

Effective Instructor Feedback: Perceptions of Online Graduate Students

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Abstract

This descriptive study explored online graduate students' perceptions of effective instructor feedback. The objectives of the study were to determine the students' perceptions of the content of effective instructor feedback (“what should be included in effective feedback?”) and the process of effective instructor feedback (“how should effective feedback be provided?”). The participants were students completing health-related graduate courses offered exclusively online. Data were collected via a survey that included open ended questions inviting participants to share their perspectives regarding effective online instructor feedback. Thematic analysis revealed five major themes: student involvement/individualization, gentle guidance, being positively constructive, timeliness and future orientation. We conclude that effective instructor feedback has positive outcomes for the students. Future studies are warranted to investigate strategies to make feedback a mutual process between instructor and student that supports an effective feedback cycle.

Keywords: Online teaching; Instructor feedback; Graduate education; Computer assisted learning; Computer assisted instruction

Introduction

Online education is a viable option for many students and an increasing number of courses are being offered over the Internet. Today, students and instructors often interact exclusively in online virtual learning environments. One challenge that online educators face is providing effective feedback to students with whom they interact only via online technologies. Although we know from the literature that timely, constructive feedback is valued by students who study via the Internet (Mancuso-Murphy, 2007), there is little research that describes “what” feedback is useful (content of feedback) and “how” useful feedback is given (process or style of giving feedback) in an online learning environment, particularly from students’ perspectives.

This study is one component of a program of research focused on elements of exemplary online education. Initial studies examined students' perspectives of the qualities that make an online educator exceptional (Perry & Edwards, 2005) and students' experiences with selected online teaching technologies (Perry & Edwards, 2006). From these studies, and from other literature described below, it is evident that feedback given to students by their instructors is an important component of providing an exemplary online education experience. Yet there is little research focused on the key content and process aspects of providing effective feedback to students who study at a distance. The goal of this project was to determine students' perspectives of the content and processes of effective instructor feedback in an online course. This study on feedback was designed as one more element to achieving a fuller understanding of the exemplary online teaching and learning experience.

Conceptual Framework

This descriptive study was guided by the Community of Inquiry (COI) framework of Garrison, Anderson and Archer (2000). The COI framework highlights three major dimensions of the online learning environment that overlap to form the educational experience of the student: social presence (interpersonal connection), cognitive presence (construction of meaning through communication) and teaching presence (facilitation of active learning).

As Anderson (2008) writes, “no element of course design concerns students in a formal educational context more [than] assessment” (p. 351) and direct communication and feedback

from instructor to learner about such assessment is an integral aspect of the role of an online instructor. The provision of feedback from instructor to student is part of the teaching presence dimension of the COI framework (Anderson, Rourke, Garrison & Archer, 2001; Garrison, Anderson & Archer, 2000). The component of teaching presence known as “direct instruction” includes assessment of the effectiveness of the learning process and provision of constructive, critical explanatory feedback that allows students to understand their mistakes and clarify and expand their ideas, not only within the conference discourses of the class community but also through individualized feedback between instructor and learner (Garrison, Anderson & Archer, 2000; Arbaugh & Hwang, 2006). Reported measures of teaching presence in the COI framework consistently include an item related to the provision of feedback that supports learning (Arbaugh, 2008; Arbaugh & Hwang, 2006; Arbaugh et al., 2008; Shea, Li & Pickett, 2006).

For the purpose of this study, feedback was defined as information provided from instructors to students about course activities in which students were engaged, including written assignments, conference postings and course interactions. Feedback included both objectivist, product-oriented information (for example, comments provided following evaluation of written assignments) and constructivist, process-oriented information (for example, suggestions to improve the content of online conference postings) (Hummel, 2006). The specific focus of this study was on the content (the information about the student's performance of the course activity) and the process (the technique of communicating the information) elements of instructor feedback that the students considered effective.

