Enhancing the Effectiveness of Online Teaching by using Peer Review

Thomas A. Simonds SJ EdD

Associate Professor of Education

Barbara L. Brock EdD

Professor of Education

Max T. Engel PhD

Resident Assistant Professor

Timothy J. Cook PhD

Professor of Education

Creighton University

Abstract

Increasing numbers of students are taking online courses. Therefore, it is imperative to investigate ways to improve teaching effectiveness in an online environment. This article describes the development of a peer review process and instrument to help professors improve their online teaching. To initiate the study, the authors designed and piloted a peer review instrument while reviewing the literature for best practices in online instruction. After revising their instrument, the authors assembled ten online instructors in focus groups to test the instrument’s validity and usefulness. Based on input from the focus groups, the authors developed a new process and instrument. This new peer review worksheet was then evaluated for usefulness and validity by three instructional designers. The findings of this study suggest that the peer review process is helpful for experienced online instructors but not for instructors who are new to online teaching. The findings further suggest that the online peer review process should include a face-to-face orientation for peer dyads and a worksheet that contains open-ended questions and is adaptable to changing technology and a variety of disciplines. In the end, the authors recommend a 360-degree review process that incorporates self-review, peer review, and student evaluations. The peer review materials the authors created are included.

Keywords

improving online teaching, peer review of teaching

Author Note

 Tom Simonds SJ, Barb Brock, Max Engel, and Tim Cook, Department of Education, Creighton University.

 Correspondence concerning this article may be addressed to Tom Simonds SJ, Department of Education, Creighton University, 2500 California Plaza, Omaha, NE 68178 USA. E-mail: tsimonds@creighton.edu Phone: 1-402-280-3602

Author Bios

Thomas A. Simonds, S.J., Ed.D. is associate professor of education at Creighton University in Omaha, NE, USA. He holds a doctoral degree in education from the University of San Francisco as well as master’s degrees from Gonzaga University and Boston College. Tom Simonds is the author of more than twelve articles on spirituality, faith-based values education, online learning, and school violence prevention. His published books include: *School Violence Prevention Workbook: Stopping Harassment and Hazing*, and *Advent and Christmas Reflections: Ideas for Teaching the Catholic Faith in the Home, School, and Parish*, both published by the National Catholic Educational Association. Tom Simonds has been teaching online since 2007, and has been conducting research into the best ways to learn online since 2008.

Contact at tsimonds@creighton.edu

Barbara L. Brock, Ed.D. is professor of education and teaches in the online Doctor of Education in Leadership Program at Creighton University. She is a past chair of the Education Department and former director of the online Master’s Program in Educational Leadership. Her publications include eight co-authored books and numerous book chapters and journal articles. She presents internationally and nationally on topics related to her research, which include the career development of educational leaders, and most recently, the online learning preferences and needs of graduate students.

Contact at barbarabrock@creighton.edu

Max T. Engel, Ph.D. is resident assistant professor at Creighton University. Max teaches courses in the Department of Education and the Department of Theology. His specialty is religious education.

Contact at maxengel@creighton.edu

Timothy J. Cook, Ph.D. is professor of education and director of the online Master’s Program in Educational Leadership at Creighton University.

Contact at tcook@creighton.edu

Statement of Originality

Our original paper entitled *Enhancing the Effectiveness of Online Teaching by using Peer Review,* has not been published and is not being considered for publication elsewhere.

Enhancing the Effectiveness of Online Teaching by using Peer Review

 The number of college students taking online courses continues to increase (Brooks, 2009; Community College Research Center [CCRC], 2013b). Therefore, college professors are in need of effective and accessible forms of professional development for online teaching. One very helpful way for college professors to enhance their online teaching skills is to ask a qualified peer to review their online course (Chism, 2007; Conrad & Donaldson, 2004; Elbaum, McIntyre, & Smith, 2002). The conversation that results from the peer review process can assist both professors in further honing their online teaching skills and revising their online courses.

 Three of the researchers in this study began utilizing the peer review process in their online courses in 2008, and while we benefited from the process, we identified a need for a valid instrument to review online teaching. So we set out to develop a peer review instrument that could be used in the online teaching environment. One of the researchers created an initial version of the instrument, and then three members of the research team tested the instrument by using it to review each other’s online courses. Following this initial trial of the instrument, we conducted a literature review.

**Literature Review**

 The literature review proved to be particularly helpful in further revising the peer review instrument. We examined articles, books, and web-based materials in order to learn more about online instruction and the online peer review process.

