendations for improvement on their assigned activities, research papers, and tests. Feedback from instructors can serve as a means for students to value teacher expertise which promotes teacher-student interactions forming the basis for student-based classrooms.

In Figure 1, Presentation and Expectations also have much lower scores than Knowledge and Preparation/Organization. This may be the result of a lack of expertise with how these two qualities are practical during instruction as opposed to the highly valued qualities of Knowledge and Preparation/Organization. While 11 respondents do not recognize the importance of Presentation, stating it "is based on the theory of multiple intelligence," and "may not be possible due to time constraints," there are six who clearly state this quality as adding "excitement" and "flexibility" to the teaching process. In addition, 12 respondents also have a limited understanding of Expectations writing that it is "helpful for students to know and helps learning" while six have a broader view that it "reduces confusion" and "helps students understand the specific goals of the course." Formal pedagogical training may enable respondents to recognize these two teaching qualities as necessary for interactive teaching. For instance, respondents can learn from Helterbrand (2008) that those instructors who only rely on lecture notes or PowerPoint presentations are "criticized" by students for they appear too dependent on these methods which are unable to promote students in engaging ways. Moreover, respondents can also learn from Polacheck (2006) that teachers must state their Expectations of what students must do to succeed, such as engaging in debate, asking probing questions and think critically about the course material. Instructors may perceive that their Knowledge and Organization of course material are important; however, their students may believe that expertise and organizational qualities are not as important if course requirements are not clarified and there is a lack of interactive ways to engage students during the learning process.

2. Interactions between Professional and Personal Teaching Qualities
When all the teaching qualities of the two categories are combined in Figure 3, respondents can gain a more comprehensive overview of how Grieve's (2010) finding that cognitive and affective teaching qualities interact during instruction. The personal quality Open-mindedness is assigned the lowest score of the five personal qualities according to the perceptions of respondents. The responses of the participants indicate there is no clear understanding of what is meant by this teaching quality. Ten respondents answer with vague generalizations of the meaning of Open-mindedness, such as "it aides in the overall classroom wellness" and "students need to know help is available." However, five respondents view this quality as meaningful for instruction since it "helps students develop autonomy in the learning process." Essential pedagogical training can enable respondents to have a better understanding of how Open-mindedness can help teachers to interact with their students. For instance, respondents can learn from Helterbran's (2008) finding that students who believe that an instructor "does not care what students think and doesn't stop to ask" (p. 133) is unconcerned about helping them with their academic work. Instructors, who are unreceptive to students' ideas and opinions, may find that students devalue their expertise. These types of instructors may cause students to lose interest in inquiring, challenging, and discussing the subject matter presented. However, when instructors encourage students to become inquisitive, is an indication of their command of academic material. Students who are encouraged to actively participate in the learning process, have more opportunities to advance their academic knowledge and skills. Kopelman & Vayndorf's (2015) study found that students who are challenged to explain their ideas during class discussion, analyze and evaluate course material, and engage in problem-solving activities, improve their understanding of course content and critical thinking skills. Students who are encouraged to actively participate in the learning process, have more opportunities to improve their academic knowledge and skills. Kopelman & Vayndorf's (2015) survey study found that undergraduate instructors who challenge students to explain their ideas during class discussion, analyze and evaluate course material, and engage in problem-solving activities, improve their students' understanding of course content and critical thinking skills. Open-mindedness interacts with Knowledge helping to build student-centered classrooms.

3. Self-Reflection as a means to evaluate teaching practices
Two additional questions arise when examining Figures 2 and 4. Why are the assigned scores of the four personal teaching qualities in Figure 2 almost equal? Why do study participants assign equal values to the two professional and personal teaching categories in Figure 4? A possible explanation for both questions may be that respondents commonly use the four personal qualities Respect, Focus, Caring, and Communication as well as terms "professional" and "personal" in daily interactions with family, friends, colleagues, and students. Moreover, this familiarity is seen in participants' written responses, such as "class should be a dialogue, not a monologue" and "you get respect, when you give respect." Finally, many participants identify with the general categories of "professional" and "personal" because they are terms that are applied in everyday interactions between students and colleagues. Perhaps this explains why seven respondents considered both professional and personal categories "interdependent" while 20 participants assign equal values to both categories.

When instructors of this study think about responding to the aforementioned questions, they are determining what teaching qualities they perceive to be important for instruction. They are examining and challenging their own assumptions of the relative strengths and weaknesses of their own practices. Can this self-reflection process improve pedagogy? This metacognitive process helps instructor to analyze and evaluate their practices and the teaching qualities they must acquire to be more effective in the classroom. Sellheim & Weddle's survey (2015) found that instructor self-reflection promotes pedagogical effectiveness. The authors stated many undergraduate faculty members reported that the reflection process enabled them to prepare course syllabi more effectively; incorporate more relevant content material into the curriculum; and examine their pedagogical practices in order to teach more successfully. When instructors examine their own pedagogical practices, it may help them to develop a more in-depth and comprehensive understanding of how to build interactive learning environments.

Although respondents may discover what instructional practices need improvement, McAlpine & Weston (2002) find that successful self-reflection requires additional steps. After instructors realize what teaching practices need change, it is necessary for them to know how to make and implement these changes during instruction. This meaningful insight suggests that there must be ongoing professional development to potentially benefit from the self-reflection process.

Conclusion

What can be learned when undergraduate instructors reflect on their professional and personal teaching practices? The increasing importance of learner-centered instruction in undergraduate education makes it essential that instructors take the steps necessary to learn interactive teaching practices. The self-reflective process applied to the rank order evaluation form provides opportunities for instructors from many academic disciplines to not only think of cognitive and affective qualities in categorical terms, but also to become aware of those individual pedagogical practices within both categories. For example, instructors became aware that there is a disproportionate value placed on the pedagogical qualities of Knowledge and Preparation/Organization as compared to the quality of Feedback. This type of perception may enable instructors to further examine their pedagogical strengths and weaknesses. Since the literature finds that many instructors are reluctant to adapt student-based instructional practices, there is a need for further investigation through the self-reflective process so that instructors can make a successful transition to student-centered classrooms.

Endnotes
[1] This article updates and extends previous research completed in 2012 and published in Academic Exchange Quarterly titled Self-Reflection on Undergraduate Teaching by Max Kopelman & Markus Vayndorf.

[2] To examine four Figures and one Appendix see Winter 2012 issue
http://rapidintellect.com/AEQweb/5208NEW.pdf

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