Literature Review

Much research over the past decades has documented the importance of effective feedback in supporting learning (Bangert, 2004; Carless, 2006; Nicol & Macfarlane-Dick, 2006). In their classic article discussing seven principles for good practice in undergraduate education, Chickering and Gamson (1987) identified the centrality of feedback to learning and improving performance in face-to-face, classroom learning situations. In describing the criterion “gives prompt feedback” (later amended to “incorporates assessment and prompt feedback” [Chickering & Gamson, 1999]), Chickering and Gamson wrote that feedback allows students to assess existing knowledge, reflect on what they have learned and what they still need to learn, and

receive suggestions for improvement of future work. Two recent meta-analyses of studies of classroom-based assessment, feedback and learning have supported the importance of feedback, documenting that effective feedback leads to gains in student learning (Black & Wiliam, 1998; Hattie & Jager, 1998), and recent research has revealed that, although they may experience difficulties accurately interpreting instructor feedback on their written assignments, learners in face-to-face environments attend to instructor feedback and desire feedback that highlights the strengths and weaknesses in their assignments and guides improvements in later assignments (Carless, 2006; Higgins, Hartley & Skelton, 2002). However, despite the significance of written feedback from instructor to student, this type of feedback is relatively under-researched, particularly from the students' perspectives (Higgins, Hartley & Skelton, 2002).

It is possible that these aspects of feedback are as important to online students and to students in graduate programs as they are to students in face-to-face undergraduate programs. In his study of graduate online learners, Wolsey (2008) determined that learners found “complex affirmations” (p. 318) that provided explanatory feedback very useful, and identified the importance of a respectful, personalized “instructor stance” (p. 320) to the provision of effective feedback. It should be noted, however, that Wolsey's study was limited to students in courses of which he was the sole instructor and Wolsey has recommended larger studies inclusive of broader online instructional approaches. In another study of online graduate students in MBA programs, Arbaugh and Hornik (2006) found that prompt feedback was a significant predictor of student-perceived learning and satisfaction. However, some forms of feedback that are useful in face-to-face interaction are difficult or impossible in asynchronous online environments, such as informal discussions after a classroom session, questions asked and answered as an assignment is being explained and non-verbal communication that complements verbal responses such as body language and facial expressions. In addition, feedback in online courses rarely occurs in real time, with gaps between student performance and instructor response. These features may make it even more important to learning that written instructor feedback in online classes be as effective as possible (Wolsey, 2008).

Several authors of research studies and “best practice” syntheses have identified the importance of feedback and suggested that feedback be prompt, timely, regular, supportive, constructive,

meaningful, non-threatening and helpful (Atack, 2003; Grandzol & Grandzol, 2006; Huckstadt & Hayes, 2005; Institute for Higher Education Policy, 2000; Mancuso-Murphy, 2007; Seiler & Billings, 2004; Smith, 2005; Swan, 2004). However, despite these exhortations to provide feedback of this nature and "although extensive research has been carried out into feedback's role in education yielding many theoretical models, procedures and guidelines for actually designing and implementing feedback in educational practice have remained scarce" (Hummel, 2006, p. 2). That such guidelines are needed may be indicated by studies showing that some students have difficulty correctly interpreting instructor feedback, in part because the language used by instructors when constructing feedback is unfamiliar or unclear (Carless, 2006; Higgins, 2000; Higgins, Hartley & Skelton, 2001, 2002).

In summary, although there is some research supporting that instructor feedback is important to online graduate students, there is little written about how to provide effective instructor feedback in the online environment. Further, there is a lack of research of students' perceptions of the effectiveness of feedback as an online teaching strategy. This study looking at graduate students' perceptions of effective online instructor feedback sought to fill those gaps in our understanding of exemplary online education.

Methodology

This was a descriptive, exploratory study designed to generate a description of graduate students' perceptions of the content and processes of effective instructor feedback. The study design and instruments received approval from the university's research ethics board.

To enhance the credibility of the findings and interpretations, the study made use of investigator and method triangulation. Investigator triangulation involves using more than one researcher to collect and analyze data and confirm findings (Thurmond, 2001). In this study, investigator triangulation was accomplished through a team approach involving multiple investigators and intra-team communication to decrease the potential of bias in gathering and analyzing data. The team consisted of four educators experienced in the delivery of online courses to graduate students in health disciplines and a research assistant who was a senior graduate student at the

university. Each member of the team was involved in development of the design of the study and the questionnaire used in the study as well as analysis of the data that were generated in the study.

The team used method triangulation to obtain different perspectives of the students' perceptions of feedback (Thurmond, 2001). Data were collected via a questionnaire that included both quantitative measures (a Likert scale) and qualitative measures (written statements of the participants' perspectives) (see Appendix A.). The Likert scale provided measures of the relative importance of characteristics of feedback and the written statements provided subjective data about the students' experiences of receiving feedback.

