

## The Art of Giving Online Feedback

Nancyruth Leibold<sup>1</sup> and Laura Marie Schwarz  
*Minnesota State University, Mankato, MN 56001*

---

### Abstract

The cultivation of providing online feedback that is positive, effective, and enhances the learning experience is a valuable educator skill. Acquisition of the art of providing feedback is through education, practice, and faculty development. This article provides information about the best practices for delivering online feedback to learners. An examination is given of the concept, importance, purpose, and types of online feedback. A deliberation includes the best practices for giving online feedback to learners, such as prompt, frequent, personalized, detailed, clear, specific, and balanced. Additionally, a discussion of the various avenues of delivering online feedback, such as the written word, audio file, video recording, pre-set automated feedback, and live web-based conferencing. The “art” and scientific evidence of providing online feedback are coupled in this article to provide helpful tips for the online educator.

**Keywords:** Online feedback, learner feedback, online teaching, balanced feedback, feedback sandwiches.

---

Giving effective online feedback is an important skill for educators to develop because it guides the learner’s development. Since feedback is important to the learning process, the art of giving effective online feedback is a critical skill for an educator. Teacher skills for giving online feedback to learners varies from giving feedback in face to face courses because non-verbal communications (tone of voice, facial expressions) are absent in written online feedback. Moreover, students often complain that faculty do not provide enough positive feedback (Zsohar & Smith, 2009). Learners have reported that inadequate feedback from teachers is less than satisfactory in an online course (Soon, Sook, Jung, & Im, 2000). Timely and frequent feedback from the course instructor contributes to student learning (Theile, 2003). These factors create the need for well-crafted online feedback in the written, audio, video, or in the live synchronous web-based conference format. An estimated 5.5 to 7.1 million students take at least one online course in the US according to the US Education Department and Babson Survey Research Group as reported by Kowlich (2014). An implication of providing effective online feedback is the positive impact for online learner performance (Goldsmith, 2014). This article explains practical information about the best practices of how to develop or refine the art of giving online feedback to learners.

---

<sup>1</sup> Corresponding author's email: nancyruth.leibold@mnsu.edu

## **Concept of Feedback**

The definition of feedback is information from an agent, such as a teacher, peer, or other about one's performance (Hattie & Timperley, 2007). Learners may also trade feedback with each other about coursework. Effective feedback is constructive, which means to improve performance by correcting errors (Cole, 2006; Zsohar & Smith, 2009) using a positive, future-focused, helpful manner. In addition, feedback can be informational or it can be informational and instructional (Hattie & Timperley, 2007). When feedback takes on a corrective function, then it also becomes instructional. Spink (1997) points out that feedback may be verbal or non-verbal. In the online setting, feedback for learners may be written, audio, video, or in the live synchronous web-based conference format. The definition of online feedback is information from an educator, peer, or other in an online format, such as the written word, audio file, video, pre-programmed automatic reply, or live web-based conferencing.

## **Purpose of Feedback**

The purpose of giving feedback is to point out strengths and provide comments on areas for improvement and development. Clear, effective, meaningful feedback is a robust way to foster learning (Hattie & Timperley, 2007), especially when teamed with personalization, such as addressing the receiver by their name. In online courses, due to the lack of face-to-face interactions, feedback may function to increase a connection between the educator and learner (Bonnell, Ludwig, & Smith, 2007). The authors recommend individualized feedback for each learner that includes addressing them by their name and comments specific to their coursework.

Feedback is one of the seven principles for good teaching practice in undergraduate education described by Chickering and Gamson (1987). Later, Chickering and Gamson (1999) revised this principle to include assessment in addition to prompt feedback. Students are able to reflect on their knowledge base after receiving feedback, and think about what they need to learn after considering the feedback for improvement (Chickering & Gamson, 1999). Yet, the feedback principle was a less common principle met by online educators in a meta-analysis of the seven principles for good practice (Mukawa, 2006). The lack of providing effective feedback to learners in Mukawa's study signals the necessity of faculty development in this area.

