

3-7-2022

Collaboration in an Asynchronous Online Educator Preparation Program

Laurie Bobley
Touro College

Alan Sebel
Touro College

Follow this and additional works at: https://touroscholar.touro.edu/faculty_pubs



Part of the [Education Commons](#)

Recommended Citation

Bobley, L., & Sebel, A. (2022). Collaboration in an Asynchronous Online Educator Preparation Program. INTED2022 Proceedings, 1750–1756. <https://doi.org/10.21125/inted.2022.0524>

This Conference Proceeding is brought to you for free and open access by Touro Scholar. It has been accepted for inclusion in Touro Scholarly Works by an authorized administrator of Touro Scholar. For more information, please contact touro.scholar@touro.edu.

COLLABORATION IN AN ASYNCHRONOUS ONLINE EDUCATOR PREPARATION PROGRAM

L. Bobley, A. Sebel

Touro College (UNITED STATES)

Abstract

Asynchronous online courses generally provide little opportunity for students to collaborate with peers. In a typical asynchronous course, students work fairly independently and the main interaction with peers is in discussion forums. Yet, professional standards for teachers and school leaders recognize collaborating with stakeholders as a significant responsibility [3], [12]. Acknowledging this, we wanted to provide candidates with an authentic experience communicating and working in teams, and simultaneously make their online coursework more interactive. This paper and presentation will focus on how faculty in an asynchronous online education program addressed this problem of practice. It will also describe the steps taken to identify and redesign assignments that could become collaborative projects in place of independent student work. The results of several semesters of feedback from students who were required to work in collaborative teams to complete assignments will be presented.

Keywords: Online Learning, Asynchronous, Collaboration, Educator Preparation, Online Pedagogy, Peer-Peer Interaction.

1 INTRODUCTION

Higher education has undergone a radical shift as a result of the 2020 worldwide pandemic. Previously, almost one-third of students (31.6%) were taking at least one course online [15] and approximately 63% of all U.S. college students had not had any online course experience [21]. As a result of the pandemic, for continuity of instruction, colleges moved courses to an online or remote format and faculty who had never taught online were forced to transfer their entire curriculum to accomplish this. In a 2020 national survey of 1000 undergraduate students who transitioned to completely online courses, 50% of respondents felt less included in the class when they were online and 57% felt less interested in the course content. Most significantly, 65% felt that “opportunities to collaborate with other students on course work were worse” in an online setting than in a traditional classroom setting [11].

Prior to the pandemic, one instructor in a school leadership program that previously made the shift from in-person instruction to asynchronous online instruction identified that there was a clear reduction of students working together and problem-solving as they normally would have in a typical classroom. This failed to provide students with the opportunity to collaborate with others, a required skill for effective school leaders [12].

Asynchronous online courses generally provide little opportunity for students to collaborate with peers. In a typical asynchronous course, students work fairly independently and the main interaction with peers is in discussion forums [17]. However, professional standards for teachers and school leaders recognize collaborating with stakeholders as a significant responsibility [3], [12]. The instructor consulted with a colleague who had experience with coursework that involved collaboration in online courses. They agreed it was essential to provide graduate students with authentic experiences in communicating and working in teams and also make the coursework more interactive. This paper focuses on how faculty addressed this problem of practice in asynchronous online courses. The approach taken has relevance to the current worldwide shift in the delivery of education. The impact that collaborative activities could potentially have on student learning has value as more programs continue to offer online courses as an option.

Discussion forums are the main tool for learner-learner interaction in online courses [13], [20]. Yet, Chou [1] suggests that this text-based communication in online discussion boards is lacking the social aspect of in-person communication. One mixed methods study compared two models of online discussions, a cooperative learning model and a traditional model. The traditional model only required comments on peers' work. Fifty-six graduate students participated in this one semester study [10]. Both quantitative and qualitative data were collected and evaluated. The quantitative data included grades from student survey multiple choice questions and discussion board posts and qualitative data was derived from open-ended student survey questions. When the quantitative results were reviewed, there was no significant difference in the two models, indicating, numerically at least, that none of the factors in question were affected by the incorporation of

cooperative learning strategies. The quantitative survey results revealed that graduate students who were in the online course using a traditional discussion approach valued “support, independence, structure and time management” [10]. Conversely, students in the course where cooperative learning was part of their discussion board work commented that “communication,” “engagement,” and “quality of learning” from the assignments and interaction were beneficial to their own learning [10]. The value of this study is that it highlights factors important for the design of online learning environments and for student engagement. Higher levels of engagement appear to be evident when cooperative learning is used [2], [10].