To develop the Likert scale, the primary investigator first reviewed literature and research to identify terms/phrases associated with the provision of feedback. One hundred terms/phrases were identified. Terms/phrases that conveyed the same meaning (for example, corrective, error correction and verification of correct response) were consolidated and then the terms/phrases that appeared most frequently in the literature were selected to create a list of 46 possible items to be included on the questionnaire. These items were independently ranked in importance by the four faculty team members and the 20 items that received the highest overall rankings were included in the final Likert scale. The Likert scale was a 6-response scale ranging from completely disagree to completely agree and participants were asked to indicate the extent to which they agreed/disagreed that the item was important to effective feedback.

In addition to completing the Likert scale, participants were asked to write out a definition of items in their own words. Finally, to extend the possibilities of what literature or experience suggested was important, participants were asked to write a response to the following open-ended prompt: "Please share your general perspectives about the content and processes of effective instructor feedback." This article reports on the analysis of these qualitative measures.

The study participants were 30 students enrolled in either a Master of Nursing or Master of Health Studies program at a distance university offering the programs exclusively through online delivery. In order to include participants with differing experiences with instructor feedback,

participants were recruited from eight graduate courses representative of each of the graduate programs and inclusive of students both new to and more experienced in the programs. The participants ranged in age from 26 to 56 years, with a mean of 42 years, and all but one of the participants were female. Thirteen participants (43%) were enrolled in the Master of Health Studies program, 16 participants (53%) were enrolled in the Master of Nursing program and one participant identified that he/she was completed the course as a non-program student. The participants had been in the program for between one and four years, had completed between one and 10 courses (with a mean of four courses) and were currently registered in between one and four courses.

Subsequent to receipt of their official grades for courses completed during one four-month semester, participants were contacted by the principal investigator via email and invited to participate in the study. The study was explained to them fully and they were asked to return a completed consent form with an electronic signature if they wished to participate in the study. With the invitation to participate, potential participants received via email the survey described above. The surveys were returned to the principal investigator, any identifying information (such as the course number or instructor name) included in the responses was removed, and the responses were compiled into one document by the research assistant. This document was provided to each member of the research team for analysis.

The qualitative responses were analyzed using the process of “thematizing” (Mitchell & Jones, 2004) in which categories/themes in the data emerged through an iterative process of reading and re-reading the responses. Themes were initially identified independently by each member of the research team, using three criteria (Owen, 1984). The first criterion was recurrence of ideas within the data set, that is, ideas with the same meaning but different wording. For example, responses that feedback should help students “identify areas of further growth required in a topic” and “decide on improvements for the future” led to the development of a theme of “future orientation.” The second criterion was repetition, the existence of the same ideas using the same wording. An example of repetition was the repeated use of the descriptor “positive” that led to development of a theme about the positive nature of effective feedback. The final criterion was forcefulness, in which the importance of a response was reinforced by the emphatic tone of the

response or the use of quotation marks, underlining, italics or bolding to provide emphasis. Forceful responses (for example, “I think this is unacceptable” or “I want to highlight”) lent support to the decision to create a theme about the topic being discussed.

Following the development of themes by each individual researcher, a teleconference of the research team was held to compare the independent thematic analyses, discover commonalities in the analyses, and collapse themes. This “collaborative analysis” or “peer checking” amongst the research team is an appropriate strategy to enhance the trustworthiness of the analysis of qualitative data (Ely, 1991; Lincoln & Guba, 1985; van Manen, 1997). As a result of the team discussions, five major themes were identified and those are discussed next.

Results: What Constitutes Effective Instructor Feedback?

Thematic analysis revealed five major themes: student involvement/individualization, gentle guidance, being positively constructive, timeliness and future orientation. The themes are summarized in Table 1 and discussed below, illustrated by verbatim comments taken from the research data. In keeping with requirements of the ethical approval, all identifiers have been removed from the participants’ comments.

Table 1: Summary of Themes of Effective Instructor Feedback

Theme	Summary
Student Involvement and Individuation	Effective feedback is a mutual process involving both student and instructor.
Being Positively Constructive	Effective feedback provides constructive guidance that builds confidence.
Gentle Guidance	Effective feedback guides through explicit expectations and ongoing coaching.
Timeliness	Timelines for effective feedback are mutually established and met.
Future Orientation	Effective feedback is applicable to future situations.