**Best Practices for Online Instruction**

 We began our review of the literature by exploring writings related to best practices in online instruction. In an article by Simonds and Brock (2013), the researchers reported findings from a study of graduate education students taking online courses at a university in the United States. In order to determine what the students thought were the best ways to learn in online courses, the researchers employed an e-survey and e-focus groups. Students reported that emails to the instructor were an effective way to ask course related questions. In a similar study conducted in the United Kingdom, Cooner (2010) also noted that students found email to be an effective means of communicating with an online instructor.

 Students in the studies conducted by Simonds and Brock (2013) and Cooner (2010) also reported that pre-recorded video lectures provided an effective means for them to learn in online courses. Students noted that these e-lectures facilitated good learning because they could watch the lectures at a time that fit their schedule, and then they could return to parts of the lecture later to review concepts and deepen their understanding of the material. However, in a second article, Simonds and Brock (2014) cautioned online instructors to balance the use of pre-recorded video lectures with other learning strategies because not all students find pre-recorded lectures helpful for their learning.

 In this same vein, Simonds and Brock (2013, 2014) noted that the use of pre-recorded video lectures is just one way to develop a functioning online learning community. The researchers stated, “If students do not feel connected to the people in the class, their learning is adversely affected” (Simonds & Brock, 2013, p.100). The researchers described methods an instructor can use to bring people in an e-class together in the digital realm; for example, responding to student questions in emails and on the discussion board promptly using a respectful tone, ensuring peer-to-peer communications are respectful by establishing policies and reviewing discussions in e-groups, teaching students to help each other with learning in the course (peer helping), and following up with students who are inattentive to posting on the discussion board.

 Simonds and Brock (2013) also stated that the online asynchronous discussion board can become the virtual classroom if the instructor consistently responds to student posts, encourages students to be peer-helpers in this setting, and establishes clear expectations for consistent student participation. Carefully crafted discussion prompts that flow from course learning outcomes can provide an effective means to challenge students and get them thinking about course material in new and creative ways (Conrad & Donaldson, 2004). When students read comments to their posts by the instructor and their peers, they are able to extend their learning through feedback from multiple people (Simonds & Brock, 2013).

Students in the online courses studied by Simonds and Brock (2013) reported that they appreciated online courses in which they were challenged to explore innovative ideas. According to the researchers, instructors can introduce students to innovative and challenging material by providing links to quality e-materials. There are an uncountable number of videos, articles, and pages of material available on the world-wide-web, but the instructor must carefully review this material to check quality and also choose material that maps to course learning outcomes.

 Conrad and Donaldson (2004), Elbaum et al. (2002), and Simonds and Brock (2013) noted that online instructors can also provide opportunities for students to apply their learning and thus add depth to the learning experience. Some examples of authentic learning activities related by these scholars include: student interviews of people working in their chosen profession, discussion of case studies based on current world issues or emerging topics in the student’s future profession, or practicum experiences in which the student works in a chosen field and then reflects on the experience by posting online.

 Studies conducted by the Community College Research Center [CCRC] at Columbia University established that not all students have a positive experience in online courses. In one study, researchers at the Center discovered that community college students did not perform well on the whole in online courses (CCRC, 2013b). Student failure and withdrawal rates were an average of 11% higher for students in online courses compared to students in courses taught on campus.

 In another study by the Community College Research Center, researchers interviewed community college students about their experiences of taking online courses, and the students identified why they found it more difficult to learn in these e-classes (CCRC, 2013a). Students said that the instructor did not seem present and was difficult to contact when they needed help. The students also disliked the lack of peer interaction and thought online courses required more time than courses they took on campus. Faculty members interviewed by the researchers stated that they expected students in online courses to be independent learners, but students said they needed help learning how to become independent learners. Based on these findings, the researchers at the Center recommended that colleges require students to complete a course in online learning strategies before being permitted to enroll in an e-course. The researchers also recommended that faculty take advantage of professional development opportunities in order to enhance the effectiveness of their online teaching.

 In a third study by the Center at Columbia University, researchers discovered that high levels of interaction among students and between students and the instructor are essential for positive student learning outcomes in online courses (CCRC, 2013c). Researchers observed online courses at two community colleges in the United States, interviewed the students and faculty, and reviewed student grades in the courses. The researchers rated the courses they observed as either low interaction courses or high interaction courses. The average final grade for students in high interaction courses was 2.67, while the average final grade for students in low interaction courses was 1.87; a difference of almost one letter grade (0.8).

 A number of ways to boost human interaction in online courses were identified in this third study by researchers at Columbia University (CCRC, 2013c). Strategies recommended for creating an online learning community included: participation in live sessions by students and the instructor, regular posting and responding on discussion boards by students and the instructor, and frequent communication between the instructor and students through email and electronic feedback on assignments.

 Conrad and Donaldson (2004) also underlined that developing interactive online learning strategies is the key to effective online instruction. In addition to the strategies for online interaction already mentioned, Conrad and Donaldson also recommend the use of instant messaging and web-based tools that facilitate small group discussions. According to Conrad and Donaldson, effective online instructors must avoid using a novel teaching tool just because it is available. The online instructor must focus on student learning outcomes and map content and methods to the specified learning outcomes.

 In addition to learning activities that create human connections, students also benefit from engaging in learning activities that offer them the opportunity to reflect individually on their learning (Conrad & Donaldson, 2004). Open-ended discussion prompts, journals, and creative activities in which students summarize their learning are all ways to help students discover how to be reflective learners in online courses.

**Peer Review in Online Courses**

 In addition to exploring research and practice-based literature addressing the best ways to teach online, we also reviewed a study by Matchett and Main (2010) in which the two researchers described how they used a peer review process in their online courses. Matchett and Main were residing in different countries, so they conducted the peer review process electronically by visiting course sites on the internet and by using live conferencing tools.

 Reflecting on their experience, Matchett and Main (2010) thought that because they were not living in close geographical proximity, and because they taught in different disciplines, their experience mirrored the experience of online students. Each peer reviewer entered the course, just as a student would do, and attempted to navigate through the course while seeking to determine if specific best practices were evident.

It would no doubt be helpful to review an online course from the perspective of a student who would take the course, as noted by Matchett and Main (2010), but without some orientation materials and experiences, the peer reviewer may not have the same experience as a student taking the course. The most effective online instructors provide information about the course to students by email or other means prior to the first day of class (Boettcher & Conrad, 2010; Conrad & Donaldson, 2004; Elbaum et al., 2002; Palloff & Pratt, 2011). Instructors also create an orientation module to acclimate students to the new online environment (Conrad & Donaldson, 2004; Elbaum et al., 2002). So without any orientation to the course, the peer reviewer would not have the same experience as a student taking the course and the reviewer may be overly critical of the online instructor.

A peer review process somewhat like the one described by Matchett and Main (2010) is recommended by several authors as an effective way to develop and improve online teaching (Chism, 2007; Elbaum et al., 2002; Palloff & Pratt, 2011). According to these authors, a peer review instrument developed by a group of faculty teaching online can be an effective way to define guidelines and standards for online course development and teaching. Peer review of an online course can also serve as a way to test how easily a person is able to navigate within the virtual classroom. Palloff and Pratt (2011) emphasized that the peer review process works best when instructors see themselves as equal members of a learning group. This concept of true peer review void of formal job-related review provided the insight we needed to develop the conceptual framework for this research project.

**Conceptual Framework for this Study**

Palloff and Pratt’s (2011) encouragement to develop communities of inquiry to enhance teaching among college instructors serves as the foundation for the conceptual framework for this study. Palloff and Pratt’s idea of a community of inquiry is built up into a complete conceptual framework for effective online instruction by Fecho (2011) and Palmer (1997, 1998).

 Fecho (2011) approaches the concept of a community of inquiry from a perspective of social transformation. Palmer (1997, 1998) addresses the concept from a perspective of personal transformation. But despite different approaches, both writers describe the same concept. Fecho and Palmer both lament the fact that educators have become isolated from one another and from their students. These two writers suggest that one effective way to break down this isolation is by developing communities of inquiry. These small learning communities will be most effective, the writers state, when instructors decide to develop the communities on their own out of a felt need to enhance their practice of teaching.

 In our university, great courses and seminars are offered on how to teach online. Instructional designers are available to help us develop new courses. But what we were missing was a conversation among ourselves about what works best for our online students. We felt even more isolated teaching online than we did teaching on campus. At least in an on campus course, a peer could sit in on a class and then we could have a conversation about our instructional practices. But in our online courses, we did not have a similar process and we needed one.

**Method**

One member of our research team began teaching online in 2007, and since that time has been seeking to discover ways to enhance online teaching skills. In the course of conversations with colleagues at our university, he became intrigued by the concept of peers helping each other develop their online teaching skills. After reviewing material by Chism (1999), he developed an instrument that university professors could use in teams to review online courses. He then shared this instrument with the other members of our research team and we decided to further refine the online course review instrument.

**Pilot Study**

We met online using a live conferencing tool to discuss the draft version of the instrument and then developed version one of the instrument. Subsequently, we met face-to-face to discuss how we would conduct a pilot study of the instrument. We decided to carry out a two-stage pilot study. In the first stage, we used the instrument to perform self-reviews of our online courses. We then shared some brief explanatory comments with each other about the layout of our online courses as suggested by Conrad and Donaldson (2004) and Elbaum et al. (2002).

In stage two of the pilot study, we used the instrument and the explanatory comments to review each other’s online courses. The courses we reviewed were graduate online education courses. These courses were all conducted on the Internet with no face-to-face contact between the students and instructors required to complete the courses.

After completing the pilot study, we met to discuss our experiences and developed version two of the peer review instrument. Then after consulting and discussing literature about online instructional practices, we made additional changes to the instrument, creating version three.

**Approval by Institutional Review Board**

Once the pilot study was completed and the peer review instrument had been revised, we submitted our research proposal, including the peer review instrument, to the social science review board at our university. The review board approved our study.

**Validity and Usefulness of the Instrument**

We then assembled a group of online instructors teaching at our university in order to establish the validity and usefulness of the instrument. We sent an email invitation to instructors asking them to consider participating in this study (Appendix A). We sent one follow up reminder email (Appendix A).

Ten instructors consented to participate in this study. Each of the ten participants used version three of the peer review instrument to conduct a review of one of their own online courses. The participants then met in three different focus groups (Table 1).

Table 1

*Focus Groups*

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Participants Yrs Teaching Field Highest

 *N* =10 Online Earned Degree

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Focus Group One Aa 04 EDU Leadership MS

Facilitator: TAS B 06 Theology PhD

 C 02 Philosophy PhD

Focus Group Two D 04 EDU Leadership MA

Facilitator: BLB E 13 EDU Leadership PhD

 F 05 EDU Leadership EdD

 G 01 Law MA

Focus Group Three H 01 Teacher Prep MEd

Facilitator: MTE I 02 Teacher Prep MS

 J 02 Teacher Prep PhD

 \_\_

Average Years 04

Teaching Online

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Note*. aParticipant (A) shared responses to questions via email.

The facilitator of each focus group asked participants pre-determined questions and took notes recording participant’s responses and suggestions. The questions we asked in the focus groups are included in Table 2 below.

Table 2

*Focus Group Questions*

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. How long have you been teaching online?
2. What courses do you teach online?
3. Do we need to add any items to the instrument?
4. Do we need to delete any items from the instrument?
5. Do we need to change any items on the instrument?
6. Did you find that your use of the instrument helped you enhance your

online course?

1. Is there anything else you would like to say about the completeness or usefulness of the instrument?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

To ensure the accuracy of our analysis of the focus group data, three members of our research team individually coded the data by instrument item number and theme. We then met as a group to seek consensus on the coding, reaching consensus after collectively evaluating the individually coded data.

Based on recommendations from the focus groups, we decided to scrap the instrument we had developed and create a completely new process that included a peer review worksheet as just one piece of a larger document. We decided to make this significant change based on input from our online instructional colleagues in the focus groups.

The initial instrument we had developed and revised three times was too similar to the instrument we used in on campus courses at our own institution. The instrument did not have enough flexibility built into it for either the nature of online instruction or for use across disciplines and institutions of higher education.

After we had developed a completely new peer review worksheet, we sought input on the validity and usefulness of this new document from three instructional designers at our university. All three online course designers had earned master’s degrees in their field, specialized training in online course design and instruction, and had an average of five years’ experience designing online courses (range 1.5-10).

We asked each instructional designer to review the peer review worksheet independently. Then two members of our research team met with the group of instructional designers. The two researchers independently took notes throughout the meeting. After the meeting, the notes were coded independently by the two researchers for themes. Then the two researchers met, reviewed their coded notes, and reached consensus about the instructional designers’ recommendations for changes to be made to the worksheet. Our research team then developed the final version of the peer review worksheet (Appendix B).

We decided not to create a reliability panel to assess the peer review worksheet. Precise questions that would remain fixed over time did not fit the context of online instruction. With continual changes in online teaching tools and strategies, the long-term continuity necessary to develop a form that could be tested for reliability did not seem feasible. Instead, we created a working document that provides online instructors with a template to describe and review their online instructional practices (Appendix B). In this way changes in technology, diversity among instructors, and differences between disciplines and institutions of higher education can be easily accommodated.

**Findings**

 We analyzed two sets of data. The first set of data was collected from ten instructors teaching online courses at our university. The second set of data was collected from a group of three instructional designers who evaluated the validity and usefulness of the peer review worksheet.

**Analysis of Data Set One**

As our research team reviewed data set one, we noticed a difference among the ten online instructors according to their years of experience teaching online. Instructors who had four or more years of online teaching experience all found the peer review process to be helpful for improving their online instruction.

For example, instructor (A), who had four years of online teaching experience commented: “I felt [the peer review instrument] gave me some ideas on how to improve my class.” Instructor (D) who also had four years of online teaching experience commented: “I used [the peer review instrument] to review my course after I read student evaluations. I found it helpful.” Instructor (B) who had taught online for six years remarked: “Item 23 [on the peer review instrument] got me thinking about the importance of mapping assessments to course objectives. I plan to do more of this in a new course that I will be developing.”

However, instructors with less than four years of online teaching experience did not find the peer review instrument helpful. Instructor (H) who had taught online for only one year noted: “No, [the form] did not really help me enhance my online course. The required university course for online instructors that I just recently completed helped me examine my course.” Instructor (I) who had taught online for two years stated that, “the self-review wasn’t particularly helpful.”

In addition to noting a difference among the instructors according to online teaching experience, our analysis of the data collected from the online instructors yielded a number of other important findings. First, seven out of ten instructors participating in the focus groups were confused about the process they were to use to review their own online courses. We provided instructors with a written step-by-step explanation of how to conduct the review of their online courses (Appendix A), but this proved to be insufficient for 70% of the instructors participating in this study.

Second, after much reflection on the comments the focus group members made about the peer review instrument, we realized that the instrument we had created had to be set-aside. Participants in the focus groups stated that the instrument and the peer review process should be applicable across a variety of teaching styles and course formats, useful across the range of academic disciplines, and adaptable to the variety of institutions of higher education spread across the United States. Participants also noted that the process and the form needed to reflect the terminology and functionality of different online learning management systems and be flexible enough to accommodate the continually changing set of tools employed by online instructors.

So rather than revising version three of the peer review instrument, we decided to create an entirely new document with a detailed explanation of the peer review process and a worksheet to guide the process. As we crafted this new document, we included key recommendations from members of the focus groups, as described in the bullet points below.

* In light of the fact that 70% of focus group members were confused about how to engage in the peer review process, we included an extensive explanation of the peer review process in the document, and we also included language that strongly recommends that groups begin the process with an orientation meeting.
* On the worksheet used to guide the course review process, instructors are asked to describe how they engage in best practices within their online courses. The open-ended questions provide for greater flexibility and adaptability.
* We avoided using words such as effectively, consistently, and regularly. One focus group member pointed out that these words are too subjective. Instead we ask instructors to describe what they do in their online courses so that they themselves create the description their peer will use to review their course.
* We used bullet point examples on the worksheet to enhance understanding of best practices, but these examples are broad enough to be applicable across disciplines and institutions, and do not specify technologies that are only relevant to one learning management system or that may change over time.
* We changed the format from evaluative to formative by not including a five point Likert scale that we had included on the old peer review form.

In addition to making suggestions for changes to the peer review process and instrument, participants in one of the three focus groups also suggested that the peer review process could be one part of a course review that utilized multiple data points. Participants stated that this would be akin to the 360-degree review process used with leaders of institutions (Lublin, 2011). Three data points were suggested by members of the focus group: the instructor’s own insights, comments by a peer, and student evaluations of the course and the instructor. The focus group participants emphasized that this expanded review process ought to be exclusively for the benefit of the instructors and not be a component of a supervisor-implemented summative review process related to employment.

**Analysis of Data Set Two**

After we developed the peer review worksheet, we asked three instructional course designers at our university to review the new document. The course designers noted that the worksheet included most of the essential items. However, our analysis of comments made by the instructional designers did lead us to add one item in which instructors describe how they assist students in being able to attain course learning outcomes.

The course designers also stated that the number of items on the worksheet ought to be reduced. Therefore, we combined some items so that the same concepts would be covered in eight sections on the worksheet instead of the thirteen sections we had originally created.

The instructional designers also pointed out that changes to the wording of some questions would enhance understanding across institutions. Therefore, we inserted generic terms instead of using “learning management system,” “discussion post,” or “course module.”

After further analysis of data set two, we noted that the course designers thought that the peer review worksheet could be used to develop or revise a course prior to teaching a course, as well as to evaluate how well an instructor had taught a course. So we changed the wording of the instructions section of the worksheet to give instructors greater flexibility in how they decide to use the worksheet.

**Conclusions & Recommendations**

Analysis of the data indicate that the peer review process will benefit experienced online instructors by providing a collegial environment in which they will be able to enhance their online teaching skills. Focus group participants noted the rapidity of technological change as a factor supporting a need for continuous professional development for online instructors. As instructor (B) explained, “Ongoing mentoring and support over time is…important for veteran online teachers because the technological tools used to teach online will always change over time.”

However, study findings also indicate that instructors with less than four years of online teaching experience are less likely to benefit from the peer review process. This conclusion is consistent with research by Boice (1992) and Buskist and Benassi (2012). These researchers note that new faculty are focused on establishing basic teaching skills and negotiating the culture of higher education, and are not yet ready to expand their repertoire of skills.

Regarding the optimal type of document to use for peer review of online courses, analysis of the data helped us to realize that a review instrument for online courses had to be completely different from what we had initially developed based on face-to-face course review documents. So we scrapped our initial instrument, and created a completely new document based on recommendations from online instructors and online course designers. The worksheet we created is flexible and broadly applicable to a variety of academic disciplines and pedagogical styles. This flexibility will enable groups of online instructors using the worksheet to make modifications that best serve their instructional needs. Additionally, the worksheet can be adapted in response to changes in technology (Chism, 2007). So we look upon the worksheet we have created as a living document that each peer review team can adjust to fit emerging technologies and teaching strategies.

We recommend that the peer review worksheet included in Appendix B be used solely as a tool for college professors to create more effective online courses and not be used for the purpose of external or internal evaluation. We have found that online instructors need a forum in which they can experiment, discuss, and receive collegial feedback, and the worksheet and process we share in this article provides such a forum (Fecho, 2011; Palloff & Pratt, 2011; & Palmer, 1997, 1998).

In the interests of fostering collegiality and avoiding confusion before beginning a peer review process, we recommend that participants meet face-to-face for an orientation and arrive at consensus on how to move forward. We recommend that faculty form dyads so that the initial review of online courses is manageable and truly collegial (Chism, 2007; Palloff & Pratt, 2011). The dyads can then share their experiences and best practices with a larger group of faculty who have also engaged in a dyad-based peer review process of their courses. By working together in an atmosphere of collegiality, college faculty members will be able to continue to provide the very best educational experiences for their students in the new online class environment.

In closing, we note that we integrated the 360-degree review process within the peer review worksheet. Initially we had planned to recommend using a course self-review followed by a peer review to improve online teaching practice. We added student teaching evaluations to our suggested format based on the recommendation of one of our focus groups. We believe that this expanded review process will provide a helpful way for college faculty to utilize student course evaluations within a collegial atmosphere of respect and ongoing learning from practice. Also, the instructional designers who reviewed our peer review worksheet wondered out loud how they could be more involved in a collegial process of what works best for online instruction. This could be a fruitful avenue for future research.

**References**

Boettcher, J. V., & Conrad, R. M. (2010). *The online teaching survival guide: Simple and*

 *practical pedagogical tips*. San Francisco, CA: Jossey-Bass.

Boice, R. (1992). *The new faculty member: Supporting and fostering professional*

 *development*. San Francisco, CA: Jossey-Bass.

Brooks, M. (2009). The excellent inevitability of online courses. *The Chronicle of Higher*

 *Education, 55*(38), A64.

Buskist, W., & Benassi, V. A. (2012). *Effective college and university teaching*.

 Thousand Oaks, CA: Sage.

Chism, N. V. N. (1999). *Peer review of teaching: A sourcebook.* Bolton, MA: Anker.

Chism, N. V. N. (2007). *Peer review of teaching: A sourcebook* (2nd ed.). Bolton, MA:

Anker.

Community College Research Center [CCRC]. (2013a, March). *Creating an effective*

 *online environment*. Retrieved from <http://ccrc.tc.columbia.edu>

Community College Research Center [CCRC]. (2013b, April). *What we know about*

*online course outcomes*. Retrieved from <http://ccrc.tc.columbia.edu>

Community College Research Center [CCRC]. (2013c, April). *Creating an effective*

*online instructor presence*. Retrieved from <http://ccrc.tc.columbia.edu>

Conrad, R., & Donaldson, J. A. (2004). *Engaging the online learner: Activities and*

*resources for creative instruction*. San Francisco, CA: Jossey-Bass.

Cooner, T. S. (2010). Creating opportunities for students in large cohorts to reflect in and

on practice: Lessons learnt from a formative evaluation of students’ experiences of a technology-enhanced blended learning design. *British Journal of Educational Technology, 41*(2), 271-286.

Elbaum, B., McIntyre, C., & Smith, A. (2002). *Essential elements: Prepare, design,*

 *and teach your online course*. Madison, WI: Atwood.

Fecho, B. (2011). *Teaching for the students: Habits of heart, mind, and practice in the*

 *engaged classroom*. New York, NY: Columbia Teachers College.

Lublin, J. S. (2011, December 8). *Transparency pays off in 360-degree reviews*.

 Retrieved from <http://online.wsj.com>

Matchett, N. J., & Main, C. (2010, September 22). *Faculty collaboration at a distance:*

*Using online peer review to improve course design*. Retrieved from

<http://www.educause.edu>

Palloff, R. M., & Pratt, K. (2011). *The excellent online instructor: Strategies for*

 *professional development*. San Francisco, CA: Jossey-Bass.

Palmer, P. (1997). *The grace of great things: Reclaiming the sacred in knowing,*

 *teaching, and learning*. Retrieved from [www.couragerenewal.org](http://www.couragerenewal.org)

Palmer, P. (1998). *The courage to teach*. San Francisco, CA: Jossey-Bass.

Simonds, T. A., & Brock, B. L. (2013). Discovering effective ways to teach online. *The*

 *International Journal of Technologies in Learning, 19*(2), 93-106.

Simonds, T. A., & Brock, B. L. (2014). Relationship between age, experience, and

student preference for types of learning activities in online courses. *The Journal of Educators Online*, *11*(1). Retrieved from <http://thejeo.com>

**Appendix A**

**Emails Sent to Participants**

**Invitation Email**

Dear Joe Smith,

Names of research team members; all members of University X’s Education Department, are developing a process that instructors may use to develop or enhance online courses. I am writing to ask if you will assist us with this research project.

Your participation in the study would involve using a form we have created to perform a self-evaluation of an online course you currently teach or are developing. The self-evaluation will likely take one hour to complete. This self-evaluation process may help you develop or enhance an online course. Following the self-evaluation process, you would participate in a focus group with one member of our research team and 3-4 other professors from University X. The purpose of the focus group is for us to hear from you how the process worked and what you would suggest we do to improve the form. The focus group may also be helpful for you as you develop or enhance an online course. The focus group will be scheduled for one hour.

Please respond to me by email if you would be interested in participating in this research project. I would appreciate your response before December 1st, 2013. You will be able to perform the self-study anytime between December 15th, 2013, and January 30th, 2014. The focus groups will be conducted in February, 2014.

Thanks for considering this invitation,

Research Team Member

**Follow-Up Invitation Email**

Dear Mary Smith,

I am conducting a research project related to online teaching. The goal of the project is to design a form instructors may use to enhance or develop online courses. If you would like to participate in this study, please contact me and I will send you more information. This is a follow up to a previous email, and if I do not hear back from you I will assume you would prefer not to participate in this study.

All my best,

Research Team Member

**Participant Directions Email**

Dear Joe Smith,

Thank you for agreeing to participate in our research project. Attached to this email you will find the form you will use to conduct a self-evaluation of one of your online courses.

1. Please download and print the form attached to this email.
2. Using the hard copy form as a guide, log onto one of your University X courses in our LMS and check to see if your course meets the criteria listed on the form.
3. As you work through each item on the form, write notes on the hard copy of the form that indicate how well your course meets the criteria listed.
4. Also write comments on the hard copy noting changes and additions to the form that you believe would be helpful. It is important for you to write your thoughts and suggestions on the hard copy form since you will not be sharing your feedback with us until we meet with you in a focus group in February.

You may complete the self-evaluation process at any time between December 15th, 2013, and January 30th, 2014. You need not complete the self-evaluation process in one sitting, but you may find it helpful to do so. We estimate that the self-evaluation process will take one hour to complete.

If you have any questions, please contact me by email. If you have decided that you would rather not participate in this study, please let me know; otherwise, I will get back with you in January to schedule a focus group meeting for February.

With My Thanks,

Research Team Member

**Appendix B—Peer Review Document**

(Revised March 30, 2015)

**Explanation of the Peer Review Process**

The peer review process is designed to give you helpful information about your online courses so that you can improve your courses and your online teaching. The peer review process is akin to a 360-degree evaluation process used to help people enhance their leadership skills.

We developed this peer review process, including the course review worksheet, based on our own professional practice of teaching online, an extensive review of literature, and three published research studies we conducted. Based on the findings of our research studies, we recommend that the peer review process be used by college professors with at least four years of online teaching experience.

To begin the peer review process, create a group of between four and eight interested faculty. This group ought to meet in person or via live web conference. This initial group meeting is crucial to the success of the process. By-passing the initial meeting step of the process will likely result in participant confusion, frustration, and an overall breakdown of the peer review process.

During the first meeting, the group will seek a common understanding about the process to be used and will also look over the worksheet that will guide the course review process (the worksheet is included below). We recommend that you use the worksheet once before making modifications, but you may want to make some changes to the worksheet before using it for the first time. By making modifications to the course review worksheet, the team can adjust the worksheet to fit the context of their own institutions, disciplines, teaching styles, and course formats. Adjustments may also be made in light of new online instructional tools & strategies.

Once the team has met to discuss the course review process and has reached consensus about how the group will move forward, then the team forms small groups with two instructors in each group. Each instructor will then choose one of their own courses to review.

**Bullet Point Summary of the Peer Review Process**

* Talk with other instructors about the process and seek to develop a team of four to eight instructors interested in the peer review process
* Organize the team into small groups of two instructors each
* Each instructor chooses to review one of their own online courses
* Each instructor considers student evaluations of the course, if possible, to identify some areas to check on during the review process
* Instructors each use the course review worksheet to review their own courses
* Instructors then meet with their peer to discuss what they both have learned from reviewing their own online courses
* The two instructors then exchange worksheets electronically and complete the peer comment boxes while reviewing their peer’s course
* The two instructors meet again to discuss what they both learned from the process
* The larger team of four to eight instructors may want to meet again in order to learn from each other and establish group action steps

Faculty members have our permission to copy, modify, and use the peer review worksheet for collegial peer review as long as authors of the instrument and publisher are credited. Each person or program using the instrument assumes full responsibility for its use and outcomes.

**Peer Review Worksheet**

Name of Instructor:

Course & Section Reviewed:

Name of Peer Reviewer:

**Instructions for Using the Worksheet**

 The worksheet is divided into eight sections. Each section enables you to explore one important aspect of online instruction. Begin on the left side of the worksheet by reading the online teaching and learning strategy in the first section; “Get students started in a course.” Bullet point examples are provided just below the instructional strategy to help you better understand the strategy. After reading the strategy and the bullet point examples, then look across to the right on the worksheet and read the instructor prompt. After you read the instructor prompt, then review your own course and type your response in the box on the worksheet. The size of the text box will expand as you type your response. Continue to complete each section on the worksheet until you have completed all the sections. After you have completed the review of your course, then you are ready to meet with your peer. We estimate that the review of your own course will take between 60 and 90 minutes to complete.

**Team Taught Courses**

We recommend that instructors engaging in team teaching initially work with each other to review their team taught course using the worksheet as a guide. Then a third instructor could provide additional insights about the course using a process similar to the one outlined above.

|  |  |
| --- | --- |
| Online Teaching & Learning Strategies | Instructor & Peer Comments Based on Review of Course |
|  |
| Get students started in a course**Examples*** Welcome email
* Welcome video
* Explain how to move around within the course
 | Prompt for InstructorDescribe two ways that you provide students with an orientation to your course. |
| Instructor’s Response to Prompt |
| Peer Comments |
|  |
| Communicate course objectives**Examples*** Syllabus
* Course objectives included in weekly overviews
* Grading rubrics
 | Prompt for InstructorDescribe two ways that you communicate course objectives to your students. |
| Instructor’s Response to Prompt |
| Peer Comments |
|  |
| Communicate with students**Examples*** Post video each week
* Respond to online discussions every week
* Participate in live sessions each week
 | Prompt for InstructorDescribe three ways that you communicate with your students each week during the course. |
| Instructor’s Response to Prompt |
| Peer Comments |
| Facilitate communication between students**Examples*** Require peer review of assignments
* Require students to respond on peer blogs
* Require students to respond to peer discussion comments
 | Prompt for InstructorDescribe two strategies you use to ensure that students communicate with one another. |
| Instructor’s Response to Prompt |
| Peer Comments |
|  |
| Facilitate critical thinking**Examples*** Wording of discussion group prompts
* Ask students to discuss and evaluate different points of view
* Case studies
 | Prompt for InstructorDescribe two ways that you facilitate critical thinking in your course. |
| Instructor’s Response to Prompt |
| Peer Comments |
|  |
| Assist students during course **Examples*** Timely follow up when assignments not completed
* Facilitate peer mentoring
* Adjust due dates
 | Prompt for InstructorDescribe two ways that you assist students in accomplishing course learning objectives. |
| Instructor’s Response to Prompt |
| Peer Comments |
|  |
| Assess student progress in meeting course learning objectives**Examples*** Grading rubrics
* Quiz at end of each week aligned with course objectives
* Weekly discussion questions aligned with course objectives
* Final project aligned with course objectives
 | Prompt for InstructorDescribe two ways that you assess how well students have met the course learning objectives. |
| Instructor’s Response to Prompt |
| Peer Comments |
|  |
| Share assessment results**Examples*** Return assignments with media comment and grade within one week of submission
* Post student grades in online gradebook weekly
* Send feedback to students weekly when they participate in online discussion groups
 | Prompt for InstructorDescribe two ways you share assessment results with students and include your timeline for sharing the results. |
| Instructor’s Response to Prompt |
| Peer Comments |
|  |