Enhancing Scholarly Connectedness with Online Graduate Students via

a Cohort Learning Model

Jeffrey McCarthy, Rick Albright, Andrea Barbian, Capri Brooks

Department of Counselor Education and Family Studies, Liberty University

For questions related to this article, contact: Dr. Jeffrey McCarthy, jamccarthy@liberty.edu

Abstract

The growth of online learning has increased the need for graduate programs to consider novel approaches to enhance students' sense of connectedness in order to increase student retention. This study describes both the rationale and the impact of an innovative instructional strategy – a cohort learning model - in a graduate school counseling program across field experience courses. Ethical considerations are addressed. Findings indicate that the cohort learning model helps school counseling graduate students feel more connected to their classmates, instructors, and institution. Furthermore, findings and implications for the field and future research are discussed.

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Introduction

Online learning has sustained exponential growth over the past twenty years (Miller et al., 2015). While this growth has provided access, flexibility, and increased opportunity (Martin et al. 2015), it has also created some unique challenges for programs to nurture student connectedness and a sense of community, both of which facilitate student success (Wyatt, 2011; LaBarbera, 2013). Defining this construct is an important first step towards understanding the challenges and reviewing relevant research findings.

Student connectedness refers to a student's feeling of belonging and development of bonded relationships (Rovai, 2002). Researchers have discovered that not all students experience connectedness in identical ways. Men maybe particularly at risk for low connectedness (Shea, 2006; Summers et al. 2002). Meanwhile, Ngozi et al. (2010) found that adult learners over the age of 25 may also face the particular risk of feeling isolated in their postsecondary studies. Furthermore, online graduate programs may be particularly at risk for diminished connectedness due to some of the changes that have accompanied relatively recent exponential growth. In addition, many of these students are experiencing increased stress as they attempt to fulfill their many roles and responsibilities both in and beyond the classroom (Swayze & Jakeman, 2014). While important, these findings likely only scratch the surface of experiences for specific sub-populations regarding student connectedness which in turn will require further considerations in online higher education in the years ahead. Moreover, Skelcher et al. (2020) note that further research is needed to better understand students' feelings of connection and/or isolation.

The landscape of online graduate school enrollment is an increasingly competitive one. Competition has led to increasingly flexible program models, which are designed to attract and retain adult learners. One aspect of this flexibility is that online graduate programs are often characterized by students entering programs at various nontraditional points throughout the academic year as opposed to the highly structured models of traditional brick and mortar institutions of the past. Additionally, online programs are increasingly designed to maximize flexibility for students and these programs by allowing students to register for required classes emphasizing choice and convenience rather than working through a set sequence. This, combined with high enrollment at some institutions, may inadvertently result in students only working with a given professor and/or select classmates for as little as the duration of a single 7- or 8-week sub-term, limiting time and opportunity to facilitate meaningful connections. These variations from traditional models have enhanced student and program flexibility and have at least accompanied, if not contributed to, higher enrollments. However, these same changes have exacerbated the risks for students experiencing diminished thoughts and feelings of connection. In addition, participation in cohort learning models can affect retention rates (Lei et al., 2011). These are only some of the reasons online graduate programs have a vested interest in identifying innovative approaches and models to enhance student retention and satisfaction.

The most successful graduate programs facilitate student connection to their fellow students, to their professors, to their programs, and to the university. Research consistently indicates that high levels of social connectedness are attributed to higher levels of retention (O'Keeffe, 2013) and student satisfaction with online learning (LaBarbera, 2013). Furthermore, enhancing social connectedness may reduce students' isolation (Gallien & Oomen-Early, 2008) and enhance their academic performance (Levy, 2007). The combination of persuasive research findings

supporting the benefits of student connectedness along with enrollment competition provides a

strong rationale for online programs to have significant interest in strategies for enhancing

student connectedness.

One potential solution to promote student connectedness in the online environment is to

expand the use of cohort-based learning which may facilitate the development of connection via

community-building. A cohort learning model intentionally groups students together over

multiple courses, terms, or semesters as well as in some cases with the same instructor. Students

in a cohort learning model often work together on projects or in small groups (Lei et al., 2011).

This increases technological communication between students and thus aides in the depth of the

connection (Swayze & Jakeman, 2014). The increases of cohort-based learning have historically

been evident in brick-and-mortar institutions. However, this is perhaps more a result of

convenience and the relatively small size of their graduate programs than an intentional

programming strategy. Regardless, researchers have noted a need to more fully understand

student experiences with cohort-based education (Browne-Ferrigno & Muth, 2003; Hickson,

2015).

A growing body of research suggests that cohort-based learning helps to facilitate students'

perceptions of connection with their classmates and instructors (Swayze & Jakeman, 2014).

Cohort learning models nurture an environment which is conducive to meaningful interactions

among students which is critical to student learning and success (Glazer & Wanstreet,

2011). Conrad (2005) suggests that a sense of community is created by utilizing an online cohort

learning model. The use of this model enhances a sense of community through increasing

communication and interactions between students as they work toward the same academic and

program goals (Swayze & Jakeman, 2014). This sense of community not only supports students

academically, but often goes beyond academic endeavors into support for personal trials

(Swayze & Jakeman, 2014). Furthermore, Hickson (2015) found that students' perceptions of

presence and voice in cohort learning models nurtures positive environments for student

engagement and participation in activities and conversations. Additionally, cohort learning

models may also benefit students by facilitating educational environments that are easier to

navigate while also allowing them to better understand program processes and procedures

(Hickson, 2015). McCarthy et al. (2005) suggested that graduate programs in educational

contexts may be particularly appropriate for implementing cohort-based learning models.

Description of the Cohort Learning Model

To further explore the effectiveness of the cohort learning model, the authors completed a

study to measure the degree of connectedness among online graduate school counseling students

who participated in a cohort learning model for one academic year. In this instance, the

implementation of the cohort learning model was applied specifically to the practicum and

internship clinical experiences portion of the master's program. The participating faculty and

students committed to remain in the same section for both the fall and spring semesters. The

rationale was that increasing connectedness during this critical stage of students' educational

program would lead to increased academic success, increased scholarly collaboration, and

increased support leading into their transition from school to professional work.

There are three primary stakeholders involved in this specific method of implementation,

students, faculty members, and program administration. Program administrators are typically

responsible for assigning faculty and students to courses. In this instance, the authors worked

with the practicum and internship department at the university to recruit students based on their

enrollment in a practicum or internship course for the Fall 2021 semester. As students agreed to

participate in the cohort learning model, they were assigned to a cohort learning model section of

practicum or internship. Given that the faculty and students committed to remain in the same

section for both the fall and spring semesters, less time was spent on scheduling students and

course assignments in the subsequent semester. When the cohort learning model is implemented

across the board in a large program, program administrators' workload is significantly decreased,

allowing for them to focus on other tasks.

Faculty members are also considered stakeholders in the cohort learning model. The

implementation of the cohort learning model allows for faculty to develop a deeper level of

comfort and trust with their students. Like that of the counseling relationship, when rapport is

established, faculty can confront and challenge their students to promote deeper growth (Paul &

Cochran, 2013). Faculty also benefit by being able to establish common areas of research interest

with students, which can lead to further mentorship and scholarly collaboration (Swayze &

Jakeman, 2014).

While program administrators and faculty benefit from the cohort learning model of learning,

the most central stakeholders are the students. The expected outcome is that students will feel

that they have developed a more quality relationship with their faculty members as there is

naturally less transition and more depth to the learning environment. To determine the impact

that the cohort learning model has on the students, the authors utilized the *Online Student*

Connectedness Survey ([OSCS]; Bolliger & Inan, 2012). The OSCS has four scales measuring

community, comfort, facilitation, and interaction and collaboration. Additionally, the students

were asked to complete the OSCS (Bolliger & Inan, 2012) at the end of both the fall and spring

semesters, the outcomes of which will be discussed in further detail in subsequent sections. In

addition to academic and professional benefits, implementing the cohort learning model in

graduate education can support students' social support network. Students who participate in the cohort learning model report feeling a sense of camaraderie with their classmates that encourages program completion (Mauldin, Barros-Lane, Tarbet, Fujimoto, & Narendorf, 2022).

A wealth of resources exists to assist university personnel in implementing the cohort learning model. However, important aspects of implementation include establishing a need and identifying advantages for stakeholders, obtaining buy in and commitment from stakeholders, developing a plan and procedure for implementing the cohort learning model, and evaluating the effectiveness of the cohort learning model. There are various ethical, professional, and developmental considerations when implementing the cohort learning model. As faculty-student relationships grow and deepen, there is the potential for boundary violations. Faculty must be aware of instances where they or students become too comfortable, and professionalism is compromised (Brown-Rice & Furr, 2016; Schwartz, 2011). Faculty must model the balance between connectedness and professionalism.

In terms of diversity and inclusivity, it is essential that universities implementing the cohort learning model of learning consider its impact on students who are unable to meet the requirements of remaining in the same course semester after semester. For example, consider students who must take a semester off due to financial constraints, health issues, and other personal matters. These students are then placed in a new cohort with students and faculty who already have an established relationship. Are these students then at a disadvantage? Another consideration would be the instance of interpersonal conflict between a faculty member and student or student and classmate. How could interpersonal conflicts impact the student's feelings of connectedness? How could interpersonal conflicts impact the student's ability to receive a positive reference? Furthermore, program administration must consider the comprehensive

learning experience of the students participating in the cohort learning model. Is it better for students to interact with a variety of faculty and gain varied learning experiences or is it more beneficial for them to experience consistency?

Effectiveness of the Cohort Learning Model

There is considerable research related to the effectiveness of online learning and the cohort learning model promoting connectedness (Omenyi et al., 2010). This research increased during the recent Covid-19 pandemic as online learning greatly expanded during this period (Chisadza et al., 2021). Shachar and Neumann (2010) conducted a meta-analysis of studies published from 1990 to 2009 and found that more than 75% of students performed better than students learning face to face. Online learning tends to benefit older students with work or family responsibilities and these older students are most often involved in graduate courses (Arias et al., 2018). However, there has been an increase of younger students attending online learning as early as high school due to the ease and flexibility of online learning (Arias et al., 2018).

The cohort online learning model provides students with greater emotional and academic support for individuals as well as the collective group (McKinley & Champagne, 2013). The cohort learning model promotes critical thinking skills, which enhances academic performance and overall success. This is accomplished by the cohort learning model providing a greater sense of community, collaboration, and overall interaction between the professor and students related to course content (McKinley & Champagne, 2013). The sense of community is fostered best when students are well connected and engaged with each other. The results of the current study showed that the cohort learning model for graduate practicum and internship students does promote a greater sense of connectedness and sense of community as students noted feeling comfortable with their peers and were able to get to know their peers. The sense of feeling

comfortable by students in the present study would also provide a forum for positive

collaboration as students are more willing to engage with each other.

Assessment Tools and Methods Used to Assess Student Learning in the Cohort Learning

Model

There are numerous assessment tools and methods that can measure connectedness and

student learning via the cohort online learning model (Bolliger & Inan, 2012; Giray, 2021).

Student connection is a vital component to their academic success and is an important factor in

promoting positive interactions and relationships with peers and professors. Research shows that

students feeling more valued and cared about develop a greater sense of belonging. The

connection a student had with their professor was also noted to be significant for student success

and how they felt about their performance (Jorgenson et al., 2018).

The OSCS (Bolliger & Inan, 2012) was used in this study to measure feelings of

connectedness among online practicum and internship master's School Counseling students. The

OSCS examines four contributing factors related to the development of online student

connectedness. These factors are comfort, community, facilitation, and interaction and

collaboration. Data for reliability from the OSCS was reported to be $\alpha = .98$ at the time of survey

development (Bolliger & Inan, 2012).

Research increasingly shows there is a benefit to online learning via a cohort learning

model (Swayze & Jakeman, 2014). Cohort learning provides not only support for academic need,

but there is also evidence that graduate students learning via a cohort learning model experience

a more positive learning environment and feel a greater sense of community (Hickson, 2015).

Implications for the Field of Counselor Education

Online master's School Counselor practicum and internship students participating in this study responded to 25 questions focused on online student connectedness. The results showed that students felt comfortable in a cohort learning environment and that their peers were getting to know them well in online courses. Although the other questions did not indicate significant results, the responses for these two questions help to support some benefit to cohort learning in online graduate courses. A third question asking if 'online peers depend on me' showed a moderate result ($p < .058$), which although not significant, also showed a potential for connectedness among online graduate students learning via a cohort class.

Conrad (2005) suggested that online group learning helped promote a greater sense of cognitive and emotional connection among students and this enhanced connection promoted student learning. Online students that participated in an online cohort group reported the sense of community and support experienced from the cohort helped them to continue learning even when the instruction was subpar from their professors, or their learning experience was not considered positive (Conrad, 2005).

This study helped to support these findings by Conrad (2005) in showing that online master's School Counseling practicum and internship students felt comfortable in a cohort learning environment and these students were able to get to know their peers well in an online cohort learning environment. The online cohort learning model can provide a greater sense of connectedness to classmates and professors as well as a cohort learning model would provide more meaningful and positive interactions for students.

Limitations and Areas for Future Research

This current study looked at the degree of connectedness among online master's School Counseling practicum and internship students. There were 25 questions asked from the OSCS

(Bolliger & Inan, 2012) that focused on the factors of comfort, community, facilitation, and interaction and collaboration. This study provided an additional look at the effectiveness of the online cohort learning model and better understanding of connectedness. One limitation was the sample as these students were from one program and one university, which may not allow the findings to generalize to students at other institutions or programs. Another limitation was that personal characteristics were not considered in understanding connectedness.

Some areas for future practice and research could be replicating this study to include multiple institutions and programs. Another future focus might be to consider student and faculty personal characteristics as well as the impact of culture on student connectedness. A final consideration for future practice is to consider use of the cohort learning model for more courses and programs as this study as well as other research shows positive support for student connectedness and learning (Jorgenson et al., 2018; Omenyi et al., 2010).

References

Arias, J. J., Swinton, J., & Anderson, K. (2018). On-line vs. face-to-face: A comparison of

   student outcomes with random assignment. *e-Journal of Business Education and   S*

   Scholarship of Teaching, 12(2), 1–23.

Bolliger, D. & Inan, F. (2012). Development and Validation of the Online Student

    Connectedness Survey (OSCS). *International Review of Research in Open*

    And Distributed Learning, *13*(3), 41–65. https://doi.org/10.19173/irrodl.v13i3.1171.

Browne-Ferrigno, T., & Muth, R. (2003). Effects of cohorts on learners. *Journal of*

   School Leadership, *13*(6), 621-643.

   https://doi.org/10.1177/105268460301300602

Brown-Rice, K., & Furr, S. (2016). Counselor educators and students with problems of

   professional competence: A survey and discussion. *The Professional Counselor, 6*(2),

   134-146.

Chisadza, C., Clance, M., Mthembu, T., Nicholls, N., & Yitbarek, E. (2020). Online and face to

   face learning: Evidence from student's performance during the Covid-19 pandemic.

   African Development Review, 33, 114-125. https://doi.org/10.1111/1467-8268.12520

Conrad, D. (2005). Building and maintaining community in cohort-based online learning.

   Journal of Distant Education, 20(1). 1-20.

Gallien, T. & Oomen-Early, J. (2008). Personalized versus collective instructor feedback

   in the online courseroom: Does type of feedback affect student satisfaction, academic

   performance and perceived connectedness with the instructor?

   International Journal on E-Learning, 7, 463-476.

Giray, G. (2021). An assessment of student satisfaction with e-learning: An empirical study with

      computer and software engineering undergraduate students in Turkey during pandemic

      conditions. Education and Information Technologies, 26, 6651-6673.

      https://doi.org/10.1007/s10639-021-10454-x

Glazer, H. R., & Wanstreet, C. E. (2011). Connection to the academic community:

      Perceptions of students in online education. *The Quarterly Review of Distance Education,*

      12(1), 55-62.

Hickson, C. (2015). Perspectives of instructional staff of cohort learning groups. *Literacy*

      Information and Computer and Computer Education Journal, 9, 2864-2872.

Jorgenson, D.A., Farrell, L.C., Fudge, J.L. & Pritchard, A. (2018). College connectedness: The

      student perspective. *Journal of the Scholarship of Teaching and Learning, 18*(1), 75-95.

LaBarbera, R. (2013). The relationship between students' perceived sense of

      connectedness to the instructor and satisfaction in online courses. *Quarterly Review of*

      Distance Education, 14(4), 209-220.

Lei, S., Gorelick, D., Short, K., Smallwood, L., & Wright-Porter, K. (2011). Academic cohorts:

      benefits and drawbacks of being a member of a community of learners. *Education*,

      131(3), 497+. https://link.gale.com/apps/doc/A253740208/BIC?

      u=vic_liberty&sid=summon&xid=793e1eed

Martin, F., Budhrani, K., Kumar, S. & Ritzhaupt, A. (2019). Award-winning faculty online

      teaching practices: Roles and competencies. *Online Learning, 23,* 184-205.

Mauldin, R. L., Barros-Lane, L., Tarbet, Z., Fujimoto, K., & Narendorf, S.C. (2022).

Cohort-based education and other factors related to student peer relationships: A mixed

methods social network analysis. *Education Sciences, 12,* 1-24. http://doi. org/10.3390/

educsci12030205.

Miller, D.L., Soh, L., Samal, A., Kupzyk, K., & Nugent, G. (2015). A comparison of

educational statistics and data mining approaches to identify characteristics that

impact online learning. *Journal of Educational Data Mining, 7*(3), 117-150.

McCarthy, J., Trenga, M. E., & Weiner, B. (2005). The cohort learning model with graduate

student learners: Faculty-student perspectives. *Adult Learning*, *16*(3), 22–25.

McKinley, J., & Champagne, D.J. (2013). Promoting school-based cohorts in distance/online

learning. *Creative Education, 4*(8A), 9-11.

Ngozi, A., Omenyi, A. & Odimegwu, C. (2010). An assessment of students'

connectedness in tertiary institutions in Anambra State of Nigeria. *Educational

Research and Reviews, 5*(2), 90-98.

O'Keeffe, P. (2013). A sense of belonging: Improving student retention. *College Student

Journal, 47*, 605-613.

Omenyi, A., Agu, N., & Odimegwu, C. (2010). A measure of student's connectedness in tertiary

institutions in Anambra State of Nigeria. *Academic Leadership, 8*(1), 90-98.

Paul, J. A., & Cochran, J. D. (2013). Key interactions for online programs between faculty,

students, technologies, and educational institutions. *The Quarterly Review of Distance

Education 14*(1), 49-62.

Rovai, A. P. (2002), Building sense of community at a distance. *International Review of

Research in Open and Distance Learning, 3*(1).

Shachar, M., & Neumann, Y. (2010). Twenty years of research on the academic performance

differences between traditional and distance learning: Summative meta-analysis and trend examination. *MERLOT Journal of Online Learning and Teaching, 6*(2), 318–334.

Shea, P. (2006). A study of students' sense of learning community in online environments. *Journal of Asynchronous Learning Networks, 10*(1), 35-44.

Skelcher, S., Yang, D., Trespalacios, J., & Snelson, C. (2020). Connecting online students to their higher learning institution. *Distance Education, 41*(1), 128 147. https://dx.doi.org/10.1080/01587919.2020.1724771

Summers, J. J., Svinicki, M. D., Gorin, J. S., & Sullivan, T. A. (2002). Student feelings of connection to the campus and openness to diversity and challenge at a large research university: Evidence of progress? *Innovative Higher Education, 27*(1), 53-64.

Schwartz, H.L. (2011). From the classroom to the coffee shop: Graduate students and professors effectively navigate interpersonal boundaries. *International Journal of Teaching and Learning in Higher Education, 23*(3), p. 363-372.

Swayze, S. & Jakeman, R. C. (2014). Student perceptions of communication, connectedness, and learning in a merged cohort course. *Journal of Continuing Higher Education, 62*(2), 102-111.

Wyatt, L. G. (2011). Nontraditional student engagement: Increasing adult student success and retention. *The Journal of Continuing Higher Education*, *59*(1), 10–20. http://dx.doi.org.ezproxy.liberty.edu/10.1080/07377363.