It should be noted that, although the team set out to discover distinct process and content elements of effective feedback, the interconnection of these elements became apparent through the process of thematic analysis. For example, the theme “student involvement/individualization” involved both the process of giving feedback (in this case, providing feedback in a personalized manner) and the content of feedback (in this case, feedback that is specific to the student). Because of this overlap between process and content elements, the themes are reported under one title, *effective instructor feedback*.

As well, as the analysis evolved the team discovered that the outcomes of effective feedback were interwoven with the process and content elements. For example, the theme of future orientation included the responses “identifying strategies for future learning,” a content element, and “deciding on improvements for the future” which was both a content element (improvements that were needed) and an outcome of effective feedback (as a result of the feedback, the student decided on needed improvements).

Finally, although the participants were enrolled in one of two programs (Master of Health Studies or Master of Nursing), the courses were blended and included students from both programs. Instructors in the selected courses provided feedback to students from both programs. Given that and considering the relatively small numbers of participants from each program, we did not attempt to compare the experiences of students across the two programs. Results from students in both programs were combined to elicit an overall picture of the experiences of graduate students.

Student Involvement/Individualization

Participants viewed effective feedback as a mutual process that ideally included input from the student as well as substantive contributions from the instructor. A feedback plan that involved students from the beginning of a course was noted as desirable. The students envisioned that, for feedback to be most useful, they should be consulted by the instructor to determine what feedback they would find most useful. Participants indicated that they knew best their own learning goals and areas for improvement and having an instructor who was interested in individualizing the feedback process to address their specific concerns or areas of weakness

made the feedback more meaningful. For example, students characterized effective instructor feedback as “unique to me,” “specific to the learner,” “just for/about me,” “tailor made to what I said or submitted,” “customized,” and “not a cookie cutter approach.”

The participants recommended strategies that could be used by instructors to achieve the individualization of feedback. One student recommended creating “personalized messages that demonstrated to the learner that the students’ works had been read and evaluated.” Another suggested that online instructors should “use [the student’s] name and use examples which reflected the learner’s situation or contributions.” One student commented that she wanted to “determine [her] own learning plan” which would include identified topic areas around which instructor feedback should be focused. A participant reported that individualized feedback must be a private conversation between the student and the instructor and that individualized feedback “did not belong in a public forum.”

Participants in the study saw effective feedback not as a top-down process with an instructor in control of determining those aspects of the student’s learning on which feedback would focus, in isolation from the student. Rather, student participants saw feedback as a mutual process with both the instructor and the student coming to agreement early in a course regarding the feedback foci for that individual. Such a plan would necessitate that feedback provided was individualized and specific to the learning needs of each student. In some ways the feedback model recommended by the study participants was “bottom-up” with students having much of the control, at least over determining those aspects of their performance that would be assessed.

Gentle Guidance

The theme of gentle guidance had two facets. The first facet was that of guiding by making expectations of the course explicit and providing comparators that students could use to evaluate their progress in the course. Comments such as “provided clear ground rules” or “clearly stated expectations and choices” and “[told me] how I was doing in regards to the set expectations” or “[told me] how I was doing in comparison to my colleagues” illustrated this aspect of guiding.

The second aspect related to gently guiding or coaching students as they navigated their way

through course activities. Phrases such as “kept the flow of the posts...[going] in the right direction,” or “moved the process or pointed it into a different direction,” and “steered the course” gave indication that the study participants saw effective instructor feedback as both helping to set the direction for the course and keeping them headed that way.

One participant indicated how instructors should enact gentle guidance. The participant suggested that instructors should “create a structure, loosely knit but with enough cement to let us see where (we) stand.” Another suggested that the online instructor should be “like a conductor in an orchestra” using feedback to lead the students through the course content.