Replication of research findings regarding the purposes of feedback have emerged. Edwards, Perry, and Janzen (2011) presented qualitative data in their study of what makes an exemplary online educator. Affirmed, challenged, and influenced are common statements learners used in the verbatim examples regarding the feedback they received. This represents a consistent theme in the research literature that effective feedback stimulates and motivates learners to acknowledge areas of success and strive for improved performance.

## Types of Feedback

Evidence published about the type of feedback that is the most effective for learners related to writing in online courses is increasing in volume. Alvarez, Espasa, and Guasch (2011) studied types of feedback for writing assignments in an online learning environment and identified four types: corrective feedback, epistemic feedback, suggestive feedback, and epistemic plus suggestive feedback. Corrective feedback is the feedback that is specific to the requirements of the assignment and content. For example, “The instructions called for x, however x was not included.” Epistemic feedback includes prompts or questions for further thought and explanation or clarification. For example, “Say more about how this concept relates to the point you make.” Suggestive feedback contains advice, expansion, or ideas to improve an idea. For example, “By giving an example of courage after you describe the concept would make the meaning of courage clearer.” Epistemic + Suggestive Feedback combines the use of prompts/questions for further development and making suggestions for improvement. In a subsequent study, the quality of learner writing performance improved the most with the use of epistemic feedback and epistemic + suggestive feedback (Guasch, Espasa, Alvarez, & Kirshner, 2013). This evidence supports the intervention that asking a question to promote critical thinking in learners is an effective feedback skill for educators to incorporate in their practice.

## Best Practices for Giving Online Feedback to Learners

The collection of research studies on the topic of effective teacher feedback is extensive. Hattie (1999) reported a synthesis of over 500 meta-analyses related to effective feedback, which reported over 100 variables that influence student success. In this synthesis, receiving feedback and comments about how to improve was a powerful teacher intervention. Additionally, Hattie (1999) found that feedback that addresses items done correctly, as opposed to pointing out incorrect performance was more effective. Feedback that builds upon previous knowledge is also effective.

The volume of evidence related to feedback and online teaching practice is increasing. Online teacher practice research often includes a focus on feedback and the crucial role it plays in online courses. Providing feedback was a common response in a study of 40 undergraduate and graduate faculty when asked about effective practices for online educators (Lewis & Abdul-Hamid, 2006). Effective online feedback from educators to learners is able to guide learners toward positive learning outcomes (Getzlaf, Perry, Toffner, Larmarche, & Edwards, 2009). Feedback is a necessary skill for online instructors.

Feedback is an important intervention for the online educator because it is an opportunity to develop the instructor-learner relationship, improve academic performance, and enhance learning. In an exploratory study about online teaching behaviors, attitudes, and beliefs, Bigatel, Ragan, Kennan, May, and Redmond (2012) identified 64 teaching competencies for online teaching success. Feedback practices were identified multiple times in relation to online teaching success. Specific teaching competencies include communicating expectations for learner performance, grading that is visible to learners, providing prompt feedback, giving feedback that is helpful and enhances learning, and providing

clear, detailed feedback on assignments (Bigatel et al., 2012). Helpful feedback builds the instructor-learner relationship through positive interactions. Feedback is a critical aspect of online educator practice (see Table 1) because it promotes the learning experience.