Best practices for online course design notably include meaningful interaction so that students do not feel isolated, and the content is relatable [14], [16], [19]. Effective online pedagogy requires student to instructor, student to student, student to content interaction [13], [20]. Authentic learning experiences have been described as those that provide situational tasks “that reflect the way knowledge will be used in real life’ [5]. The professional standards for teachers and school leaders specifically address this as a competency and indicate that highly effective practitioners are able collaborators [3], [12]. Collaboration involves individuals with varied perspectives working together to develop new understandings [9]. According to Garrison [7],

Interpersonal relationships are the greatest influence on our thinking and learning. This is in contrast to the fallacy of the isolated creative thinker. Thinking and learning is not a private experience. It is dependent upon open communication. We don't know what we don't know until we are confronted with conflicting facts and arguments.

A review of the literature indicates that including activities for students to collaborate as they examine information and come to a shared understanding may facilitate learning and prepare them for their future practice as educators.

2 METHODOLOGY

This qualitative research centers on a strategy to integrate an underutilized best practice into online course design. The researchers seek to validate whether the implementation of one component identified in the literature on best practices for online learning, cooperative activities, would improve students’ perception of online learning and their perception of their capacity to apply these essential skills. This qualitative study assumed an action research approach. “Action research is a form of research carried out by educators in their everyday work setting for the purpose of improving their professional practice” [6]. The researchers wanted to explore the value of integrating a collaborative activity in an asynchronous online educator preparation course in a masters degree program. The goal was to improve the student experience in an online course and simultaneously prepare future school leaders to address the professional standards [3], [12]. An additional goal was to improve online course design in an effort to break down the isolation experienced by students in asynchronous online courses [1], [4].

The following questions guided this study:

- What challenges exist for faculty when designing and facilitating student-to-student interaction in an asynchronous online course?
- What are the experiences of students participating in cooperative activities in asynchronous online courses?

A pilot was conducted in one course over two terms. Based on the positive feedback and outcomes, another collaborative project was developed for a second course and six semesters of data was collected from this additional course.

Previously in Course 1, students were provided a descriptive case study of a school district and the educational outcomes achieved during a school year. Each student independently developed an executive summary to be presented by the superintendent to the school board where they summarized the current conditions and outlined plans for the next school year.

In the revised assignment, candidates were randomly grouped in teams of four. After reading the case study, they collaboratively determined each members’ role as a member of the superintendent’s staff. They each then developed a summary of the conditions and plans for their responsibility area. Using online document sharing platforms, such as Google Documents, they developed a cohesive description of the district’s current status and plans for the next school year. They then presented a written executive summary and video presentation of that summary to the school board, with each member speaking about their specific area of expertise. This was shared with peers for comments and feedback, and with the instructor for feedback and grading.

Table 1. Comparison of Course 1 District Case Study Assignment

Original Assignment	Redesigned assignment
Read a descriptive case study	Read a descriptive case study
Develop an executive summary with respect to each role identified in the case study <ul style="list-style-type: none"> • Describe the current conditions • Outline plans for the next school year In the role of superintendent, present plan to school board	Each individual member assumed a role on the superintendent's staff <ul style="list-style-type: none"> • (e.g., Director of Bi-lingual Instruction, Director of Buildings and Grounds, Director of Guidance) • Develop an executive summary (written) • Describe the current conditions Outline plans for the next school year In their selected role, present their plan (via video) to school board (peers and instructor)

Each student in Course 2 read a book about or by a leader who was from a field other than education (business, sports, politics, military, etc.). Individually, they wrote a book review and identified the leader's key leadership principles aligning them with the PSEL standards. Students also described how the identified principles would influence their future practice as leaders. In the revised assignment, students were randomly assigned to groups. The first opportunity for collaboration was determining which leader each member of the group would read about as each member of the team had to read a different book. The students still identified the leadership principles of the leader, aligned the ideas espoused by that leader to the PSEL standards, and described the relevance of the identified leadership principles to their future practice as school leaders. Instead of writing an extended book review, each member of the team completed a graphic organizer summarizing their findings. After review and approval by the instructor, they then collaboratively completed a graphic organizer focusing only on those principles that were shared by the leaders. The goal was for the graduate education candidates to gain insight into leadership from a variety of perspectives.

Table 2. Comparison of Course 2 Leadership Principles Assignment

	Original Assignment	Redesigned assignment
Individual	Read a book about or by a leader from a variety of different backgrounds (business, sports, politics, military, etc.) Book review (five pages minimum) <ul style="list-style-type: none"> • Write a summary of the book • Identify the leader's key leadership principles • Align the leadership principles with PSEL (2015) standards • Describe how the identified principles would influence their future practice as leaders. Submit assignment directly to instructor for individual grade	Read a book about or by a leader from a variety of different backgrounds (business, sports, politics, military, etc.) Graphic organizer <ul style="list-style-type: none"> • Identify the leader's key leadership principles • Align the leadership principles with PSEL (2015) standards • Describe how the identified principles would influence their future practice as leaders. Submit assignment directly to instructor for individual grade
Groups		Read a book about or by a leader from a variety of different backgrounds (business, sports, politics, military, etc.) Graphic organizer <ul style="list-style-type: none"> • Identify the leader's key leadership principles • Align the leadership principles with PSEL (2015) standards • Describe how the identified principles would influence their future practice as leaders. Submit assignment directly to instructor for individual grade

Surveys were distributed to school leadership candidates in a total of 10 course sections over several consecutive terms. Additional data was collected through course evaluations and student reflections. Faculty also reflected on the development of the assignments and how they facilitated the collaborative project. Quantitative and qualitative data from student surveys and reflections were analyzed as they were collected. Each term, faculty also reflected on their own experience with the revised assignments.

3 RESULTS

The findings from this action research study indicate a consistency with the existing literature about collaborative activities in online courses. Several themes have emerged from analysis of the data.

3.1 Student surveys

Survey results for Course One can be found in Table 3.

Table 3. Survey Results Course One

	<i>Strongly Agree and Agree (%)</i>	<i>Strongly Agree and Agree (%)</i>	<i>Disagree and Strongly disagree (%)</i>	<i>n</i>
Collaboration improved my learning	59	13	28	100
Collaboration was too complicated in an online environment	53	13	34	100
Collaboration increased my knowledge of technology and/or online collaboration tools	75	8	17	100
Collaboration personalized the online learning experience	60	16	24	100
Collaboration strengthened course content	53	11	36	100
What I learned about online collaboration is transferrable in my future work as a teacher/leader	77	12	11	100

Students (n=100) agreed or strongly agreed that collaboration improved their learning (59%), collaboration increased their knowledge of technology and/or online collaboration tools (75%), personalized the learning experience (60%) and strengthened course content (53%). Seventy-seven percent (77%) agreed or strongly agreed that collaboration is transferable to their work as future leaders and educators. Additionally, 53% agreed or strongly agreed that collaboration was too complicated in an online class.

Survey results from Course Two can be found in Table 4.

Table 4. Survey Results Course Two

	<i>Strongly Agree and Agree (%)</i>	<i>Strongly Agree and Agree (%)</i>	<i>Disagree and Strongly disagree (%)</i>	<i>n</i>
Collaboration improved my learning	79	14	7	198
Collaboration was too complicated in an online environment	29	13	58	198
Collaboration increased my knowledge of technology and/or online collaboration tools	69	20	11	198
Collaboration personalized the online learning experience	61	28	11	198
Collaboration strengthened course content	71	16	13	198
What I learned about online collaboration is transferrable in my future work as a teacher/leader	86	9	5	198

Students (n=198) agreed or strongly agreed that collaboration improved their learning (79%), collaboration increased their knowledge of technology and/or online collaboration tools (69%), personalized the learning experience (61%) and strengthened course content (71%). Eighty-six percent (86%) agreed or strongly agreed that collaboration is transferable to their work as future leader and educator. Additionally, 29% agreed or strongly agreed that collaboration was too complicated in an online class.

3.2 Student feedback and reflections

To evaluate candidate participation and the value of group work, candidates were asked to collaboratively describe their experiences with the group process and their perceived learning. The following are representative comments:

Several groups described that getting started was difficult because “it took effort to adjust the group members’ schedules due to personal and life responsibilities, such as family, graduate studies and work as an educator.”

Our group found that the collaborative exercise would be relevant for use by school leaders with their own staff.

School leaders can apply the skills of this task to their staff, as an effective school requires a great amount of teamwork and the ability to collaborate productively. The use of technology during this collaborative exercise is relevant to school leadership as well. Being able to work on a document together or doing virtual calls are both tools that can be used with staff and colleagues.

The value of diversity of opinion was a common theme

We each learned something new about ourselves, whether it be leadership styles, our weaknesses, or simply using new software. This exercise promoted growth as a whole for each of us as individuals and as a team.

and

School leaders may use this type of group work to establish effective groups, to build work relationships and to find information about a topic from the different points of view of others. When more than one person is working on the same task, you will find out new information about the topic, more than you would if working alone.

Another group aligned their ideas with a PSEL standard and stated that the collaborative project...

was a great example of how school leaders can get teachers to work together when planning. It taught us how we can use online tools to work effectively and efficiently to come up with common planning times, respectfully exchange ideas, and learn from one another. These tools can be used among staff members in schools when working towards a common goal (PSEL 2).

This exercise provided one group with a “window” into their world and described that “Online collaboration is not the future, but the present. This exercise helped prepare us for collaboration as school leaders.”

3.3 Faculty reflections

Faculty found that redesigning the assignments was a bit complicated as they wanted to ensure that the learning outcomes would be the same or better after the addition of a collaborative exercise in the course. This concern appears to have been addressed as survey responses indicate that the most significant result of participating in a collaborative project was that the candidates believed that the ability to collaborate is transferable to their future work as school leaders.

A goal of the redesign was to have candidates practice collaboration as this is an important skill for educators. In both cases, prior to the redesign there was no emphasis on collaboration, which was neglectful of a key skill required of educational leaders. The benefit of the redesign was to provide an opportunity for candidates to develop this required skill. In course two, there was a dual purpose in developing the collaborative assignment. Purpose one was to continue to emphasize the importance of collaboration and to develop that skill. Purpose two was to identify leadership skills or principles that could be generalized across various fields of leadership and that are applicable to their future work as school leaders.

Faculty believe that based on positive student feedback, the time it took to redesign the assignments to be collaborative was time well spent and beneficial to candidate learning and outcomes.

4 CONCLUSIONS

Collaborative instructional activities embedded in asynchronous online courses, can simulate conditions found in the workplace and address the professional standards which require interaction between multiple and varied stakeholders [3], [12]. Working on tasks together requires student to student interaction, which in turn personalizes the online experience while developing shared understandings of the course content. Collaboration facilitates the development of meaningful connections between the content of the course and authentic situations professional educators will face in their daily practice.

The researchers found that requiring students to work on collaborative projects provided actual practice with the essentials of collaboration, including acceptance of diverse perspectives on the issues addressed. Being able to negotiate to achieve a product that reflects the melding of diverse ideas into a final work product parallels what future school leaders will need to accomplish when leading a school. Students commented that multiple voices prompted new ideas and helped them arrive at new solutions or new understandings of the content.

The act of completing a collaborative exercise also added to the element of accountability. Students were accountable to their peers as well as to the instructor and themselves for the completion and submission of a final product.

There were several lessons learned from conducting the pilots:

- It is essential to have clear rubrics for the assignment and for participation of all in the group. The participation rubric allows for each member of the collaborative team to evaluate their own and their teammates' contributions to the completion of the task. This facilitates accountability and reduces student anxiety about the possibility of "freeloaders" not contributing to the work of the group.
- It is important to establish a timeline or a pacing schedule for the groups to follow so that they know and understand that collaboration takes planning and cooperation. The pacing schedule must include periodic check-ins with the instructor.
- It is important that the instructor monitor the pacing schedule. This will allow the instructor to know if a team is experiencing difficulties and if intervention is needed to support the process of collaboration and the completion of the assignment task.
- Collaborative assignments should only be developed if the final product improves the learner's experience and ensures a greater understanding of the course content and its relevance to future professional practice.

The benefits of collaboration in both courses are that the revised assignments fostered interaction while breaking down the isolation that is common in online courses[4]. As previous research has indicated, when included in online courses, collaborative activities foster discussion, support the development of knowledge and the deeper understanding of content. Collaboration also encourages personal reflection as individuals need to consider the ideas and viewpoints of others [8], [10]. If group activities lead to the improvement of communication and quality of learning, then it may be beneficial to incorporate cooperative learning activities into higher education online courses

REFERENCES

- [1] P. Chou, "Teaching strategies in online discussion board: A framework in higher education," *Higher Education Studies*, 2(2), 25-30, 2012.
- [2] S. Chou and H. Min, "The impact of media on collaborative learning in virtual settings: The perspective of social construction," *Computers & Education*, vol. 32, pp. 417-431, 2009. doi: 10.1016/j.compedu.2008.09.006
- [3] Council of Chief State School Officers. Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards: A Resource for State Dialogue. Accessed 20 November, 2021. Retrieved from https://ccsso.org/sites/default/files/2017-11/InTASC_Model_Core_Teaching_Standards_2011.pdf

- [4] N. Croft, A. Dalton, and M. Grant. Overcoming Isolation in Distance Learning: Building a Learning Community through Time and Space, *Journal for Education in the Built Environment*, vol. 5, no. 1, pp. 27-64, 2010. doi: 10.11120/jebe.2010.05010027
- [5] J. Fleming, k. Becker, and C. Newton, Factors for successful e-learning: does age matter?, *Education & Training*, Vol. 59, no. 1, p. 85, 2017. doi; 10.1108/ET-07-2015-0057.
- [6] M. D. Gall, P. J. Gall, and W. R. Borg, *Educational research: An introduction*. Boston/MA: Pearson Education, Inc, 2007.
- [7] D. R. Garrison, *Community of practice for research and practice*, Third Edition, p. 12, New York/NY: Routledge, 2017.
- [8] D. R. Garrison and M. Cleveland-Innes, Facilitating cognitive presence in online learning: Interaction is not enough. *American Journal of Distance Education*, vol. 19, pp. 133-148, 2005. Accessed 18 July, 2021. Retrieved from http://dx.doi.org/10.1207/s15389286ajde1903_2
- [9] L. Ingram and L. G. Hathorn, Methods for Analyzing Collaboration in Online Communications, in *Online Collaborative Learning: Theory and Practice* (T.S. Roberts, ed.), pp. 215-241, Hershey/PA: IGI Global, 2004. <http://doi:10.4018/978-1-59140-174-2.ch010>
- [10] L. Kupczynski, M. A. Mundy, J. Goswami, and V. Meling, Cooperative learning in distance learning: a mixed methods study. *International Journal of Instruction*, vol. 5, no. 2, pp. 81-90, 2012.
- [11] B. Means, J. Neisler, and Langer Research Associates. *Suddenly Online: A National Survey of Undergraduates During the COVID-19 Pandemic*. San Mateo, CA: Digital Promise, 2020.
- [12] National Policy Board for Educational Administration Professional Standards for Educational Leaders. 2015. Reston/VA, (2015). Accessed 15 October, 2021. Retrieved from https://www.npbea.org/wp-content/uploads/2017/06/Professional-Standards-for-Educational-Leaders_2015.pdf
- [13] M. G. Moore, Three types of interaction. *The American Journal of Distance Education*, vol 3, no. 2, 1989.
- [14] R. Paloff and K. Pratt, *Building Online Learning Communities: Effective Strategies for the Virtual Classroom*. San Francisco/CA: Jossey-Bass, 2007.
- [15] J. E. Seaman, I. E. Allen, J. Seaman, Grade increase: Tracking distance education in the United States, Babson Survey Research Group, 2018. Accessed 18 July, 2021. Retrieved from <https://files.eric.ed.gov/fulltext/ED580852.pdf>.
- [16] Standards from the Quality Matters Higher Education Rubric, Sixth Edition. Quality Matters. Retrieved from Specific Review Standards from the QM Higher Education Rubric, Sixth Edition
- [17] K. Swartzwelder, J. Murphy, and G. Murphy, The impact of text-based and video-based discussions on student engagement and interactivity on an online course. *Journal of Educators Online*, vol. 16, no. 1, 2019. Accessed 30 December, 2021. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1204391.pdf>
- [18] Croft with M. J. W. Thomas, Learning within incoherent structures: The space of online discussion forums, *Journal of Computer Assisted Learning*, vol. 18, no. 3, pp. 351–366, 2002. doi:10.1046/j.0266-4909.2002.03800
- [19] The Touro Rubric for Online Education, Touro College and University System, 2020. Accessed 18 July, 2021. Retrieved from <https://www.touro.edu/online-education/faculty-resources/rubric/>.
- [20] Interaction isolation C. Turley & C. Graham. Interaction, Student Satisfaction, and Teacher Time Investment in Online High School Courses. *Interaction, Interaction, Journal of Online Learning Research*, vol. 5, no. 2, pp. 169-198, 2019.
- [21] U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 2020*, Table 311.15.