Being Positively Constructive

Students acknowledged that they desired feedback from instructors that they found “supportive,” “positive,” “encouraging,” and “friendly.” Although they identified the important role that feedback played in correcting their errors and encouraging them to think critically and in new ways, they also recommended that truly effective feedback could accomplish this and still leave students with enhanced self-esteem. As students commented, it was important that feedback be provided “in a way that did not demean the effort of learning” or left them feeling “belittled.” Further, the participants acknowledged that at least at the beginning of their programs, they had feelings of “insecurity” and “self-doubt” regarding their ability to perform at the graduate level. Positively constructive feedback helped students to “feel safe” and “develop self-reliance.” Many participants noted that effective feedback from instructors that provided constructive guidance helped them to gain confidence and to ultimately perform at even higher levels than they had hoped. In essence, this type of feedback was motivating or, as one participant said, it provided the “adrenaline for motivation.” One participant succinctly said, “positive phrases were essential...to keep the struggling person feeling supported, especially with new technology in the online format.”

While suggesting that effective feedback should have a positive overtone, participants cautioned that being excessively positive without balance is not effective feedback: affirmative comments must be “authentic.” One very telling comment illustrates this: “I found that when an instructor was very positive without some item or area for improvement, I automatically thought there was

an ulterior motive. They just couldn't be bothered; they were trying to get me to like the method of instruction etc. I always look for ways to improve so I wanted feedback." Another participant wrote that "instructor feedback must demonstrate to me that my materials were read and actively evaluated."

Students suggested that small comments such as "you made a great point," "you are in the right direction," or "I liked your comment, can you elaborate further" were inspiring, encouraging and motivating. As one student commented, "there is something good in every situation that should be highlighted. Negative feedback should be provided in manageable chunks." The participants described kindly constructive feedback as "starting with the positive," "showing the positive and the negative and then suggesting ways of improving the negative," or, as one student wrote, using "the sandwich technique: some positive, some negative, and some more positive."

Timeliness

A very consistent theme throughout the student participant responses was the importance of the feedback being provided promptly. Phrases such as "within the recommended or suggested time frame," "reasonably promptly," "within a short timeframe," and "shortly after the assignment [was submitted]" gave an indication that students often were anxious to receive feedback from the instructors.

What students considered "prompt" varied. Some students thought a reasonable time period to wait for feedback was 24 hours or one to two days. Others were more generous, suggesting that they considered one to two weeks reasonable. It should be noted that the survey did not specify types of assignments and thus students might have had different promptness expectations for a conference posting than for a written assignment.

The data indicated that students believed it was important to know when they should expect feedback. Students suggested that guidelines or time frames for instructor response to submitted assignments should be established and mutually agreed upon. Once established, it was important that instructors met these expectations. As one student commented, "on target...or even ahead of schedule" would be best for the feedback to be optimally effective. Another noted that if an

instructor could not meet an agreed-upon timeline for feedback, then students wanted to be informed. She said, “if she [the instructor] was unable to communicate fully, she would say so and get back to me later. That was great. . . . If I had to wait for a full response at least I knew it was coming.”

Students gave reasons why prompt feedback was important. One noted that an expedient response to an assignment gave her “ample time to use the information. . . in a meaningful way.” She went further on this point, noting that prompt feedback gave her time to “process it and use it to prepare for another assignment.”

Future Orientation

Although the term feedback may suggest a “past” orientation with comments directed at course work already completed, the participants in the study identified that a major purpose of feedback was to assist them to look ahead. Students identified two dimensions of this future orientation, one related to their present course and program of study and another related to their lives outside of their studies.

With respect to the former, effective feedback prepared them for what was to come in the course. As one student commented, effective feedback “defined areas of needed growth.” Others noted that effective feedback helped to identify gaps in their knowledge and aided them in determining what they should focus on in their studies. This is illustrated in the comment that feedback helped the student “determine where to go to clarify areas of weakness and seek further information.”

The second aspect of the future orientation of feedback was determining how the feedback would be applicable to practical areas of the lives outside of their course work. One student commented that feedback helped her “integrate the new knowledge into [her] current frame of reference to see if and how it applied to [her] daily activities.” Others noted that feedback helped them apply theory to practical, clinical experiences and to situations in their work settings. Another noted that feedback was important in “considering how new concepts applied to. . . future thoughts, feelings and/or actions.”

Discussion

The results of this study confirm that effective feedback is a crucial aspect of the “direct instruction” component of teaching presence of online instructors, as described in the Community of Inquiry framework, and is important to online graduate students. As was the case for face-to-face students in the study of Higgins, Hartley and Skelton (2002), online students attended to the feedback received from instructors and desired feedback that would clarify strengths and weaknesses and point the direction to future improvements. As well, the feedback provided by instructors was seen to have aspects of the “design and organization” component of teaching presence, in which the instructor makes explicit the structure and expectations of the course (Garrison, 2007; Garrison & Arbaugh, 2007). Participants identified that an important characteristic of effective feedback is the clarification of timelines, expectations and ground rules for the course.

