

# BUILDING VIRTUAL BRIDGES: ENGAGING ONLINE LEARNERS THROUGH AN INTERACTIVE WEBINAR SERIES

Cynthia Gautreau, California State University Fullerton  
Kai Dailey, California State University Fullerton  
Lisa Evans, California State University Fullerton

---

## ABSTRACT

*This research presents findings of a College of Education Pilot Webinar Series designed to promote online students' engagement with classmates, faculty presenters, and the university. Student attendees participated in a pilot webinar series that included active discussions and options to synchronously communicate and engage with others. Findings suggest that student attendees increased their sense of engagement with other students, faculty presenters, and the university based on their active participation during webinars. In addition, student attendees reported a sense of increased connection with others during the webinars. Future recommendations are to continue the COE Webinar Series because the online interactions address the students' need to increase engagement and relatedness with other students, faculty, and the university.*

*Key words: webinar, engagement, online students, education*

## INTRODUCTION

Online learning currently provides an unprecedented level of convenience and accessibility for students, but it often falls short of expectations in the areas of retention and social engagement. As students' access to reliable, high-speed Internet continues to grow, the integration of regular online, face-to-face interactions holds promise for addressing these issues. Virtual social learning events allow students and faculty to cross the time and physical distances embedded in the asynchronicity of course forums and learning management systems. Delivering interactive webinars via inexpensive video conferencing software is a readily available resource to counter isolation. The full promise of online learning requires moving beyond the time-worn paradigm of the perceived fixed limitations to making learning experiences that embrace and fully utilize the unique affordances of the online space.

Online students' retention rate is substantially

lower than traditional learners (Bawa, 2016), and one reason that students withdraw from online courses is a lack of connectedness and the associated inability to relate to classmates, faculty, and the university (Martin, Wang, & Sadaf, 2018; Yücel & Usluel, 2016). To address this concern with online students, the researcher designed a pilot webinar series with the intent of building increased engagement. The webinars, serving as a virtual bridge to the university community, allowed student attendees to exchange ideas, comment, and increase their communications with others (Creelman, Árnason, & Röthler, 2017). The researcher conducted an extensive review of existing webinars by various education and training institutions and designed the webinar series based on best practices gleaned from this review.

A common theme in the literature is that individuals need to connect with one another. Ryan and Deci (2017) reinforce that there is an

innate need for individuals to seek competence, autonomy, and relatedness. The researcher used the College of Education (COE) Webinars as a vehicle for connectedness and created an environment where students communicated with others by discussing a particular topic in real time. The real-time relatedness fostered students' need to remain in contact with others (Ryan & Deci, 2017). Given that online learning environments are primarily asynchronous, the COE Webinar Series provided engagement with others that asynchronous learning omits. As noted by Garrison (2017), "thinking and learning collaboratively, however, provide opportunities for deep and meaningful learning experiences" (p. 4). As such, the webinars enabled student attendees to engage others who have similar interests, a like status, and the same intrinsic motivation to learn about a particular topic.

### **SELF DETERMINATION THEORY AND WEBINARS**

The self-determination theory as described by Deci and Ryan (1985) posits that three behavioral elements play an essential role in cultivating and maintaining intrinsic motivation: competence, autonomy, and relatedness. Competence refers to one's sense of efficacy derived from producing a desired result (White, 1959 as cited in Deci & Ryan, 1985). Autonomy describes actions taken in accord with one's authentic interests and values. And relatedness, as noted by Ryan and Deci (2017), concerns the desire to interact, be connected, and experience caring for one another. The presence of all three aspects is essential for preserving intrinsic motivation.

Scholars consistently identify intrinsic motivation as a factor in the successful completion of online courses (Cheng & Jang, 2010). Conversely, the lack of intrinsic motivation tends to exert a significantly negative influence on student retention (Gonzalez, 2015). Relatedness is one of the social aspects that online learners often lack (Bowers & Kumar, 2015). The depletion of a student's intrinsic motivation due to a perceived absence of relatedness with fellow students, faculty, and the university may lead to a withdrawal from online courses (Bowers & Kumar, 2015). Relatedness powerfully mediates learning as individuals "tend to internalize and accept as their own the values and practices of those to whom they feel, or want to feel, connected, and from contexts in which

they experience a sense of belonging" (Niemic & Ryan, 2009, p. 139). Belonging also extends to making meaningful contributions to a social group in which one feels an integral member (Niemic & Ryan, 2009). The real-time social experience found in webinars satisfied the students' need to remain in contact with others. The COE Webinars Series allowed students to tend their intrinsic motivation through participation in a community of learners forged around common issues and purposes.

### *The COE Webinar Series Design and Development Process*

By design, the students were engaged by the deliberate use of interactive affordances unique to webinars (i.e., chat features, polls, screen sharing, interactive icons, and open conversation) (Creelman et al., 2017). Researchers Zieliński et al. (2013) define webinars as the "transmission of video and audio content online (over the internet) from one source to a limited audience with the purpose of training" (p. 5). Unlike one-way webcasts or lecture-style broadcasts designed to limit viewer engagement to accommodate large numbers of attendees, the COE Webinar Series utilized an open, interactive format to facilitate lively conversations between faculty presenters and student attendees (Zieliński et al., 2013). The typical attendance count of 30 students or fewer permitted a higher level of interactivity (Zieliński et al., 2013). Student participation drove the conversation and added to the faculty presenter's lecture and discussion. Software permissions selected by the moderator permitted student attendees to ask questions during the webinar by either texting a comment or verbally asking a question. Students retained the freedom to choose their preferred level and type of interaction.

The College of Education (COE) Webinar Series design was intentional. The webinar series design plan consisted of a review of existing webinar programs (Amhag, 2013) coupled with research related to learning and understanding more about a specific content area. The COE Webinar Series focused on building relationships with others through online connections and consistent engagement in synchronous activities. The researcher incorporated a needs assessment and faculty training on interactive presentation strategies as part of the series design and development process. The researcher received a

monetary stipend for designing, training faculty presenters, and implementing the webinar series. Each webinar presenter received a monetary stipend to attend the training and host the webinar. Each design element was utilized to increase participant engagement by presenting topics of interest and maximizing the affordances of the webinar platform.

### *Students' Needs Assessment*

Researchers support the inclusion of a needs assessment to inform the design and development of instruction (Alessi & Trollip, 2001; Dittmar & McCracken, 2012; Frass, Rucker, & Washington, 2017; Zielinski et al., 2013). A needs assessment informs the proper selection of training content and technology delivery formats (Frass et al., 2017). As explained by Alessi and Trollip (2001), the design and development of a learning product must be guided by the ongoing evaluation of standards that should be applied consistently throughout the project and incorporated through an iterative design process.

Collecting data to support improvements is also underscored by Dittmar and McCracken (2012), who illustrated the usefulness of assessing faculty and student feedback to provide opportunities for ongoing improvements to webinar content and delivery. This responsiveness to feedback equipped the webinar format to simultaneously address institutionwide training goals as well as the demands and needs of students and faculty (Dittmar & McCracken, 2012).

The researcher designed a needs assessment survey and administered it to all COE students. The needs assessment consisted of closed and open-ended questions, and the students were encouraged to provide information about relevant topics of interest. The researcher considered the students' input and responses when scheduling webinars. Of considerable importance were the scheduling preferences indicated by students. Due to varied course offerings and student's schedules, the webinars were offered on the same day and time during the semester. This programming decision allowed for consistency in scheduling, afforded students with a sense of continuity and self-sufficiency, and created an informal "drop-in" social space for student attendees.

The digital community of learners formed through the COE Webinar Series provided

professional and academic competence support by addressing timely and relevant topics related to education. During webinar sessions and discussions, faculty presenters modeled social behaviors and described professional expectations. Student attendees received immediate and personally relevant feedback from other students and faculty (Niemiec & Ryan, 2009).

Another area of concern in the design phase was the need to include interactive strategies to increase student engagement. Unlike traditional lectures during which students are often passive learners, the online delivery of webinars allows for students to be active learners and contributors (Zieliński et al., 2013). The interactive strategies used in the COE Webinar Series are described below.

### *Webinar Presenters*

The researcher invited select faculty to participate as webinar presenters. Each webinar presenter received a stipend for their planning time and webinar presentation. The coordinator of the webinar series also received a modest stipend for training presenters, designing the COE Webinar Presenter Community site, and hosting the webinars. As with any new venture, research supports the integration of professional development (Frass et al., 2017; Johnson & Cooper, 2013; McQuiggan, 2012). Following established practice for faculty development (Lawler & King, 2000), the researcher queried faculty to identify their learning needs and used these data to create a professional development plan for those involved. Although skilled in face-to-face presenting and teaching, the researcher trained the presenters to prepare for the online format (McQuiggan, 2012).

Johnson and Cooper (2013) explain that faculty need access to technology and the willingness to develop basic digital skills to navigate online. The researcher developed a COE Webinar Presenter Community site to provide faculty with the resources needed to design an interactive and engaging webinar. As depicted in Figure 1, the COE Webinar Presenter Community site provided presenters with resources to support student engagement during the webinars.

Each faculty presenter was enrolled in the COE Webinar Presenter Community and accessed professional development materials. The researcher created the COE Webinar Presenter Community and included training videos,

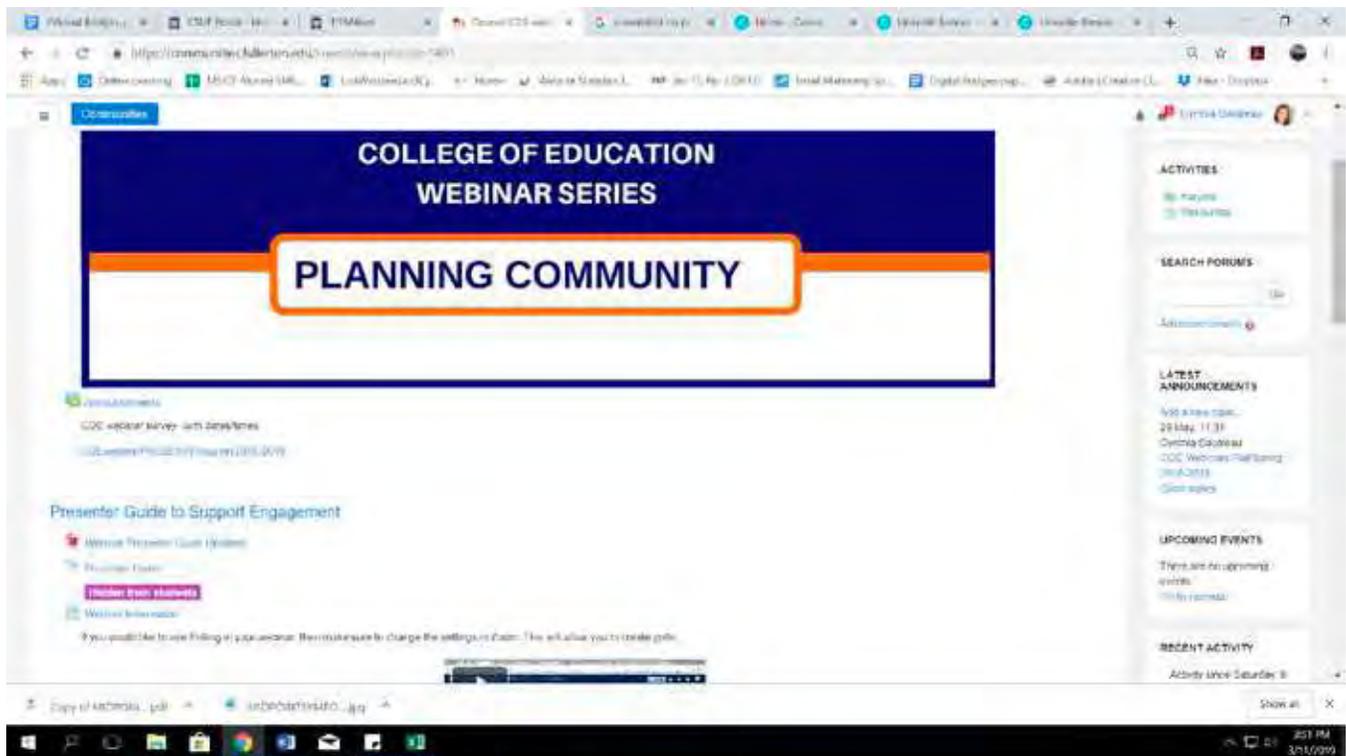


Figure 1. Screenshot of the COE Webinar Presenter Community Site

examples of high-quality webinars, suggested engagement strategies, surveys, presentation templates, and the findings of the needs assessment survey. Additionally, the researcher offered one-to-one training with faculty presenters. The researcher scheduled a time to meet with individual presenters and then scheduled a subsequent training online that allowed time for presenters to practice their delivery of the webinar and utilize the various engagement tools to create a high level of student engagement during the webinars. The researcher found that providing presenters with webinar training supported the successful formation of a community of learners that provided a useful and worthwhile interactive experience for students. One of the most useful implementations was the presenter's inclusion of question slides in the presentation.

The researcher, referencing the instructional strategy New American Lecture (Silver, Strong, & Perini, 2007) and anecdotal experience, suggested that after three slides the presenters embed a question slide. This practice ensured students' active engagement by allowing them to answer questions, ask questions, and contribute their ideas. In an online environment, these

efforts support successful outreach, learning, and community formation.

### *Webinar Topics*

The researcher proposed the webinar topics based on the results of the needs assessment survey and determined that webinar topics needed to appeal to the mass audience needs of COE students. As such, a recurring theme each semester was a focus on career interests including resume writing and interviewing skills. Topics focused on the application of current trends in K–12 education, such as mindfulness (Meiklejohn et al., 2012) and 21st century skills (Kereluik, Mishra, Fahnoe, & Terry, 2013), were also intentionally included in the series. Over one academic year, the pilot webinar series consisted of 15 webinars on topics ranging from Career Center Resources, Classroom Management Skills, ePortfolios, Mindfulness, and LinkedIn Profiles and the Job Search. Table 1 shows the list of webinar titles and attendance for each session. All webinars in the series were offered at no cost to participants

The most attended synchronous webinars were Studying and Teaching Opportunities Abroad ( $n = 59$ ), Exploring Doctoral Degree Programs ( $n = 38$ ), Technology and 21st Century Skills ( $n = 32$ ),

Table 1. COE Webinars and Participation Rates

| Webinar title   | Live webinar date | Synchronous attendees | Asynchronous views |
|---|-------------------|-----------------------|--------------------|
| Career Center Resources                               | 9/18/17           | 12                    | 87                 |
| Technology and 21st Century Skills                    | 9/25/17           | 32                    | 127                |
| Study and Teaching Opportunities Abroad               | 10/19/2017        | 59                    | 0                  |
| Scholarship and Grant Opportunities                   | 10/23/17          | 15                    | 101                |
| LGBTQ and Gender Diversity Inclusion in PK-12 Schools | 11/6/17           | 8                     | 19                 |
| ePortfolios: Building Your Online Profile             | 11/13/17          | 32                    | 37                 |
| Online Teaching: The Basics                           | 12/4/17           | 14                    | 0                  |
| Classroom Management Skills for New Teachers          | 12/11/17          | 11                    | 40                 |
| Mindfulness: How It Can Improve the Quality of Life   | 2/5/18            | 19                    | 31                 |
| Superheroes Wanted: Future Teachers Apply             | 2/12/18           | 12                    | 57                 |
| Bringing Art into Elementary Classrooms               | 3/12/18           | 13                    | 15                 |
| Interview Skills: Asking the Right Questions          | 3/19/18           | 6                     | 0                  |
| More about Migrant Education                          | 3/26/18           | 8                     | 38                 |
| LinkedIn Profiles and the Job Search                  | 4/16/2018         | 2                     | 16                 |
| Exploring Doctoral Degree Programs                    | 4/30/2018         | 38                    | 50                 |

and ePortfolios: Building Your Online Profile (n = 32). The webinars most frequently accessed asynchronously, through recorded session, were Technology and 21st Century Skills (n = 127), Scholarship and Grant Opportunities (n = 101), and Career Center Resources (n = 87).

## METHODOLOGY

### *Context of the Study*

This study took place within the College of Education at a four-year public university in Southern California. The College of Education consists of five departments (Elementary and Bilingual, Secondary, Special, Reading and Literacy, and Educational Leadership) and average enrollment is approximately 1,000 credential and master's candidates. The video conference software Zoom (zoom.us) was used to support the webinars and was purchased by the university and commonly used by faculty and students. The webinars were available at no cost to all enrolled students. The number of participants who attended the synchronized webinars was 281, representing students from across the university. The number of College of Education students who attended was

141 or approximately 14.1% of the total enrollment. Participants in this study included webinar faculty presenters (N = 6) and College of Education student attendees (N = 141).

### *Data Collection*

Data were collected from the student attendees, who were sent a survey link immediately after the webinar concluded. The student attendee post webinar survey consisted of 16 questions (see Appendix A) and included both the assessment of student attendee learning and the overall effectiveness of the webinar as suggested by Zieliński et al. (2013) for effective webinar evaluation.

As a follow up to the pilot webinar experience, the faculty webinar presenters were asked to complete open-ended questions. Qualitative data collected from faculty presenters included a five-question post webinar survey distributed by email to faculty (see Appendix B).

### *Research Question*

The researchers sought to answer one research question: Will student engagement with others increase through participation in interactive webinars?

### Webinar Feedback Surveys

The researcher administered student feedback surveys online after each webinar. Among the 141 student attendees, 41 completed the surveys, resulting in a response rate of 34%. The majority of student attendees (89%) were from the College of Education, with the remainder of attendees representing the College of Arts, College of Communications, College of Health and Human Development, and College of Natural Science and Mathematics. College of Education students represented a variety of departments, with most (57%) enrolled in the Instructional Design & Technology program, followed by 17% enrolled in Elementary and Bilingual Education, 13% enrolled in Secondary Education, and the remainder enrolled in Literacy and Reading, Special Education, and Higher Education. The majority of respondents (70%) were enrolled in online courses. Figure 2 displays the attendance rates based on the webinar series survey.

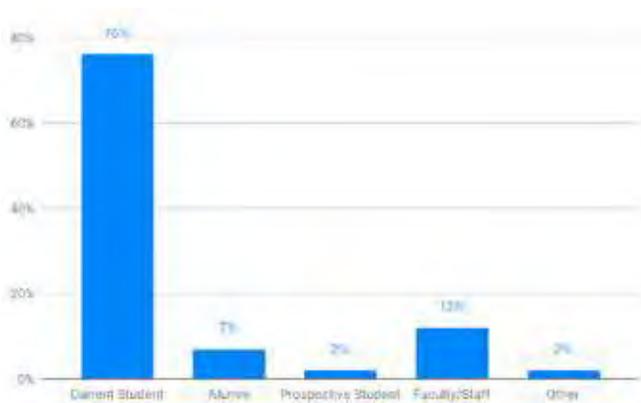


Figure 2. Webinar Student Attendees by COE Affiliation

Student attendees reported that they learned about the COE Webinar Series from multiple communications sources including email (43%), their professor (26%), Facebook (10%), the COE website (7%), classmates (5%), and the university website (2%). A department Facebook page, graduate advisor, and LinkedIn were other reported sources of information about the webinar series. Faculty who promoted the series to their students notified them that participation or nonparticipation would not affect their course grade.

Among the student attendees who completed the webinar feedback survey, 95% indicated that they learned something new during the webinar and that their participation in the webinar made

them feel engaged with others. The majority of attendees (95%) also agreed that participating in the webinar made them feel connected to the College of Education. All of the survey respondents indicated that they planned on attending future webinars.

Feeling connected to a community of learners is not exclusive to those students who actively engaged in the webinar. While 75% of student attendees reported that they asked written or verbal questions during the webinar, 90% indicated that participating in the webinar made them feel like part of a community of learners. One student shared, “I love this meeting; it makes me feel connected with educators and peers. I receive valuable resources and knowledge about the teaching credentials. It makes me feel more confident and ready to be an educator.” Another shared, “I always learn something new when attending the webinars. It’s also good to see classmates.”

### Webinar Presenter Surveys

The webinar presenter survey consisted of five open-ended questions. The webinar presenters attributed the students’ increased sense of connectedness after attending a COE Webinar to tailoring the webinar topics to the students’ immediate interests, which helped attract students’ attention and draw them into the series. One presenter commented, “The topics were relevant and ... involved information that students were interested in.”

Personalization was also a key factor in supporting connectedness. Presenters felt that the COE Webinar Series allowed them to establish a personal connection with students. When asked to indicate what they did to increase the students’ sense of connectedness, common responses included sharing their personal experiences during the webinar introduction, including their contact information, and communicating their interest in mentoring students. The presenter who facilitated one of the most highly attended sessions in the series, Exploring Doctoral Degree Programs, said:

*The material hopefully made them feel connected because they learned more about the college and our resources. I think hearing that we will support students is something [they] want to know and appreciate. Also, having a personal*

*connection during and after the webinar builds a sense of community.*

The survey prompted presenters to share their webinar strategies for increasing students' sense of connectedness to one another. The strategies included allowing time for student attendees to "introduce themselves, including their names, current role in education, and what they hoped to gain from the webinar." Another strategy was encouraging students to ask questions of each other during the question-and-answer section of the webinar and to use the chat feature to ask questions and converse with one another about the webinar topic.

Webinar presenters recommended that future webinar presenters share personal experiences, including acknowledging mistakes made and lessons learned from those experiences, as a way to increase students' feelings of connectedness to faculty. As one presenter shared, doing so "makes you more human to the students." Presenters also suggested sharing professional experiences and photos before the webinar and discussing current and past research, data analysis, and publications. One presenter recommended that throughout the webinar, future presenters should repeatedly encourage students to schedule follow-up web conferencing sessions with faculty to get focused attention and tailored responses to their pressing questions.

Presenters responded to survey questions about webinar strategies to increase and promote student engagement, and they frequently mentioned that students posted questions into the live text chat feature and then the presenter would respond. One presenter shared that she "used polls to understand the audience a little better," and another presenter used interactive slides to keep students engaged. Presenters noted that it was easier to tell if students were engaged when the students' web cameras were turned on and they could see their faces. Overall, presenters reported having a positive experience with the COE Webinar Series and did not feel that they would change much about their presentation. The few suggestions presenters did make included allowing more time for open questions, encouraging more interaction through the live text chat to facilitate postwebinar connections, and spending more time practicing the presentation before the live session.

### *Limitations*

There were several limitations associated with this pilot study. First, the sample size and data collected were limited to those who completed the post webinar survey. An increased sample size may impact future findings. Second, the consistency in webinar scheduling may have influenced the sample size. Providing a variety of webinar dates and times may support increased attendance and increase the sample size of future webinars.

### **RECOMMENDATIONS**

Based on a review of the COE Webinar Series preliminary findings, the following four recommendations are proposed:

The first recommendation is to implement a needs assessment. A survey that determines the needs of students should be distributed to gather information about interests and related topics. Based on the survey findings, schedule a webinar series with a wide array of topics to engage and support students' interests. Providing options to student attendees allows for personal choice and an increased sense of self-motivation and engagement.

The second recommendation is to incorporate interactive and engagement options for attendees. Consistent with research findings and a review of literature, webinar presenters should facilitate active online engagement among attendees. Interactive elements should consist of questions, chat options, discussions, and reflective opportunities for students. The content presented during a webinar should be focused and structured to ensure quality. Clinefelter (2012) recommends that webinars be used to teach one topic or tool, with a recording made accessible through a central portal. A webinar should include options for students to engage with and question the presenter. According to Mayorga, Bekerman, and Palis (2014), webinars that provide interactivity and immediate feedback to student attendees support critical thinking and learning. In planning a webinar series designed to engage students, it is vital to communicate the need for question slides and interactions to the webinar presenters. The presenters guide the webinar discussions; therefore, advanced planning will ensure an actively engaged audience and opportunities for feedback and discussions.

The third suggestion is to ensure that webinar presenters are well prepared to deliver the webinar.

Technology support for presenters is essential to a webinar. The presenters need to be prepared to embed question and reflection slides and be well versed in the video conference technologies. Online training requires significant investments of time and resources for initial development, but the options for webinar reuse and distribution, as well as the ease of updating content based on learner feedback, potentially offsets the initial development investment. While one-on-one faculty training is time intensive, future faculty assistance with updating subsequent COE presentation content, as well as webinar reuse and distribution, can offset the initial time investment (Johnson & Cooper, 2013).

The final suggestion is to provide a postwebinar survey to determine if the session met the attendees' needs. Providing a postwebinar survey allows students to voice their opinions about the webinar content and the presenter. Gathering feedback facilitates the revision of future webinars and ensures that modifications are made to support learning. In addition to student reviews, it is critical to receive input from faculty presenters to determine revisions and improvements to future webinars. The development and design of a webinar program require significant time and effort; therefore, an evaluation that supports quality and management practices is needed.

## **CONCLUSION**

Faculty-led interactive webinars constitute a powerful option for humanizing online learning through the informal communication of professional norms and the sharing of personal stories and experiences between faculty and students. In this study, the researcher investigated the COE Webinar Series impact on relatedness as described by the self-determination theory (Deci & Ryan, 1985). The researcher gathered postwebinar data on students' subjective appraisals of the perceived relatedness with faculty, classmates, and the university. Future research will assess the actual impact of the COE Webinar Series on online retention. The majority of student attendees (90%) who completed a postwebinar survey reported that attending webinars made them feel like part of a community of learners, even when they did not engage in text chat or verbal conversation. Some students reported that the value of participation was merely

the opportunity to learn something new about their profession from an experienced faculty member and to see remote classmates. The success of the COE Webinar Series suggests that the limitations once inherent in the online space can be overcome, as it relates to a student's felt sense of connectedness, by creating engagement opportunities that fully utilize interactive video conferencing options. Reshaping the now dated one-way broadcast webinar into a lively social learning event requires front-end planning and faculty training, but such efforts, if widely implemented, hold promise for transforming online learning into a more personalized and engaging experience for both faculty and students.

## REFERENCES

- Alessi, S. M., & Trollip, S. R. (2001). *Multimedia for learning: Methods and development* (3rd Ed.). Boston, MA: Allyn and Bacon
- Amhag, L. (2013). *Collective webinars in higher distance education. Paper presented at the World Conference on E-Learning in Corporate, Government, Healthcare and Higher Education (AAACE)* (Las Vegas, USA). Retrieved from <http://hdl.handle.net/2043/16403>
- Bawa, P. (2016). Retention in online courses: Exploring issues and solutions a literature review. *SAGE Open*, 6(1). doi:10.1177/2158244015621777
- Bowers, J., & Kumar, P. (2015). Students' perceptions of teaching and social presence: A comparative analysis of face-to-face and online learning environments. *International Journal of Web-Based Learning and Teaching Technologies (IJWLTT)*, 10(1), 27–44. doi:10.4018/ijwlтт.2015010103
- Cheng, K., & Jang, S. (2010). Motivation in online learning: Testing a model of self-determination theory. *Computers in Human Behaviors*, 26(4), 741–752. doi:10.1016/j.chb.2010.01.011
- Clinefelter, D. (2012). Best practices in online faculty development. *LearningHouse.com*. Retrieved from [https://www.learninghouse.com/wp-content/uploads/2017/09/Best-Practices-for-Online-Faculty-Development\\_Web\\_Final.pdf](https://www.learninghouse.com/wp-content/uploads/2017/09/Best-Practices-for-Online-Faculty-Development_Web_Final.pdf)
- Creelman, A., Árnason, H., & Röthler, D. (2017). Webinars as active learning arenas. *European Journal of Open and Distance Learning*. Retrieved from <http://www.euodl.org/?p=current&sp=brief&article=757>
- Deci, E., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum Press.
- Dittmar, E., & McCracken, H. (2012). Promoting continuous quality improvement in online teaching: The META model. *Journal of Asynchronous Learning Networks*, 16(2), 163–175.
- Frass, L. R., Rucker, R. D., & Washington, G. (2017). An overview of how four institutions prepare faculty to teach online. *Journal of Online Higher Education*, 1(1), 1–7.
- Garrison, D. R. (2017). *E-learning in the 21st century: A community of inquiry framework for research and practice* (3rd ed.). New York, NY: Taylor & Francis.
- Gonzalez, E. (2015). Motivation and retention: A comparison between fully online students and on-campus students taking online courses. *The Online Journal of Distance Education and e-Learning*, 3(3), 33–48.
- Johnson, C., & Cooper, T. (2013). Online professional development: Three approaches for engaging faculty through a constructivist framework. In R. McBride & M. Searson (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2013* (pp. 31–35). New Orleans, LO, United States: Association for the Advancement of Computing in Education (AAACE). Retrieved from <https://www.learntechlib.org/primary/p/48066/>
- Kereluik, K., Mishra, P., Fahnoe, C., & Terry, L. (2013). What knowledge is of most worth: Teacher knowledge for 21st century learning. *Journal of Digital Learning in Teacher Education*, 29(4), 127–140.
- Lawler, P. A., & King, K. P. (2000). Refocusing faculty development: The view from an adult learning perspective. *Proceedings from Pennsylvania Adult and Continuing Education Research Conference*. Indiana, Pennsylvania. Retrieved from <https://newprairiepress.org/aerc/2000/papers/48>
- Martin, F., Wang, C., & Sadaf, A. (2018). Student perception of helpfulness of facilitation strategies that enhance instructor presence, connectedness, engagement, and learning in online courses. *The Internet and Higher Education*, 37, 52–65. doi:10.1016/j.iheduc.2018.01.003
- Mayorga, E. P., Bekerman, J., & Palis, A. (2014). Webinar software: A tool for developing more effective lectures (Online or In-Person). *Middle East African Journal of Ophthalmology*, 21(2), 123–127. doi:10.4103/0974-9233.129756
- Meiklejohn, J., Phillips, C., Freedman, M. L., Griffin, M. L., Biegel, G., Roach, A., ... Saltzman, A. (2012). Integrating mindfulness training into K–12 education: Fostering the resilience of teachers and students. *Mindfulness*, 3, 291–307. doi:10.1007/s12671-012-0094-5
- McQuiggan, C. A. (2012). Faculty development for online teaching as a catalyst for change. *Journal of Asynchronous Learning Networks*, 16(2), 27–61.
- Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education*, 7(2), 133–144. doi:10.1177/1477878509104318
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. New York, NY: Guilford Publications.
- Silver, H. F., Strong, R. W., & Perini, M. J. (2007). *The strategic teacher: Selecting the right research-based strategy for every lesson*. Alexandria, VA: Association for Supervision and Curriculum Development.

Yücel, A. Y., & Usluel, Y. K. (2016). *Knowledge building and the quality, content and quality of interaction and participation of students in an online learning collaborative environment*. *Computers and Education*, 97, 31–48. doi:10.1016/j.compedu.2016.02.015

Zieliński, K., Jaruga, A., Hofmann, R., Machdaoui, S., Sikorska, K., & Kerler, M. (2013). *This Webinar Methodology (Version 2)*. Retrieved from [http://webinar2learn.eu/upload/files/0/40/w2l\\_metodyka\\_EN\\_nowa.pdf](http://webinar2learn.eu/upload/files/0/40/w2l_metodyka_EN_nowa.pdf)

## Appendix A

### WEBINAR PARTICIPANT POST-SURVEY

1. Which webinar did you attend? (drop down menu)
2. I am a(n)
  - a. Current student
  - b. Alumni
  - c. Prospective student
  - d. Faculty
  - e. Staff
  - f. Other
3. If you are a current student, which college are you enrolled in?
  - a. College of Education
  - b. College of Arts
  - c. College of Business and Economics
  - d. College of Communications
  - e. College of Engineering and Computer Science
  - f. College of Health and Human Development
  - g. College of Natural Science and Mathematics
  - h. College of Humanities and Social Sciences
  - i. Other
4. If you are a College of Education student, which department/program are you enrolled in?
  - a. Education Leadership
  - b. Elementary and Bilingual Education
  - c. Doctorate in Ed Leadership
  - d. Literacy and Reading
  - e. Instructional Design and Technology
  - f. Secondary Education
  - g. Special Education
  - h. Other
5. I learned about the webinar series from
  - a. An email
  - b. Facebook
  - c. My classmates
  - d. My professor
  - e. The COE website
  - f. The university website
  - g. Twitter
  - h. Other

6. I am enrolled in online courses.
  - a. Yes
  - b. No
  - c. Comments
7. I learned something new during this webinar.
  - a. Yes
  - b. No
  - c. Comments
8. My participation in this webinar made me feel connected to the university.
  - a. Definitely yes
  - b. Probably yes
  - c. Might or might not
  - d. Probably not
  - e. Definitely not
9. My participation in this webinar made me feel connected to the College of Education.
  - a. Definitely yes
  - b. Probably yes
  - c. Might or might not
  - d. Probably not
  - e. Definitely not
10. My participation in this webinar made me feel like part of a learning community.
  - a. Definitely yes
  - b. Probably yes
  - c. Might or might not
  - d. Probably not
  - e. Definitely not
11. I asked written or verbal questions during this webinar.
  - a. Yes
  - b. No
  - c. Comments
12. I was able to log in to the webinar
  - a. Without any problems
  - b. With some problems
  - c. With many problems
  - d. Comments
13. I plan on attending future webinars.
  - e. Definitely yes
  - f. Probably yes
  - g. Might or might not
  - h. Probably not
  - i. Definitely not
  - j. Comments
14. Please select your preferred day and time for future webinars. Select all that apply.
  - a. 3:00 PM
  - b. 4:00 PM
  - c. 5:00 PM
  - d. 6:00 PM
  - e. 7:00 PM
15. Do you have any suggestions for future webinar topics? (Open ended)
16. Please provide any other comments regarding this webinar series or any suggestions to engage online learners. (Open ended)

## Appendix B

### WEBINAR PRESENTER POST-SURVEY

1. Students who participated in the webinars reported an increased sense of connection to the College of Education. Did you do anything in your presentation or share anything that may have contributed to this reported increased sense of connection? If yes, what did you do?
2. Students who participated in the webinars reported an increased sense of connection to other students. Did you do anything in your presentation to encourage students to discuss ideas with one another and build their connections? If yes, what did you do?
3. What can be done by presenters to make students feel connected to the faculty who present information during the webinar? Do you have any suggestions?
4. Do you feel that students were engaged in the webinar? How do you know that they were engaged?
5. If you could change anything about your webinar presentation, what would you change?