**Table 1. Best Practices for Providing Online Feedback: Application Examples.**

Address the learner by name	For example, “Sue, the font selected for the PowerPoint presentation is easy to read. Good choice!”
Provide frequent feedback	Set a pattern for providing feedback to learners. For example, every week by Wednesday for the previous week and within 72 hours after an assignment deadline.
Provide immediate feedback	Within 72 hours of courseroom discussions and less than one week for paper/project assignments.
Provide balanced feedback	“Peggy, great job with including APA source citation. For APA format, place a comma after the author name and before the year. The APA for the corresponding reference on the reference page is correct! Good work!”
Provide specific feedback	“The second paragraph on page 4 includes helpful information that is explained in clear terms. The information in this paragraph should have a source citation and reference on the reference page. Good job using Times New Roman 12 point and double spacing the entire APA document.”
Use a positive tone	Two-thirds of the feedback should be positive and point out what is correct. Create a feedback tone that inspires the learner to use the comments to improve future work.
Ask questions to promote thinking	“Great job with the definition of the concept. What are some examples of the concept you could describe in the paper after the definition to help clarify the meaning?”

Lifelong education about best practices for educators regarding current recommendations for giving feedback is important. A study by Jamison (2004) compared facilitators with feedback education (treatment group) to facilitators in a control group without feedback education at the university level. The learners who received feedback from facilitators that participated in education on how to give feedback had significant differences from the control group. Learners of trained feedback facilitators were more engaged in learn-

ing, had higher levels of learner self-efficacy, and reported learning enjoyment (Jamison, 2004). The skill of providing online feedback is worthy of development in faculty.

In a descriptive exploratory, two phase study, Bonnel and Boehm (2011) studied best practices for giving feedback to online learners. Common themes emerged as 1) maximize technology, 2) use rubrics, templates, and automated responses, 3) have a system, and 4) create a feedback-rich environment. Experienced online educators provided their expert opinions about the best practices for giving online feedback to learners. Educators should maximize technology by using email communication, courseroom messaging, announcement section (when not confidential or private feedback), synchronous web-bed conferences that can be recorded for those who could not attend, audio messages, and post online office hours. Related to the use of rubrics, templates, and automated responses, participants recommended the use of rubrics, and that educators refer to them in feedback. The theme “have a system” refers to using consistent interventions to provide feedback and information, such as making expectations clear, clarifying expectations, and scheduling feedback (for example, all grading and feedback for assignments will be returned to learners within 72 hours). Other recommendations include the use of praise and constructive feedback in private, and use of online discussions for some feedback that would be appropriate for all learners to view. In addition, the “system” should include giving timely and regular feedback as stated in the course syllabus, offer support, encouragement, and promote critical thinking skills. The final theme: create a feedback-rich environment includes tips such as promote learner self-reflection, use peer review, vary feedback so it fits the assignment, use group feedback, teacher feedback, and automated feedback.

### ***Prompt and Frequent Feedback***

Learners are able to build on their previous experiences through receipt of timely and effective feedback. Chickering and Gamson (1987) describe prompt feedback as one of the seven principles of effective teaching. Ritter and Lemmke (2000) studied the seven principles for good teaching practice in internet-enhanced courses and reported electronic mail as a useful way to provide feedback to students. Most learning management systems have feedback areas built into the grading function that are also useful and immediate. Practice tests and exercises in the online courseroom can also be set to provide immediate, automated feedback about their comprehension of course content (Ritter & Lemke, 2000). The Net Generation learners prefer and even expect immediate feedback (Groome, 2011). Online learners define immediate feedback as ranging from 24 to 48 hours and up to one to two weeks (Getzlaf et al., 2009). A study by Arbaugh and Hornik (2006) tested Chickering and Gamson’s seven principles to online learning and found that prompt feedback was important to learners. Learners receiving immediate feedback perform better than learners who receive delayed feedback (Johnson, 2014; Lemley, Sudweeks, Howell, Laws, & Sawyer, 2007). Online discussion feedback is best returned to learners within 72 hours of the due date and time. Assignment feedback is best when returned to learners in less than one week from the due date. This allows the learner to have rapid acknowledgement of strengths and areas to improve before the next course assignment. Feedback is best when immediate (Lewis & Abdul-Hamid, 2006), because it is a critical

aspect of quality instruction, so learners know what areas they have excelled in and what areas to focus on for improvement.

In addition to timely feedback, online educators should have a feedback frequency practice established for consistent use. The practice of frequent feedback promotes online success (Junk, Deringer, & Junk, 2011) and is best when communicated to learners in the online courseroom or course syllabus. For example, the instructor may provide a statement in the course syllabus that reads, “Feedback for weekly discussions is available to learners each week by Wednesday at 11:59 pm. Feedback for assignments is available to learners within 7 days of the due date.” This transparent statement communicates to learners what and when to expect feedback. In a comparison study of individualized and frequent feedback versus collective feedback in online courses, learners in the individualized, frequent feedback group had better academic performance, and increased student satisfaction (Gallien & Oomen-Early, 2008). Frequent feedback is a best practice of online educators to promote learner success.

### ***Tone of Feedback***

The tone of the feedback is as important as the content of the feedback. Praise the learner by pointing out skills done well. For example, consider the difference in feedback phrased in a positive, encouraging way, and feedback that is not positive and encouraging (see Table 2). In a study of online exemplary faculty, the use of encouraging feedback with learners was identified (Lewis & Abdul-Hamid, 2006). Praise and encouragement can serve to both reward and motivate the learner to continue their hard work and strive to continue to develop and improve.

**Table 2. Positive and Negative Examples of Feedback.**

---

Positive Feedback Tone	Excellent job with writing in the active tense throughout your paper! One area to make your writing even stronger is to add examples of the concepts throughout the paper. For example, when describing the concept of caring, give a few examples of when caring was present. This will clarify your meaning of caring to the reader. See sample paper AB in the courseroom resources area to see an example. You did a good job with proofreading in your paper (no spelling, grammar, or punctuation errors present)!
Negative Feedback Tone	“The implications for practice section needs work. Blah, blah, blah. Not enough detail.”

---

### ***Specific Feedback***

Clear feedback that communicates specific information to the learner is another best practice for giving effective online feedback. A message that includes enough detail so the learner is able to understand the meaning is preferred (Bigatel et al., 2012; Lewis & Abdul-Hamid, 2006). Vague comments such as “this is vague,” “good paper,” and “there are grammar errors” (see Table 3) do not provide the learner with enough information to be able to take action to improve performance. Clear communications in the online environment are important for the instructor to use so that the message to the learner is clear (Bailey & Card, 2009). Eren (2003) studied learners’ perceptions on the effectiveness of feedback in online courses and found that detailed feedback is preferred. One tip for use when an assignment lacks clarity and is vague is to respond with a question to promote critical thinking in the learner. For example, “What could you add to this section to provide more detail for the reader?” Another example is to comment, “Say more about this idea by explaining it more for the reader. Add three or four more sentences describing this in more detail.” These comments promote critical thinking in the learner.

Jones and Blankenship (2014) studied 70 online learners regarding their perceptions of instructor feedback on course work and the incorporation of feedback in future course work. Students reported the two most helpful types of feedback as the numerical grade and a grading rubric with comments at the end of the assignment. Ninety-three percent of students reported they read the feedback, while 86 percent reported the feedback was helpful for future course work. The study was a convenience sample with 70 participants (Jones & Blankenship, 2014). Replication of the study is recommended.

**Table 3. Specific Feedback versus Vague Feedback.**

---

Note: A specific feedback comment is of higher quality because it provides more information to the receiver.

Example A

Specific

“Good job with using proper citations for resources!”

Vague

“Good job!”

Example B

Specific

“There are some split infinitives in the paper. Check out more information about split infinitives in the courseroom folder titled *Writing Resources*.”

Vague

“There are some grammar errors.”

---

### ***Balanced Feedback***

Balanced feedback is the use of positive, negative, and positive feedback. Also known as the sandwich method of feedback, which is a three-part technique. First, sandwiched feedback starts with a positive comment, then a comment about an area for improvement,

and then a positive comment. Feedback sandwiches serve the purpose of making constructive criticism more palatable (Toledo, 2013). Comments should be specific and appropriate to the level of the student (see Table 4 for example). That is, the comments would vary for a student in a 100 level writing intensive course versus a graduate student. Feedback that focuses on areas for improvement should include what needs correction in terms of meeting the assignment instructions. Helpful resources may also be instructive for the learner. For example, in a paper with multiple split infinitives, a resource about split infinitives may help the learner to understand and consequently improve performance.

**Table 4. Example of Balanced or Sandwiched Feedback.**

Top Bun	A positive comment that focuses on an item done correctly.
Middle	Focuses on a comment about something that needs improvement. Include corrective feedback, such as a resource with information or ask a probing question to facilitate learner thinking on the area.
Foundation Bun	Includes a positive comment about something done correctly.

Although numerous articles exist in publication about the technique of feedback sandwiches, there is a gap in the research literature on the topic. One article that included two studies on the topic of feedback sandwiches was present upon an extensive literature search. Parkes, Abercrombie, and McCarty published a research article in 2013 that describes two research studies they did on the use of feedback sandwiches. The first study had 21 participants and the second study had 350 participants. The researchers used a multi-method approach and quasi-experimental design. Students were surveyed their opinions about feedback sandwiches and this was compared to researcher measures of improved performance. The students reported the feedback sandwiches improved their future performance because as they did the next assignment, they would think about the feedback that they had done an area correctly and what they needed to improve on. They reported using this feedback to improve their performance. However, the researchers reported the students did not improve their performance. In another study of online feedback, Getzlaff et al. (2009) reported that using feedback sandwiches was a helpful instructor behavior. The topic of feedback sandwiches needs more research to study if it is effective or not.

### **Does Online Feedback Really Make a Difference?**

With respect to negative outcomes related to online feedback, studies are less common in publication. However, two themes are present in the literature. One theme relates to student perception and the other is about effects of feedback on learner performance.

### ***Student Perception***

In a study by Jones and Blankenship (2014) of student perceptions about online instructor feedback, 56 percent of students indicated that positive comments with the feedback were not as useful as comments about how to improve course work. An examination of online student satisfaction by Palmer and Holt (2008) identified instructor feedback for online assignments of high importance to their course experience. Yet, participants reported low satisfaction with the instructor's feedback performance. This data strengthens the need for instructor knowledge, and faculty development of best practices related to providing online feedback.

### ***Effects of Feedback on Learner Performance***

Previously in this article a description of two studies by Parkes, Abercrombie, and McCarty (2013) was given. Although students report the instructor feedback was incorporated to improve their performance, instructors report that the student performance did not improve after receiving detailed feedback. In another study by Espasa and Meneses (2010), 186 graduate students participated to analyze online feedback by instructors to students. Online assignment feedback from the instructor has no relationship to the final course grade (Espasa & Meneses, 2010). Student satisfaction with the feedback received was high. It is noteworthy that the courses in this study do not require students to do assignments within the courses. Students are only required to complete a final assignment; however have the option to complete assignments during the course. In this study, the researchers stress that not all students completed assignments during the course (Espasa & Meneses, 2010). The authors stress that faculty development related to giving feedback in online courses is worthy, despite these findings.

## **Feedback Timesaving Tips for Educators**

Providing online feedback for learners is a time-consuming task that is concerning for online faculty (Bonnell, 2008; Lewis & Abdul-Hamid, 2006). This section includes a description of a variety of tips to save time when giving online feedback. Feedback banks in word processing documents that include frequently used feedback comments are one technique to save time. Cut and paste the remarks from a word processing document into the learner's paper or online feedback area (Lewis & Abdul-Hamid, 2006). This allows the educator to construct carefully worded, specific, helpful feedback phrases with a positive tone for use.

Some educators use voice technology to provide audio feedback for learners as a time-saver (Lewis & Abdul-Hamid, 2006; Portolese Dias & Trumpy, 2014). The Desire to Learn (D2L) learning platform has audio feedback built in to the assignment dropbox and grading functions. Some educators use MP3 files to provide audio feedback that provides learner and teacher benefit (Todd, 2012). Todd (2012) reports the teacher's tone of voice can be motivating for learners to make revisions in work for improvement and saves the teacher time. In a study by Wood, Moskovitz, and Valiga (2011), audio feedback was favored to written feedback by baccalaureate and graduate nursing learners in online cours-

es. Participants reported the audio feedback from the instructor had better clarity, was more personal, motivating, and easier to retain than written feedback. In a related study comparing audio and written feedback to written feedback, doctoral learners that received audio and text feedback reported better cognitive development and satisfaction with the instructor (Rockinson-Szapkiw, 2012). Lunt and Curran (2010) reported that learners were ten times more likely to open audio feedback than written feedback. The use of audio feedback is an effective, timesaving way to provide feedback for online learners.

Online educators can provide clear, detailed assignment instructions for learners (Bigatel et al., 2012). Good instructions help learners, but also save time for faculty because the expectations are clear, less questions and clarification are necessary, and thus application is more likely. A best practice for online faculty found in a study by Lewis and Abdul-Hamid (2006) is to include clear instructions and expectations for the assignment. Schwarz recommends using small assignments that build to a larger, final assignment (2012). The learner can incorporate feedback from the small assignments to improve performance, and work up to a big project at the end of the course where they showcase their development. The use of an assignment rubric is a behavior of exemplary faculty (Lewis & Abdul-Hamid, 2006).

Video feedback and synchronized feedback are two more timesaving methods that educators can employ. Video recordings of feedback for learners are timesavers and provide clear, personalized messages for the learner that include non-verbal communications. The use of synchronous, web-based conferencing is one technique that online educators can use to provide feedback. Adobe Connect, Skype, or similar tools are examples of tools to conference with learners. Learners report improved clarity in understanding synchronous web-based conferencing feedback (Chung, Shel, & Kaiser, 2006).

## **Conclusion**

There are many reasons why giving effective online feedback is an important educator skill. The online educator has an opportunity to create an environment where the focus is on success and enhancement of learning! This forward-focused approach empowers and influences the learner through affirmation, challenging questions to excel (Edwards, Pery, & Janzen, 2011). The ability to provide effective online feedback is a critical educator skill. Therefore, lifelong education for teachers to develop and polish online feedback skills is a worthwhile activity. Best practice includes feedback that is prompt, clear, detailed (Bigatel et al., 2012; Zsohar & Smith, 2009), individualized, and frequent (Gallien & Oomen-Early, 2008), and balanced (Docheff, 1990). Educators may use a variety of medium for delivery of online feedback, such as written word, audio files, videos, pre-set automated feedback, and synchronous web-based conferencing. This article presents evidence-based, practical strategies for educators to use in the online classroom when providing feedback. These best practices can assist faculty to deliver quality feedback to enhance student learning.

## References

- Alvarez, I., Espasa, A., & Guasch, T. (2011). The value of feedback in improving collaborative writing assignments in an online learning environment. *Studies in Higher Education*, 37(4), 387-400. doi:10.1080/03075079.2010.510182.
- Arbaugh, J. B., & Hornik, S. C. (2006). Do Chickering and Gamson's seven principles also apply to online MBAs? *Journal of Educators Online*, 3(2), 1-18. Retrieved from <http://www.thejeo.com/Archives/Volume3Number2/ArbaughFinal.pdf>.
- Bailey, C. J., & Card, A. J. (2009). Effective pedagogical practices for online teaching: Perception of experienced instructors. *Internet and Higher Education*, 12, 152-155. doi:10.1016/j.iheduc.2009.08.002.
- Bigatel, P., Ragan, L. C., Kennan, S., May, J., & Redmond, B. F. (2012). The identification of competencies for online teaching success. *Journal Of Asynchronous Learning Networks*, 16(1), 59-77. Retrieved from <http://jaln.sloanconsortium.org/index.php/jaln/article/view/215>.
- Bonnel, W. (2008). Improving feedback to students in online courses. *Nursing Education Perspectives*, 29, 290-294.
- Bonnel, W., Ludwig, C., & Smith, J. (2007). Providing feedback in online courses: What do students want? How do we do that? *Annual Review of Nursing Education*, 6, 205-221.
- Bonnel, W., & Boehm, H. (2011). Improving feedback to students online: Teaching tips from experienced faculty. *The Journal of Continuing Education in Nursing*, 42(11), 503-9. doi: http://dx.doi.org/10.3928/00220124-20110715-02.
- Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, 9(7), 3-7.
- Chickering, A. W., & Gamson, Z. F. (1999). Development and adaptations of the seven principles for good practice in undergraduate education. *New Directions for Teaching & Learning*, (80), 75-81.
- Chung, G. K., Shel, T., & Kaiser, W. J. (2006). An exploratory study of a novel online formative assessment and instructional tool to promote students' circuit problem solving. *Journal of Technology, Learning and Assessment*, 5(6), 1-27. Retrieved from <http://ejournals.bc.edu/ojs/index.php/jtla/article/view/1645/1484>.
- Cole, J. (2006). *Toxic feedback: Helping writers survive and thrive*. Hanover, NH: University Press of New England.
- Docheff, D. M. (1990). The feedback sandwich. *Journal of Physical Education, Recreation and Dance*, 61, 17-18.
- Edwards, M., Perry, B., & Janzen, K. (2011). The making of an exemplary online educator. *Distance Education*, 32(1), 101-118. doi:10.1080/01587919.2011.565499.
- Eren, F. (2003). Students' perceptions on the effectiveness of feedback in online classes (Order No. 1417646). Available from ProQuest Dissertations & Theses Full Text; ProQuest Dissertations & Theses Global. (305234814).
- Espasa, A., & Meneses, J. (2010). Analysing feedback processes in an online teaching and learning environment: An exploratory study. *Higher Education: The International Journal of Higher Education and Education Planning*, 59, 277-292. doi: 10.1007/s10734-009-9247-4.

- Gallien, T., & Oomen-Early, J. (2008). Personalized versus collective instructor feedback in the online courseroom: Does type of feedback affect student satisfaction, academic performance and perceived connectedness with the instructor? *International Journal on ELearning*, 7(3), 463-476.
- Getzlaf, B., Perry, B., Toffner, G., Lamarche, K., & Edwards, M. (2009). Effective instructor feedback: Perceptions of online graduate students. *The Journal of Educators Online*, 6(2).
- Goldsmith, L. (2014). Digital feedback: An integral part of the online classroom. *Distance Learning*, 11(2), 33-40.
- Groome, T. (2011). The changing student: The Net generation. In K. G. Mastrian, D. McGonigle, W. L. Mahan, & B. Bixler (Eds.), *Technology in nursing education*. pp. 27-42. Sudbury, MA: Jones and Bartlett Publishers.
- Guasch, T., Espasa, A., Alvarez, I. M., & Kirschner, P. A. (2013). Effects of feedback on collaborative writing in an online learning environment. *Distance Education*, 34(3), 324-338. doi: 10.1080/01587919.2013.835772.
- Hattie, J. (1999). Influences on student learning. Inaugural Lecture: Professor of Education. Retrieved from <https://cdn.auckland.ac.nz/assets/education/about/research/documents/influences-on-student-learning.pdf>.
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81-112.
- Jamison, K. A. (2004). The effects of trained facilitation of learning-oriented feedback on learner engagement, performance, self-efficacy, and enjoyment. (Order No. 3241135, Virginia Polytechnic Institute and State University). ProQuest Dissertations and Theses, pp. 1-137.
- Johnson, S. (2014). Applying the seven principles of good practice: Technology as a lever - in an online research course. *Journal of Interactive Online Learning*, 13(2), 41-50.
- Jones, I. S., & Blankenship, D. (2014). What do you mean you never got any feedback? *Research in Higher Education Journal*, 24, 1-9.
- Junk, V., Deringer, N., & Junk, W. (2011). Techniques to engage the online learner. *Research in Higher Education Journal*, 10, 1-15.
- Kolowich, S. (2014). Exactly how many students take online courses? *The Chronicle of Higher Education*. Retrieved from <http://chronicle.com/blogs/wiredcampus/exactly-how-many-students-take-online-courses/49455>.
- Lemley, D., Sudweeks, R., Howell, S., Laws, R. D., & Sawyer, O. (2007). The effects of immediate and delayed feedback on secondary distance learners. *Quarterly Review of Distance Education*, 8(3), 251-260, 294-295.
- Lewis, C. C., & Abdul-Hamid, H. (2006). Implementing effective online teaching practices: Voices of exemplary faculty. *Innovative Higher Education*, 31(2), 83-98. doi:10.1007/s10755-006-9010-z.
- Lunt, T., & Curran, J. (2010). Are you listening, please? The advantages of electronic audio feedback compared to written feedback. *Assessment & Evaluation in Higher Education*, 35(7), 759-769.

- Mukawa, T. E. (2006). Meta-analysis of the effectiveness of online instruction in higher education using Chickering and Gamson's seven principles for good practice. (Order No. 3247839, University of San Francisco). ProQuest Dissertations and Theses, 1-162.
- Palmer, S.R., & Holt, D.M. (2009). Examining student satisfaction with wholly online learning. *Journal of Computer Assisted Learning*, 25(2). doi: 10.1111/j.1365-2729.2008.00294.
- Parkes, J., Abercrombie, S., & McCarty, T. (2013). Feedback sandwiches affect perception but not performance. *Advances in Health Sciences Education*, 18(3), 397-407. doi: 10.1007/s10459-012-9377-9
- Portolese Dias, L. P. & Trumpy, R. (2014). Online instructor's use of audio feedback to increase social presence and study satisfaction. *The Journal of Educators Online*, 11(2), 1-19. Retrieved from <http://www.thejeo.com/Archives/Volume11Number2/PortoleseTrumpy.pdf>.
- Ritter, M. E., & Lemke, K. A. (2000). Addressing the 'seven principles for good practice in undergraduate education' with internet-enhanced education. *Journal of Geography in Higher Education*, 24(1), 100-108.
- Rockinson-Szapkiw, A. J. (2012). Should online doctoral instructors adopt audio feedback as an instructional strategy? Preliminary evidence. *International Journal of Doctoral Studies*, 7245-258.
- Schwarz, L. M. (2012). Top 10 tips for teaching online. *CIN: Computers, Informatics, Nursing*, 30(6), 281-284. doi: 10.1097/NXN.0b013e31825b374a.
- Soon, K. H., Sook, K. I., Jung, C. W., & Im, K. M. (2000). The effects of internet-based distance learning in nursing. *Computers in Nursing*, 18, 19-25.
- Spink, A. (1997). Information science: A third feedback framework. *Journal of the American Society for Information Science* (1986-1998), 48(8), 728.
- Thiele, J. (2003). Learning patterns of online students. *Journal of Nursing Education*, 42(8), 364-366.
- Todd, G. (2012). Talking Beats Writing. *Educational Leadership*, 70(1), 90.
- Toledo, R. (2013). Hungry for feedback. *PM Network*, 27(5), 70.
- Wood, K., Moskovitz, C., & Valiga, T. M., (2011). Audio feedback for student writing in online nursing courses: Exploring student and instructor reactions. *Journal of Nursing Education*, 50(9), 540-543. doi: <http://dx.doi.org/10.3928/01484834-20110616-04>
- Zsohar, H., & Smith, J. A. (2009). The power of "and" and "but" in constructive feedback on clinical performance. *Nurse Educator*, 34(6), 241-243.