In addition, the results of this study confirm that students want to be able to use the feedback provided by instructors in two ways. First, and not surprisingly, students want to use feedback to make improvements in future assignments. This is consistent with discussions of feedback by Sadler (1989, 1998) which note that a key element of feedback is that it is acted upon to decrease the gap between actual student performance and the performance that is expected by the instructor. Secondly, students are interested in applying the feedback to practical situations in their daily lives. Application of knowledge to the real world is the final phase of a model of learning that underlies the COI framework, the Practical Inquiry Model (Garrison, 2007; Garrison & Arbaugh, 2007; Garrison, Anderson & Archer, 2000; Redmond & Lock, 2006). Research has revealed that it can be challenging to move students to the phase of application (Garrison, 2007; Garrison & Arbaugh, 2007) and that instructors can facilitate this through appropriate teaching presence. The students in this study suggested that effective instructor feedback can support students in reaching this phase of learning in which they apply their knowledge in practical situations.

The study expands on the concept of “instructor stance” discussed by Wolsey (2006) in his study of online graduate students. Wolsey described this stance as “respectful” and, although the

students in this study did not use that particular term, they did confirm other features of this stance discussed by Wolsey. In particular, they stated the importance of personalization of feedback: as noted by Wolsey, it is important for students that “the instructor notices and names what the students have done” (p. 320). Wolsey noted the importance of “simple affirmations” (p. 320) such as typing “yes” to indicate the student was on the right track. These students also noted the importance of brief and timely affirmations (for example, “That’s a good point.” Or “You are heading in the right direction.”) in supporting their confidence and motivation, particularly in the early courses of a graduate program. It appears that, depending on the skill of the instructor in providing feedback, students could come to view themselves as competent, capable learners or, alternatively, if the feedback was ineffective (or minimal), they could feel demeaned and belittled and begin to doubt their intellectual abilities. Literature supports this suggestion: Nicol and Macfarlane-Dick (2006) have noted that instructors can support students’ motivation and self esteem by praising student efforts and behaviors, while Higgins (2000) has described a “cycle of deprivation” in which, in response to negative or misinterpreted feedback, students begin to feel inadequate, withdraw from the learning situation and become less willing to engage with the course and instructor.

A striking finding from the study was the extent to which students identified that they viewed effective feedback as a mutual process. They wanted to be involved from the outset of the course in designing a feedback plan with the instructor that would identify the specific areas for feedback with respect to their learning goals and areas for improvement and that would include the setting of mutually agreeable timelines for feedback. This would, of course, involve a sharing of power between students and instructors that is not typical of feedback in higher education (Carless, 2006; Higgins, 2000; Miller, 2008; Sadler, 1998; Taras, 2002). As Nicol and Macfarlane-Dick (2006) have noted, feedback traditionally is largely controlled by the instructor in a one-way transmission of information from instructor to student, a process that fails to empower students for life-long self-assessment and learning.

Limitations and Areas for Further Research

This study was limited to a relatively small number of participants completing health-related graduate courses at one online university, and only one of the participants was not female. It would be premature to generalize these findings beyond this one study. However, future studies investigating the construction and provision/receipt of instructor feedback are warranted. Although this study did not include an assessment of the instructors' experiences with effective feedback, this study gives rise to the need for this follow-up investigation. In particular, investigation of strategies to make feedback a mutual process between instructor and student seems a particularly fruitful area for future research.

Conclusions

Recent literature has questioned a commonly held view that the online instructor should adopt a "guide by the side" approach to teaching. Anderson (2008) writes that such an approach diminishes the importance of the subject matter and pedagogical expertise of the instructor. This research suggests that at least some online graduate students benefit from the active participation of an instructor who includes in his/her teaching presence the provision of effective feedback.

The study identified five themes that could be the basis for the development of effective instructor feedback with online graduate students. Effective instructor feedback includes student involvement in a mutual feedback process to lead to individualization of feedback. Effective instructor feedback is perceived as gentle guidance and is offered in a positive, constructive and timely manner. Effective feedback moves students beyond reflection on what they have accomplished; it moves them forward by helping them to identify gaps in knowledge and goals and strategies for future learning, both in the course and in non-course activities in their lives.

References

- Anderson, T. (2008). Teaching in an online learning context. In T. Anderson (Ed.), *Theory and practice of online learning* (2nd ed., pp. 343-365). Athabasca, AB: Athabasca University Press.
- Anderson, T., Rourke, L., Garrison, D., & Archer, W. (2001). Assessing teaching presence in a computer conferencing context. *Journal of Asynchronous Learning Networks*, 5(2), 1-17.
- Arbaugh, J. (2008). Does the community of inquiry framework predict outcomes in online MBA courses? *International Review of Research in Open and Distance Learning*, 9(2).
- Arbaugh, J., Cleveland-Innes, M., Diaz, S., Garrison, D., Ice, P., Richardson, J., et al. (2008). Developing a community of inquiry instrument: Testing a measure of the Community of Inquiry framework using a multi-institutional sample. *Internet and Higher Education*, 11, 133-136.
- Arbaugh, J., & Hornik, S. (2006). Do Chickering and Gamson's seven principles also apply to online MBAs? *The Journal of Educators Online*, 3(2), 1-18.
- Arbaugh, J., & Hwang, A. (2006). Does "teaching presence" exist in online MBA courses? *Internet and Higher Education*, 9, 9-21.
- Atack, L. (2003). Becoming a web-based learner: Registered nurses' experiences. *Journal of Advanced Nursing*, 44(3), 289-297.
- Bangert, A. (2004). The seven principles of good practice: A framework for evaluating online teaching. *Internet and Higher Education*, 7, 217-232.
- Black, P., & William, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7-74.
- Carless, D. (2006). Differing perceptions in the feedback process. *Studies in Higher Education*, 31(2), 219-233.
- Chickering, A., & Gamson, Z. (1987). Seven principles for good practice in undergraduate education. *American Association for Higher Education Bulletin*, 39(7), 3-6.
- Chickering, A., & Gamson, Z. (1999). Development and adaptation of the seven principles for good practice in undergraduate education. *New Directions for Teaching and Learning*, 80, 75-81.
- Ely, M. (1991). *Doing qualitative research: Circles within circles*. London: Falmer Press.

- Garrison, D. (2007). Online community of inquiry review: Social, cognitive, and teaching presence issues. *Journal of Asynchronous Learning Networks*, 11(1), 161-172.
- Garrison, D., & Arbaugh, J. (2007). Researching the community of inquiry framework: Review, issues, and future directions. *Internet and Higher Education*, 10, 157-172.
- Garrison, D., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *Internet and Higher Education*, 2(2-3), 87-105.
- Grandzol, J., & Grandzol, C. (2006). Best practices for online business education. *International Review of Research in Open and Distance Learning*, 7(1), 1-18.
- Higgins, R. (2000). "Be more critical!": Rethinking assessment feedback. Paper presented at the British Educational Research Association Conference. Retrieved November 25, 2008 from <http://www.leeds.ac.uk/educol/documents/00001548.htm>.
- Hattie, J., & Jaeger, R. (1998). Assessment and classroom instruction: A deductive approach. *Assessment in Education: Principles, Policy & Practice*, 5(1), 111-122.
- Higgins, R., Hartley, P., & Skelton, A. (2001). Getting the message across: The problem of communicating assessment feedback. *Teaching in Higher Education*, 6(2), 269-274.
- Higgins, R., Hartley, P., & Skelton, A. (2002). The conscientious consumer: Reconsidering the role of assessment feedback in student learning. *Studies in Higher Education*, 27(1), 53-64.
- Huckstadt, A., & Hayes, K. (2005). Evaluation of interactive online courses for advanced practice nurses. *Journal of the American Academy of Nurse Practitioners*, 17(3), 85-89.
- Hummell, H. (2006). Feedback model to support designers of blended-learning courses. *International Review of Research in Open and Distance Learning*, 7(3), 1-16.
- Institute for Higher Education Policy. (2000). *Quality on the line: Benchmarks for success in internet-based distance education*. Washington, DC: Author.
- Mancuso-Murphy, J. (2007). Distance education in nursing: An integrated review of online nursing students' experience with technology-delivered education. *Journal of Nursing Education*, 46(6), 253-260.
- Miller, S. (2008). Liberating grades/liberatory assessment. *International Journal of Critical Pedagogy*, 1(2), 16-171.
- Mitchell, T., & Jones, S. (2004). Leading and co-ordinating a multi-nurse researcher project. *Nurse Researcher*, 12(2), 42-56.

- Nicol, D., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education, 31*(2), 199-218.
- Owen, W.F. (1984). Interpretative themes in relational communication. *Quarterly Journal of Speech, 70*, 274-287.
- Perry, B., & Edwards, M. (2005). Exemplary online educators: Creating a community of inquiry. *Turkish Online Journal of Distance Education, 6*(2), 46-54.
- Perry, B., & Edwards, M. (2006). Using photographic images as an interactive online teaching strategy. *The Internet and Higher Education, 9*(3), 229-240.
- Redmond, P., & Lock, J. (2006). A flexible framework for online collaborative learning. *Internet and Higher Education, 9*, 267-276.
- Sadler, D. (1989). Formative assessment and the design of instructional systems. *Instructional Science, 18*, 119-144.
- Sadler, D. (1998). Formative assessment: Revisiting the territory. *Assessment in Education, 5*(1), 77-84.
- Seiler, K., & Billings, D. (2004). Student experiences in web-based nursing courses: Benchmarking best practices. *International Journal of Nursing Education Scholarship, 1*(1), 1-12.
- Shea, P., Li, C., & Pickett, A. (2006). A study of teaching presence and student sense of learning community in fully online and web-enhanced college courses. *Internet and Higher Education, 9*, 175-190.
- Smith, T. (2005). Fifty-one competencies for online instruction. *The Journal of Educators Online, 2*(2).
- Swan, K. (2004). *Relationships between interactions and learning in online environments*. Sloan-C. Available at www.sloan-c.org/publications/books/interactions.pdf.
- Taras, M. (2002). Using assessment for learning and learning from assessment. *Assessment & Evaluation in Higher Education, 27*(6), 501-510.
- Thurmond, V. (2001). The point of triangulation. *Journal of Nursing Scholarship, 33*(3), 253-258.
- van Manen, M. (1997). *Researching lived experience*. London, ON: Althouse Press.

Wolsey, T. (2008). Efficacy of instructor feedback on written work in an online program.
International Journal on E-Learning, 7(2), 311-329.

Appendix A: Feedback Survey

Please indicate how much you agree or disagree with each of these statements about instructor feedback by underlining the appropriate number. Underline only one number for each statement.

Feedback from an instructor should:	Completely Disagree	Mostly Disagree	Slightly Disagree	Slightly Agree	Mostly Agree	Completely Agree
Motivate me to continue in the course	1	2	3	4	5	6
Not encourage me to interact with my instructor	1	2	3	4	5	6
Stimulate me to reflect on what I have learned	1	2	3	4	5	6
Not be provided frequently throughout the course	1	2	3	4	5	6
Not challenge me to think differently about the topic	1	2	3	4	5	6
Not help me evaluate my progress in the course	1	2	3	4	5	6
Promote my active involvement in learning	1	2	3	4	5	6
Help me build new knowledge about the topic	1	2	3	4	5	6
Not support my self-directed learning	1	2	3	4	5	6
Stimulate further learning about the topic	1	2	3	4	5	6
Not be provided in a timely manner	1	2	3	4	5	6
Stimulate me to reflect on what I still need to learn	1	2	3	4	5	6
Not be provided in an encouraging manner	1	2	3	4	5	6
Help me identify my strengths	1	2	3	4	5	6
Help me identify areas of needed improvement	1	2	3	4	5	6
Not increase my level of knowledge about the topic	1	2	3	4	5	6
Provide direction of the learning process	1	2	3	4	5	6
Build my confidence	1	2	3	4	5	6
Not be individualized to my performance	1	2	3	4	5	6
Include both positive comments and comments	1	2	3	4	5	6

Please define these phrases in your own words:

Reflection on learning:

Evaluating progress:

Challenge to think differently:

Active involvement in learning:

Building new knowledge:

Self-directed learning:

Timely manner:

Frequently throughout the course:

Encouraging manner:

Individualized:

Direct the learning process:

Build confidence:

Please share your general perspectives about the content and processes of effective instructor feedback: