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OUT OF SIGHT, NOT OUT OF MIND: ADDRESSING THE LACK OF TRANSITION SUPPORTS FOR TRANSFER STUDENTS ENTERING FULLY ONLINE PROGRAMS AT WESTERN CAROLINA

A disquisition presented to the faculty of the Graduate School of Western Carolina University in partial fulfillment of the Requirements for the degree of Doctor of Education.

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Abstract

Students who transfer from a two-year institution to a four-year institution often have some difficulty settling into their new university home, but a combination of social and academic supports can ease the transition. This change to a new institution can be even more difficult for students who are transitioning into a fully-online program. Face-to-face and campus-based transition supports and orientations are often neither applicable nor feasible for students transferring into fully-online programs, leaving this population of students moving to a new institution with supports that are non-existent at worst and inconsistent at best. This improvement initiative explores the impact of social supports on sense of community and persistence for students transferring into fully-online programs. An online community hosted via the Facebook social media platform for students in the Birth-Kindergarten Program at Western Carolina University (WCU) was implemented to provide community and support. Participants reported higher rates of connectedness as a result of participation in the online learning community. Practical implications are discussed for increasing connection and community among students who transfer to a fully-online program.

Keywords: Transfer Student, Online Program, Social Supports, Transition, Social Media
The Disquisition

The disquisition is defined as “a formal, problem-based discourse or treatise in which a problem of practice is identified, described, analyzed and addressed in depth, including methods and strategies used to bring about change and to assess whether the change is an improvement,” (Lomotey, 2018, p. 4). At Western Carolina University (WCU), the successful completion and defense of a disquisition is required for the conferral of the Doctorate of Educational Leadership (EdD) degree. The disquisition at WCU requires that educational leaders in preparation use improvement science, informed by a social justice framework to “identify, assess and solve problems of practice they experience every day in their workplace,” (Lomotey, 2018, p. 5). This focus on organizational improvement with emphasis on equitable and socially-just practices is a departure from the traditional dissertation and requires that candidates embody the dual role of scholar practitioner, where both research/analysis and the facilitation of an improvement initiative must be conducted in concert with each other. Lomotey (2018) states that scholar practitioners completing a disquisition in Educational Leadership at WCU will:

- “possess enhanced comprehensive research skills;
- provide a significant and meaningful benefit to identified constituencies around them;
- embody the enhanced values traditionally associated with the doctoral experience…; and
- encounter a unique and rewarding educational experience” (p. 9).

Bryk et al. (2015) emphasize that using improvement science methods in educational leadership preparation programs can help shift organizational improvement practices to team-based initiatives that promote innovation and improvement. The disquisition that follows seeks to do just that.
Section I. Introduction, Problem of Practice & Causal Analysis and Statement of the Problem

This section defines the problem of practice for this disquisition as well as an overview of the problem in a general sense as it relates to the larger educational community. The problem of practice is addressed further through a review of the literature, exploration of a theoretical framework, and development of a causal analysis. Implications for social justice and equity that are related to the problem of practice are also addressed.

Introduction to the Problem of Practice

A segment of the transfer student population will make the transition from their previous institution to exclusively online programs at the university. Community colleges, two-year colleges where students can earn college credit that can be applied toward a baccalaureate degree following transfer to a four-year institution, are the starting point for many of these transfer students, with between 40-45% of college students beginning their studies at public community colleges (Sublett, 2018). In addition to preparing students to transfer to four-year institutions, community colleges also provide technical and vocational training programs resulting in associate degrees or specialized certificates (Crisp & Mina, 2012). Community colleges are attractive options for many college students, as they are less expensive to attend than most four-year universities, have “open door” policies that promote access to higher education, offer more individualized supports, and allow students to work full-or part-time while attaining a degree or accumulating transfer credits (Crisp & Mina, 2012). Townsend (2001) discusses that many stakeholders view community college as a “vehicle for baccalaureate attainment” (p. 30). A problem, however, occurs when students transfer to a four-year university but the university does not provide transition supports to help them acclimate to the new environment and be successful,
both academically and socially. For students who transfer from a community college to a four-year institution, both academic and social supports are required during the transition to promote retention, persistence, and degree completion (Townsend & Wilson, 2006; Tinto, 2012). Face-to-face and campus-based transition supports and orientations are often neither applicable nor feasible for students transferring into fully-online programs, leaving this population of students transitioning to a new institution with supports that are non-existent at worst and inconsistent at best. This improvement initiative explores the impact of emotional supports on sense of community and persistence for students transferring into fully-online programs.

**Review of the Literature**

Vast information regarding the transition from community college to four-year university is available, with varying perspectives on how to promote positive and productive transitions to the new institution. Commonalities exist amongst the research-based recommendations and emphasize the importance of both academic and social supports for transfer students (Berger & Malaney, 2003; Flaga, 2006; Rhine, Milligan, & Nelson, 2010; Rodriguez-Kiino, 2013; Shaw & Chin-Newman, 2017; Tinto, 2017a; Tinto, 2017b; Townsend & Wilson, 2006; Wang, 2009; Wheeler, 2019). Within the overall transfer population exists a subset of students who transfer into fully-online programs at four-year institutions and have unique needs in the combined role as both a transfer and fully-online student (Rovai, 2002b). Persistence and retention are terms that are sometimes used interchangeably in the literature when referring to transfer students. However, Tinto (2012) emphasizes that they are markedly different and explains that *persistence* should be used when discussing educational progress from the student point of view and *retention* is used from an institutional standpoint. This distinction is important because students may persist and eventually complete a degree, even if it is not at the institution where they began.
their studies; while retention refers to the institution’s ability to retain students through graduation (Berger, Ramirez, & Lyons, 2012). The following review of the literature provides a brief synthesis of the research regarding community college transfer students who transfer into fully-online programs and best practices regarding transition supports for transfer students.

Students who transfer into fully-online programs often live away from the campus of the four-year institution and work full-time (Yang, Baldwin, & Snelson, 2017). They may choose an online program of study because of the flexibility of the online learning format or because of personal or professional goals related to the degree content (Yang, et al., 2017). Historically, student retention and degree completion in online programs has been lower than in comparable residential programs (Rovai, 2002b; Sublett, 2018). Technical difficulties, social isolation, unclear structures, and lack of supports for online students are potential reasons for higher levels of attrition, according to Sublett (2018). Rovai (2002b) adds that financial commitments, unfamiliarity with technology, low self-confidence, and other life priorities also impact the ability of students in fully-online programs to persist to degree completion. However, even as overall enrollment in postsecondary education decreases, enrollment in online programs continues to increase (Britto & Rush, 2013; Rovai, 2002; Sublett, 2018). The increase in online enrollment with continued disparities noted between residential and online student attrition are a source of concern for institutions of higher education, which have implemented a variety of retention strategies including orientations, assessments, technical supports, and including online students in institutional initiatives targeted at student retention with varying levels of implementation and success (Britto & Rush, 2013). The literature is clear that online students must be engaged with the university and feel a sense of community and belonging from the onset of interactions with the institution, or persistence is negatively impacted (Bozarth, Chapman, &
LaMonica, 2004; McLeod, 2019; Rovai, 2002; Sublett, 2018, Yang, et al., 2017). Yet, Chan (2019) found that only around 6% of the 65 institutions whose orientations were evaluated offered an online orientation option. The following theoretical framework addresses the needs of fully-online transfer students.

**Theoretical Framework**

Tinto (2012b), states that students “do not seek to be retained. They seek to persist,” (p. 254). Persistence in the context of online learning is defined by Yang et al. (2017) as “successfully finishing all course requirements and continuing on to program completion,” (pp. 23-24). This ultimate goal of student persistence in higher education and the factors that contribute to it serve as the conceptual framework for this disquisition (See Figure 1). The framework is complemented by the literature on both community college student support and on support for transfer students, as the common threads of academic and social supports run throughout.

Tinto’s (2012a) model of student motivation and persistence is especially relevant as it focuses on the institutional response to the student view of persistence by encouraging processes and policies that support self-efficacy, belonging, and perceptions of curriculum. The model defines self-efficacy as a person’s view of their own ability to be successful with a task; a sense of belonging as the student’s ability to see themselves as a valued member of a community; and perceptions of the curriculum as a focus on how students view the value and relevance of their studies (Tinto, 2012a).
The work of Rovai (2002b) is also central to this problem of practice, as his focus on sense of community builds on the work of Tinto and emphasizes connectedness and shared learning experiences. While Tinto primarily focused on face-to-face learning experiences, Rovai (2002a) studied learning communities in virtual spaces and found that the most essential elements of sense of community include: “mutual interdependence among members, connectedness, trust, interactivity, and shared goals and values,” (p. 321). Rovai’s (2003) composite persistence model synthesizes research regarding student persistence with research based on the needs of online learners, distance education students, and teaching and learning styles into a single model representing student characteristics, internal factors, and external factors that impact students before and after admission to an online program (See Figure 2). This composite model is powerful in its recognition of the multitude of factors that influence distance and online learners and their rates of persistence. Many of these factors are evidenced in the causal analysis that follows.
Figure 2

*Rovai’s Composite Persistence Model*

Causal Analysis

At the beginning of any improvement initiative, a causal analysis should be conducted to address the root cause(s) of the problem. The causal analysis helps answer the question, “Why do we get the outcomes that we currently do?” (Bryk et al., 2016, p. 66). Answering this question helps ensure participants in the improvement initiative develop a common understanding of the problem to be solved based on the amalgamation of diverse perspectives (Bryk et al., 2015).

A causal analysis exploring the problem of transfer students entering fully-online programs and the lack of targeted transition supports provided to them revealed several themes (See Figure 3). The Fishbone, or Ishikawa, Diagram was developed in the 1960s as a tool used to promote quality control in Japanese shipyards (Jayswal, Li, Zanwar, Lou, & Huang, 2011), and
is used in this context, as a tool to help identify potential causes of the problem. The problem, “Students who transfer into online programs at WCU do not receive targeted transition supports,” is located in the circle, representing the head of the fish. Each of the large “bones” represents a primary causal category and the smaller bones are components that contribute to the primary causes.

**Figure 3**

*Fishbone Diagram*

One potential contributor to the lack of targeted transition supports for online transfer students is a lack of institutional processes to orient students to fully-online programs, leaving programs to bear the responsibility. However, residential transfer students are often provided with orientations to both the university and the program. While the transition to the program area of study is very important, the lack of institutional orientation can leave students feeling
unconnected to the university and contribute to feelings of isolation (Tinto, 2012; Wyner, et al., 2016; Shaw & Chin-Newman, 2017).

Another potential issue addressed in the Fishbone Diagram is the lack of visibility of online students on a primarily residential campus. Students in fully-online programs may never visit the physical campus of the institution, and cannot or do not avail themselves of many campus resources and activities. Chou (2010) proposes that online learners are more likely to be commodified, viewed as purchasers of goods and services, rather than scholars in search of knowledge. There is potential that online learners could suffer from being out-of-sight of upper-level administration, and therefore, out-of-mind. Britto and Rush (2013) state that support services for online students are often an extension of services provided to residential students, and suggest that it may be beneficial for institutions to take these services a step further and offer extended hours and a dedicated online student help desk to better support this population.

In an increasingly digital world, there may also be an assumption that targeted supports for online learners are not needed. While most community college transfer students have taken online courses prior to transfer, there are still institutional differences, such as software platforms and Learning Management Systems (Blackboard, Moodle, etc.), that may require specific training or orientation. Again, the issue of campus capital (Shaw & Chin-Newman, 2017) is also a concern, as online students should be provided with information comparable to what is received by residential students, but targeted to their specific needs as online transfer students (Wheeler, 2019).

The relevancy of information provided is also considered a cause of the problem, as information provided to transfer students into fully-online programs should differ substantially from information provided to residential students in many ways. Online students should feel a
connection to the physical campus, but their transition services should also help them navigate
the digital and web-based resources they will need to access campus services at a distance (Britto
& Rush, 2013). Additionally, the developmental needs of transfer students into online programs
should be considered; they have experiences in higher education already and supports should
help bridge the gap between institutions (Flaga, 2006).

Social Justice and Equity Implications

When considering the issue of inconsistent or nonexistent institutional supports for
community college transfer students entering fully-online programs at four-year universities,
there are multiple connections that can be made with both social justice and equity implications.
As an overarching issue, there is a lack of equity in the distribution of services to online students.
While online students pay the same tuition and fees as residential students, comparable services
in some areas may not be available, including an orientation tailored to the needs of fully-online
students (Britto & Rush, 2013).

Community college students are a diverse group, composed of students from a variety of
racial, ethnic, and socioeconomic backgrounds (Sublett, 2018). They are more likely to be first-
generation college students (Compton, Cox, & Laanan, 2006; Davis, 2010; Sublett, 2018)
demonstrate academic risk factors (Sublett, 2018; Tinto, 2012b), and be working either full- or
part-time while attending college (AACC, 2019; Sublett, 2018; Tinto, 2012b). According to the
American Association of Community Colleges (2019), the average age of the community college
student is 28 years and the median age is 24 years, with 54% of the student population younger
than 22 years old and 9% of the population 40 years and older. The community college student
body is also ethnically diverse, with large numbers of students from minoritized populations
enrolled (See Figure 4).
When community college students transfer to fully-online programs at four-year institutions, they maintain many of the characteristics they had as community college students. As access to higher education opportunities expand through the flexibility and convenience of online learning opportunities (Yang, et al., 2017), institutions must be willing to meet the needs of this diverse group of students. Gulley (2016) proposes that:

At the institutional level, we should check our assumptions about whom we are serving, as well as whom we should or could be serving. We must not assume to know our demographics but rather examine our programs, services and curricula to be sure they are appropriate for all students—not just the ones who fit into an antiquated idea of traditional. (para. 10)

The community college transfer population, composed of many students who are first-generation, who are parents, who work full-time, and who represent minoritized groups are in need of explicit supports during the transition to promote success and persistence (Tinto, 2012b).
Section II. The Local Context

This section will provide an overview of transfer student data in the local context at WCU, as well as providing detailed information about transfer into fully-online programs at WCU. One of these fully-online programs, where the improvement initiative for this disquisition takes place, is the Birth-Kindergarten (BK) Program. Information about the program, including details about the student population and previously implemented initiatives to support student transition to a four-year institution are also discussed.

Transfer to WCU

Western Carolina University (WCU) is a mid-size regional comprehensive university located in a rural setting in Western North Carolina. WCU experienced an almost 30% increase in transfer student enrollment from 2017 to 2018 (Figure 5), with more than 74% of the transfer students coming from a North Carolina community college (Figure 6). The significant transfer enrollment increase can be attributed, at least in part, to the tuition benefit provided by the NC Promise legislation (NC GS_116-143.11, 2018) which was enacted in Fall 2018 and provides $500 tuition each semester for all undergraduate students.
Another contributing factor to the increase in transfer students to WCU is the implementation of Comprehensive Articulation Agreements (CAAs) with several academic programs at the university. The CAAs function as a type of 2 + 2 agreement, where students take
60 credit hours of coursework at the community college and then transfer into an academic program at a four-year university to take the final 60 credit hours of the 120-hour baccalaureate program. Students participating in CAAs and meeting all requirements are guaranteed acceptance into an NC public four-year institution.

The increasing number of Comprehensive Articulation Agreements, where students take 60 credit hours of coursework at the community college and then 60 additional credit hours at a four-year institution to earn a baccalaureate degree, will also potentially impact the number of transfer students coming to WCU from community colleges. CAAs, while having many benefits to students, also reduce the number of credit hours typically taken by transfer students at the four-year university. This reduction in credit hours compels academic programs to intensify content and eliminate or restructure introductory courses at the university level. Both residential and distance programs at WCU are impacted by CAAs, including Birth-Kindergarten Education, Engineering, Nursing, Music, Theater, and Visual Arts (The University of North Carolina System, 2019a).

At WCU, and in the UNC System at large, transfer student graduation rates are lower than traditional student graduation rates at the two-, three-, and four-year rates (WCU, 2019), meaning that traditional first-time undergraduate students are more likely to graduate and more likely to graduate more quickly than transfer students. Additionally, transfer students in residential programs are more likely to persist and graduate than those who enter distance programs (WCU, 2019).

**Transfer to Online programs at WCU**

In Fall 2020, 938 undergraduate students transferred to WCU (WCU, 2020). Of those, 470 students, or 48% of the transfer population, enrolled in online programs and received no
targeted transition supports (See Figure 7) (B. Hutchings, personal communication, December 14, 2020). As more Community College Comprehensive Articulation Agreements are implemented and as NC Promise continues to be funded and gain popularity, it is likely that WCU’s transfer population will continue to increase, exacerbating the problem of lack of support for online transfer students by increasing the number of students who do not receive services. As Townsend and Wilson (2006) note, “Articulation agreements can occur to ensure smooth or seamless transfer of credits, but they do not suffice to ensure the academic success of students after transfer” (p. 449).

**Figure 7**

*Program Type for Fall 2020 Transfer Students at WCU*

Currently, transition and orientation supports offered to Distance and Online Program students at WCU are limited, asynchronous, and may lack relevance to the needs of many transfer students. Some asynchronous academic and logistical information including tutorials on the use of the LMS, institutional email, and computer requirements are included, as is information about advising and registration. There is also information about a module on alcohol
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use required for students who are 23 years old or younger and a module on sexual assault and gender-based violence that is required for all students (WCU, 2020).

The Birth-Kindergarten Program at WCU

The Birth-Kindergarten (BK) Program at WCU is a fully-online program focusing on Early Childhood Education and Early Childhood Special Education. The program houses two degree pathways: One for students seeking BK teacher licensure and the other seeking a degree without licensure. More than 85% of BK students transfer to the program from a North Carolina community college (UNC System, 2019b). In Spring 2019, the BK Program served students from 68 counties in North Carolina (see Figure 8), as well as students from six other states in the US, Myanmar, and Thailand (G. McLamb, personal communication, November 8, 2019).

Figure 8

North Carolina Counties with Students Enrolled in the BK Program at WCU

Demographics of students in the BK Program are similar to national community college data in several areas (American Association of Community Colleges, 2019; WCU, 2019) (See Figure 9). However, the number of first generation college students and number of students who receive Pell Grants in the BK Program at WCU exceeds the community college national averages (B. Hutchings, personal communication, October 4, 2019). The percentage of students
identifying as White is also greater in the BK student population as compared to national community college averages, and there are fewer students identifying as Hispanic enrolled.

**Figure 9**

*Comparison of Select Demographic Characteristics of WCU BK Students and National Community College Averages (2019)*

Note. (AACC, 2019; WCU, 2019)

Currently, there are 520 students in the BK program. However, as of July 1, 2019, only 233 students were enrolled in classes for Fall 2019, meaning around 55% of BK students are not enrolled (G. McLamb, personal communication, July 1, 2019). The data are unclear about how many students who are not registered for classes are not enrolling for a single semester, multiple semesters, or whether they have “stopped out,” meaning they have temporarily withdrawn from the university. Aside from individual advising communications, the reasons for student attrition and lack of persistence in the BK Program are not known. It can be hypothesized that many of the factors shown to affect transfer students to online programs in the literature (technical difficulties, social isolation, unclear structures, and lack of supports for online students (Sublett,
2018)) are impactful in the local context, as well. Student characteristics, skills, and both internal and external factors related to the academic experience, as presented in Rovai’s Composite Persistence Model (2003), also likely influence student ability to be consistently enrolled in program coursework.

Several initiatives have been implemented at the program level to attempt to address the needs of students as they enter and matriculate through the program. Program faculty and advisors developed the “BK Online Experience,” a set of asynchronous modules focused on academic, technological, and logistical components of the program, including: Modules on using the Blackboard LMS platform, how to complete different types of assignments, how to communicate within courses, registration information, student handbooks, etc. Advisors also conduct group advising sessions morning, afternoons, evenings, and weekends to better meet the needs of students and to encourage participation in advising. In the asynchronous Voicethread platform, which allows students to post comments and questions on presentations or videos, faculty and advisors have recorded informational presentations about BK Program processes and resources. The links are then shared with students, and advisors monitor the Voicethreads for questions. Voicethread has also been used by BK faculty to develop modules related to Academic Dishonesty, Netiquette (online etiquette), and Cultural Awareness.

All these initiatives were implemented to help BK Students entering the program be successful with various elements of their online studies. The initiatives have primarily been designed to support the academic and dispositional development of students. However, the effectiveness of the activities has not been measured and it is unclear if the supports that have been implemented have any bearing on student persistence.
Section III. Theory of Improvement and Proposed Improvement Initiative

This section addresses the Theory of Improvement and proposed improvement initiative related to the problem of practice, including the short- and long-term aims of the initiative. A driver diagram is used to illustrate how the change ideas were narrowed to support the development of the improvement initiative and a review of the literature on the change idea and improvement action provides additional support and justification.

Theory of Improvement

A variety of initiatives have been implemented to provide academic supports to students transferring into the BK Program. However, issues with student persistence in the program continue to be problematic. The literature suggests that transfer students need a combination of academic and social supports to promote positive transitions and increase persistence. The Improvement Initiative for this disquisition will focus on providing emotional supports through participation in an online community for new students in the BK Program. At the start of my disquisition, my theory of improvement held that: Participation in an online community will provide students who transfer to the Birth-Kindergarten Program at Western Carolina University with heightened senses of belonging, thus increasing the students’ overall perceptions of sense of community and ultimately increasing student persistence and degree completion.

Proposed Improvement Initiative

The intervention provided is the origination of an online community for students in the BK Program at WCU. The online community was hosted via the Facebook social media platform and focused on offering students access to emotional supports that provided students with access to interactions with peers and the program that promoted self-confidence, belonging, and sense of community that will ultimately increase persistence in the program.
The driver diagram is a tool of improvement that helps to organize ideas related to improvement efforts (Langley et al., 2009). Bryk et al. (2015) emphasizes that the driver diagram helps provide participants in an improvement effort with a common understanding of the language related to a shared problem. To aid in the development of this common understanding, the driver diagram in Figure 10 was developed based on initial stakeholder input regarding the Problem of Practice as well as the literature on the transition from community college to four-year institutions and on the needs of students in fully-online programs. Stakeholders involved in seminal conversations about the Problem of Practice include BK faculty, BK advisors, and BK students. In Figure 10, the Aim describes the goal of the intervention, which is to provide BK online students with targeted supports that will help increase persistence. Academic and Social Supports serve as the primary drivers for the intervention, as there is consensus in the literature about the importance of both types of supports for students transferring to a new institution (Berger & Malaney, 2003; Flaga, 2006; Rhine, Milligan, & Nelson, 2010; Rodriguez-Kiino, 2013; Shaw & Chin-Newman, 2017; Tinto, 2017a; Tinto, 2017b; Townsend & Wilson, 2006; Wang, 2009; Wheeler, 2019). The secondary drivers are based on elements of the primary drivers, identified through stakeholder feedback and the literature concerning both academic and social supports. The final column contains change ideas that could be implemented to address secondary and primary drivers, ultimately impacting the overall stated aim. The change idea to be implemented for the improvement action for this disquisition is outlined and is focused on providing students with interactions that promote self-confidence, belonging, and a sense of community. The chosen change idea was selected based on data collected from the focus group in addition to the noted gap in supports currently being provided based on the literature.
Social Supports for Transfer Students

In addition to academic supports, social supports during the transition to the four-year university are vitally important to the success of the transfer student. Tinto (2012) discusses that social supports during the transition to a new institution ease the transition, reduce academic stress, enable students to gain informal knowledge through peer networks, promote self-worth, and increase student attachment to the institution; all factors which increase academic performance and persistence.

Shaw and Chin-Newman (2017) identify three types of social supports that are needed by students in the first semester after transfer (and beyond): Emotional support, practical support, and campus capital. A discussion of emotional support and campus capital will frame the content regarding social supports for transfers.
Emotional Supports. Community college transfer students are likely to find emotional support from a variety of people across different contexts in their lives. Shaw and Chin-Newman (2017) find that support from family, friends, and staff/faculty at the university were all able to provide emotional support to students during the transfer transition. This support might be in the form of verbal encouragement or other sources of support designed to boost confidence and enhance self-esteem. Tinto (2012) states, “For those students who enter college academically underprepared or who have struggled academically in the past, success depends as much on their coming to see themselves as being able to succeed as it does the acquisition of basic skills” (p. 27). Thus, the emotional support of family, friends, peers and the community are of great importance to the success of transfer students, who are more likely to rely on informal support networks than formalized campus resources, such as a counseling center (Flaga, 2006). With regard to first-generation students, Ellis (2013) states that they view themselves as role models for other family members and find a sense of pride and self-motivation in college attendance and the pursuit of a baccalaureate degree.

Campus capital. Campus capital-related supports are identified by Shaw and Chin-Newman (2017) as campus-specific supports that provide students with the tools they need to be successful at a specific institution. Townsend (2008) emphasizes that it is important for institutions to take care to distinguish between general student issues and issues that are specific to transfer students. This transition work can help bridge the gap between community college and university, an important task considering that transfer students must understand how two, possibly very different, institutions operate (Shaw & Chin-Newman, 2017).
Learning Communities

Tinto (2012) recommends that all students should have access to participation in a learning community with others during their first year at an institution. The goal of the learning community in the improvement initiative for this disquisition is to use social media to increase belonging and sense of community in a fully-online program. This learning community will help provide students with both emotional support and campus capital, increasing their ability to persist and increasing the likelihood of degree completion (Shaw & Chin-Newman, 2017, Tinto, 2012).

Online learning communities. Dolan, Kain, Reilly, and Bansal (2017) discuss the importance of a space that is a forum for conversation and interactions that are not course-related for online students to build relationships, build trust, and prevent students from feeling isolated from the community. This type of environment is discussed as a “third place” by Baker-Eveleth, Eveleth, and Sarker (2005), who describe an environment that allows students with common ties to build community through social interaction in a shared location; emphasizing that while content in the third place is often not prescribed, it can exist as a learning community structured around topics of interest.

Facebook as a Platform for an Online Community. Facebook has been found to be a useful tool in helping online students build community, share information, and provide emotional support to each other as learners (Gonzalez-Ramirez, Reyes, Gasco & Llopis Taverner, 2015; Kocdar, Karadeniz, & Goskel, 2018; Nicolai, et al., 2017). González-Ramírez, et al. (2015) found that Facebook, as a platform in education, improves interaction and communication by providing a means for both synchronous and asynchronous communication, improves motivation increasing community and sense of connection to the program and/or faculty, and can increase
academic performance of participating students. However, some weaknesses associated with the use of Facebook and teaching were also identified: Concerns about privacy, technological deficits for some students who may not know how to use Facebook, and unproductive use of time and energy sorting through all the information that can be available on Facebook were identified as potential sources of concern in using the platform for academic means (González-Ramírez, et al., 2015; Nicolai, et al., 2017).

Section IV. Improvement Methodology and Design

This section provides detail about design and methodology for the improvement initiative. A description detailing the role and membership of the design team for the initiative is given to provide context for the multiple perspectives that informed the plans for the initiative as well as the iterative responses to formative evaluation. An overview of the improvement initiative process and timelines for the implementation period is shared, as well.

Design team

In the development and implementation of an improvement initiative, the design team plays an important role in ensuring a diverse range of perspectives are considered in relation to both the problem and the proposed change ideas. Bryk et al. (2015) emphasize that engaging a group of stakeholders who each view the problem through a unique lens can help highlight both differences and commonalities that enable the group to see the system more holistically. The design team for this improvement initiative consisted of the Birth-Kindergarten Program Coordinator, the primary BK Academic Advisor, and BK Faculty Members.

The BK Program Coordinator has a long tenure in the BK program and holds deep programmatic and institutional knowledge that will be important to the development of a new
initiative to support students. The Program Coordinator, is also able to facilitate conversations at the program and departmental level regarding the initiative, if necessary.

The primary BK Academic Advisor is the first contact for many potential and incoming students. BK advisors also facilitate admissions processes for students and have a direct line of communication with new transfer students. They are able to provide up-to-date information about the needs and concerns of students.

BK Program faculty consistently work with community college transfer students throughout the entire scope of the program and are able to critically evaluate student needs, strengths, and areas of growth/concern in an ongoing manner. Their consistent contact with students helped provide in-the-moment feedback and evaluation information related to the improvement initiative.

As scholar practitioner my role was to use the feedback of the design team to design and implement the content provided to the students via the online community. I facilitated interactions in the community and conducted formative and summative assessments throughout implementation and data collection, adjusting the interventions based on formative data to best meet the needs of BK students.
The main components of the improvement initiative were to develop and implement an online community to support students transitioning from community college to the BK Program at WCU. This community was facilitated via Facebook and sought to promote self-confidence, belonging, and a sense of community. Figure 11 above provides a graphic of the improvement initiative, with nested circles representing the increasing impact of the initial change idea. The small center circle represents the initial change idea, the implementation of the Facebook online learning community. I predicted that participation in the community will result in an increased sense of collaboration, belonging, and overall sense of community for students, which will ultimately result in greater persistence and degree completion.

I facilitated the community as the scholar practitioner and member of the BK Faculty. Optional membership in the group was made available to: Students new to the program; BK faculty members; and BK advisors. Content presented to the group included the following themes: Campus resources for online students, campus activities/events available to online students, relationship/community-building activities, inspirational/motivational content, content-specific (Early Childhood) information and research, and reminders and updates about
programmatic happenings. The group also sought to help fully-online students feel connected to the institution by sharing photographs and videos of the campus, campus events, and campus-based supports. While fully-online students may never travel to the physical campus, feeling a part of the institutional community is an important component of belonging (Britto & Rush, 2012).

**Participants**

Participants included students in the fully-online BK Program at WCU who voluntarily participated in the Facebook group. The only criteria for participation were that students must be in their first semester at WCU and that they must be community college transfers. Of the 47 students extended an invitation to participate, 35%, or 16, students completed the informed consent, pre-survey, and joined the Facebook group. All of those students identified as female and ranged in age from 20 to 49 years of age. The average participant was 33 years of age. A total of 75% of the participants identified as First Generation College students. There was no control group in this intervention.

**Implementation timeline**

The implementation timeline allowed for one complete implementation cycle comprised of three month-long PDSA cycles. The improvement initiative was implemented during the Fall 2020 semester, from August-December 2020. Initially, the improvement initiative was designed to go through two complete cycles in the summer and fall semesters (See Figure 12). However, no transfer students were admitted into the program for the summer semester, so the necessary student population was not available.
Figure 12

*Implementation Timelines*

<table>
<thead>
<tr>
<th>Planning with Design Team</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invite New Students to Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Survey Pre-test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation Cycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Community Survey Post-test
- Semi-structured Student Interviews

**Key:** Group 1 Group 2

*Note:* Proposed (left) and Enacted (right) implementation timelines

**Improvement Initiative Procedures.** The implementation initiative began with scheduled design team planning in early August 2020. All design team meetings were conducted via email or Zoom. In early August, new transfer students in the BK Program were extended an invitation to participate in the improvement initiative via email (See Appendix A). Potential participants who responded to the email invitation were asked to complete the electronic Informed Consent along (See Appendix B) with the pre-test survey. The Pre-test survey (See Appendix C) utilized the Classroom Community Scale-Short Form (CCS-SF) (Cho & Demmans Epp, 2019) as well as some general questions about the use of Facebook. Once informed consent was established, participants were invited to join the Facebook group via an email link. The Facebook group is a private group that can be accessed by invitation only with membership requests approved individually. Group content was added and facilitated during the academic semester, and the adapted on a monthly basis based on formative assessment results. In December 2020, at the conclusion of the academic semester, participants were prompted to complete the post-survey via email and reminder posts in the Facebook group. The post-survey
(See Appendix D) repeated CCS-SF (Cho & Demmans Epp, 2019) and also included open-ended questions about participation in the group. The post-test survey also allowed participants to opt-in to a semi-structured interview following the conclusion of the semester. Interviews were conducted in mid-December, following the close of the academic semester and used a consistent set of questions and prompts related to participation in the Facebook group (See Appendix E).

**Figure 13**

*Improvement Initiative Procedures Timeline*

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**Expected Outcomes**

In the short-term, results will demonstrate an increase in both the Connectedness and Learning subscales of the CCS-SF (Cho & Demmans Epp, 2019), as measured through pre- and post-survey data. Additionally, analysis of interview data will reveal that the improvement initiative helped students achieve a greater sense of belonging and connectedness to the BK Program at WCU.
In the long-term, the desired goal is for BK student persistence rates to match those of residential transfer students at the one-year mark. In Fall 2017, students who transferred into residential programs at WCU had a one-year persistence rate of 85%, while students who transferred into distance programs had a persistence rate of only 70% (WCU, 2019).

Section V. Formative Evaluation of Improvement Methodology

This improvement initiative will be implemented using an Improvement Science framework (Langley, et al., 2009) in which measurement of change will take place in iterative cycles throughout the initiative, with a focus on using data collected in each cycle to inform and improve the next cycle. Quantitative measures to be used in the study include an adapted version of the Classroom Community Scale- Short Form (Cho & Demmans Epp, 2019). Qualitative data will be collected using a semi-structured interview format with a sample of participants following the collection of quantitative data.

Formative Evaluation of Improvement Initiative

Langley, et al., (2009) propose three questions central to the Model for Improvement framework: “What are we trying to accomplish? How will we know the change is an improvement? What changes can we make that will result in an improvement?” (p. 5). These questions, in conjunction with the use of Plan-Do-Study-Act (PDSA) Cycles, promote the ability to implement change ideas that lead to improvement. Figure 14 (below) is a visual representation of the implementation and with formative assessment (PDSA) cycles highlighted in red. The improvement initiative allows for monthly PDSA cycles, with each PDSA Cycle comprised of the following actions: Plan- Plan content for Facebook Community; Do- Provide content to students via Facebook; Study- Monitor engagement with content and activity (likes, posts, etc.)
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to determine if content is promoting engagement; Act-Adapt content for next PDSA cycle (see Figure 15).

**Figure 14**

*Implementation Chart with Formative Assessment Timeline*

![Implementation Chart](image)

*Note.* PDSA Cycles highlighted in red

**Figure 15**

*PDSA Cycle for Improvement Initiative*

![PDSA Cycle Diagram](image)

The initial plan for the improvement initiative included the use of Facebook Group Insights analytics as a tool of formative assessment, however, this tool requires a minimum of 50
group members for analysis. Since the improvement initiative netted only 16 group members, it was necessary for the Facebook data to be collected and analyzed manually. The following group data were collected and analyzed during each PDSA cycle: type of post, number of comments on posts, and ratio of comments to type of post. Along with the design team, I used the analyses of these data to adapt content for subsequent PDSA cycles to meet the needs of students and promote higher or continued engagement. These data are also correlated to summative survey responses.

The first type of formative data collected was the categorization of the posts made within the Facebook group. Two initial categories were established to guide the categorization, based on the subscales of the CCS-SF (Cho & Demmans Epp, 2019): Connectedness and Learning. Posts in the Connectedness and Learning categories which I developed as the group administrator/scholar practitioner. The Connectedness category included posts centered on elements of Emotional Support (Shaw & Chin-Newman, 2017), which includes building community, providing emotional support, and increasing self-confidence of group participants. The Learning category encompassed elements of Campus Capital (Shaw & Chin-Newman, 2017) and focused on posts that provided students with tools and information to help them be successful at their new institution. The Learning category posts were specifically targeted to transfer students in the BK Program at WCU. An additional category of post emerged as the Facebook group progressed. Student-Initiated Posts, which were posts where participants asked a question or shared information with the group in a new post, materialized as participants began to use the group as a source of information and connection. While the content of Student-Initiated Posts often could also be categorized as Connectedness or Learning, it was important to provide this novel category to emphasize and explore the role of student-initiated queries and discussion.
within the learning community. Figures A1, A2, and A3 in Appendix F are screenshots from Facebook that provide an exemplar of each category of post. Facebook posts have been redacted to protect personal information.

Balancing measures seek to monitor and correct unintended consequences associated with the implementation of change ideas (Langley, et al., 2009). As a balancing measure during the period of data collection, I monitored the content to ensure that students were using the group for its intended purpose. For example, if students used the Facebook group to ask questions about specific course assignments, it would have been an inappropriate use of the forum. Throughout the data collection period, students participated appropriately in the group. On occasions where there were questions or concerns about a particular requirement, assignment, or course, group participants transitioned their discussion to private messaging or another mode of communication without prompting. An example of this situation is when one student was struggling in a particular course and reached out to the group to see if anyone else was having a hard time. Two students responded in the group that they also needed some support and would email the original poster to discuss further.

An additional balancing measure implemented was to monitor the completion of modules in the BK Online Experience, a series of academic support modules provided as a transition support to the BK Program, to ensure that social supports put in place through the Facebook group did not take away from academic supports that are also needed during the first semester. The majority of students in the Facebook group completed most of the requirements in the BK Online Experience proficiently, indicating participation in the group was not a hindrance to other program requirements.
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Intentionally tracking the amount of time spent facilitating the group was important for me as the group administrator/scholar practitioner. While my primary goal of was to promote engagement and community, it was also important to not overemphasize the group or group content in relation to other work and life responsibilities. Time spent on facilitation was recorded weekly and monitored to ensure an inordinate amount of time was not spent on facilitation of the group. Between one and two hours per week were spent researching and posting new content and participating in the group. This amount of time was not problematic to other work and life duties.

Formative Evaluation Results and Response

Formative evaluation information, gathered in PDSA format, was influential in ensuring that attempts to make Facebook group content meaningful were responsive to the needs of the student participants. Over the course of the three PDSA cycles, there were some differences noted in the types of posts originated in the Facebook group over time (see Figure 16), as well as the ratio of the number of comments/responses to each type of post. In PDSA Cycle 1, there were similar numbers of Connectedness and Learning posts that enabled the evaluation of the responses to the posts and informed what content would be most appropriate moving forward. In PDSA Cycle 1 (August 15, 2020-September 15, 2020), there were six Connectedness posts and seven Learning posts shared with the group. There were 14 comments made on the Connectedness posts and 18 comments made on the Learning posts. There were also two Student-Initiated posts with four associated comments. In PDSA Cycle 1, as the scholar practitioner and group administrator, I was very active in the group, posting new content as well as commenting and replying to student participants. However, it was noted that when I commented on a post or replied to a question, it often was the last comment, effectively ending the conversation related to the post.
Note. Number of posts in each category by PDSA Cycle

In PDSA Cycle 2 (September 16, 2020-October 15, 2020), more Student-Initiated content was posted, with five initial posts and 15 comments/replies. Since the Student-Initiated posts and associated comments appeared to be successfully helping students build relationships with each other, the Connectedness posts were decreased in Cycle 2, with three original posts and nine comments/replies. There were eight Learning posts originated during this PDSA cycle with ten associated comments/replies. Many of these posts were providing reminders and information related to COVID-19 and the upcoming advising season. In a change informed by observations during PDSA Cycle 1, I did not respond to all posts during Cycle 2 in an effort to allow the other student participants in the group to respond to the content and each other without input from me, as well as to observe if the overall number of comments increased without intervention. Overall comments decreased slightly from PDSA Cycle 1 from 36 to 34.
PDSA Cycle 3 (October 16-November 30) the number of Student-Initiated posts held steady, but the number of comments increased significantly, with 25 comments/replies and five posts. In response to posts where students seemed to be feeling some stress about registration, final exams, etc., additional Connectedness posts were added to the group to provide emotional supports (Shaw & Chin Newman, 2017). Additionally, there were six Learning posts that garnered only one comment overall. Overall comments on posts increased during the final PDSA cycle to 51, up from 36 in Cycle 2.

Of particular interest throughout the formative assessment process was the ratio of comments to each type of post. Posts categorized as Connectedness or Student-Initiated had a higher ratio of responses than those categorized as Learning (See Figure 17). Connectedness posts had an average of 3.2 comments/responses for each post. Learning posts resulted in an average of only 1.4 comments per post, while Student-Initiated responses had the highest ratio of 3.7 comments/responses for each post.

Figure 17

Ratio of Comments to Posts

The use of the PDSA Cycle allowed for viewing of participant interaction with the Facebook group in an iterative way that provided opportunities for adaptations that promote not
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only change, but improvement. Langley et al. (2009) state, “The [PDSA] cycle can be used to turn ideas into action and connect action to learning,” (p. 97). Formative assessment during this improvement initiative indicates that participants in the Facebook group not only interacted with content that promoted learning, but content that promoted connection, as well.

**Section VI. Summative Evaluation of Improvement Methodology**

Summative data was collected using an adapted short form of Rovai’s Classroom Community Scale, called the Classroom Community Scale–Short Form (CCS-SF) developed by Cho and Demmans Epp (2019). Rovai’s Classroom Community Scale (CCS) has been used across many educational settings to measure a sense of community among online students, and has been found valid and reliable across multiple contexts (Ahmady, Kohan, Bagherzadeh, Rakshhani, & Shahabi, 2018; Rovai, 2003). The CCS is a 20-item scale with two 10-item subscales focusing on connectedness and learning within a course. In the development of the CCS-SF, Cho and Demmans Epp (2019) maintained reliability and increased content validity, while using a subset of eight questions from Rovai’s original CCS. The CCS-SF was used with permission from the authors and was chosen as a way to measure community more quickly and reliably than by using the original measure (Cho & Demmans Epp, 2019).

In the summative evaluation process, all eight items on the CCS-SF were used, and the measure was distributed via Qualtrics survey software. The language of these items was adapted to focus on connectedness within the program rather than within an individual course, as the initiative focused on students new to the BK Program (See Appendices C and D). While all students in the initiative were new to the program, they were not necessarily enrolled in the same courses. This change in language was important, as online students often establish connections with peers and instructors within courses, but have little sense of connectedness or community at
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the program level (Exter, Korkmaz, Harlin, & Bichelmeyer, 2009). Students completed the survey prior to participation in the Facebook group and at the completion of the data collection period.

Additional items related to comfort/familiarity with the Facebook platform were included in the pre-survey to help the me understand if some participants may need support using the social media site. The additional questions focused on participant familiarity with Facebook and skills or actions commonly used to interact with the platform, including: Viewing posts, viewing videos, commenting, replying to comments and reacting to posts. Participants were given a Likert-type scale with choices ranging from Not Comfortable to Very Comfortable (See Appendix C).

In addition to the CCS-SF, the post-survey also included a question related to the frequency of engagement with the Facebook group, asking participants to rate how often they were engaged with the content. Answer choices ranged from “Never” to “Daily.” Optional open-ended responses related to the participants’ experiences in the Facebook group were added to the post-survey, as well. The open-ended response prompts asked participants to share any impacts they may have experienced as a result of participation in the group and if they had suggestions about building community within the BK Program. A question was also included that solicited participation in a semi-structured interview (See Appendix D).

Following the conclusion of the Fall 2020 semester, semi-structured interviews were conducted with two participants to gain more insight into how participation in the Facebook group impacted each interviewee’s perceptions of sense of community within the BK Program. The semi-structured interview format used both predetermined questions and supporting prompts that serve to “reassure the speaker that you are listening, but they do not turn the conversation
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aside,” (Olsen, 2012, p. 33). Interview questions expanded on adapted CCS-SF items and
provided opportunities for students to share additional information related to community,
connectedness, needed/wanted supports, and persistence (See Appendix D). Interviews were
conducted via recorded Zoom sessions and the audio files associated with each session were
transcribed.

Summative Evaluation Analyses and Results

Quantitative Results and Analysis. It was anticipated that pre- and post-survey results
would be compared using a paired t-test to determine if there was any significant change in the
means of the pre-and post-surveys as a result of the improvement initiative. A paired t-test was
viewed as an appropriate statistical application, as the participants can be matched from pre- to
post-survey, thus decreasing the variability in the set of data (Salkind, 2010). However, only
eight participants completed both the pre- and post-surveys, resulting in a sample size that would
not generate enough power to use the paired t-test with any statistical significance. Because of
the lower than anticipated sample size, the decision was made to analyze the data using measures
of central tendency. Analyses comparing the means ($M$) from pre-test to post-test were
completed at the item level and the subscale level. Mean ($M$) is an appropriate statistic to use in
this situation, as it allows the description of all participant responses to the CCS-SF (Cresswell,
2013, p. 181). The CCS-SF is a five-point Likert-type scale. When calculating mean, responses
on individual items were “scored from 0 to 4, with the least favorable choice assigned 0 and the
most favorable choice is assigned a value of 4” (Cho & Demmans Epp, 2019, p. 11).

There was variability in the results comparing means from pre-test to post-test on
individual items of the CCS-SF (See Table 1). The means of items one, four, and seven remained
constant from pre-survey to post-survey, while the means of items two, five, six and eight increased. The mean of item 3 decreased from pre-survey to post-survey.

Table 1

*Means and Standard Deviations of Individual Items of the CCS-SF from Pre-Survey to Post-Survey*

<table>
<thead>
<tr>
<th>CCS-SF Item</th>
<th>Subscale</th>
<th>Pre-Survey</th>
<th>Post-Survey</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel students in this program care about each other</td>
<td>Connectedness</td>
<td>8</td>
<td>3.00</td>
<td></td>
<td>.535</td>
<td>3.00</td>
<td>1.069</td>
<td></td>
</tr>
<tr>
<td>2. I feel connected to others in this program</td>
<td>Connectedness</td>
<td>8</td>
<td>2.00</td>
<td></td>
<td>1.309</td>
<td>2.75</td>
<td>1.035</td>
<td></td>
</tr>
<tr>
<td>3. I feel it is hard to get help when I have a question</td>
<td>Learning</td>
<td>8</td>
<td>2.88</td>
<td></td>
<td>.0641</td>
<td>2.50</td>
<td>1.195</td>
<td></td>
</tr>
<tr>
<td>4. I feel uneasy exposing gaps in my understanding</td>
<td>Learning</td>
<td>8</td>
<td>2.00</td>
<td></td>
<td>1.195</td>
<td>2.00</td>
<td>1.195</td>
<td></td>
</tr>
<tr>
<td>5. I feel reluctant to speak openly</td>
<td>Learning</td>
<td>8</td>
<td>2.25</td>
<td></td>
<td>1.282</td>
<td>2.50</td>
<td>1.512</td>
<td></td>
</tr>
<tr>
<td>6. I feel I can rely on others in this program</td>
<td>Connectedness</td>
<td>8</td>
<td>2.13</td>
<td></td>
<td>1.356</td>
<td>2.50</td>
<td>.756</td>
<td></td>
</tr>
<tr>
<td>7. I feel I am given ample opportunities to learn</td>
<td>Learning</td>
<td>8</td>
<td>3.50</td>
<td></td>
<td>.535</td>
<td>3.50</td>
<td>.535</td>
<td></td>
</tr>
<tr>
<td>8. I feel confident that others will support me</td>
<td>Connectedness</td>
<td>8</td>
<td>3.00</td>
<td></td>
<td>.756</td>
<td>3.13</td>
<td>.641</td>
<td></td>
</tr>
</tbody>
</table>

Data were also analyzed at the subscale level. As shown in Table 2, the mean score increased by 1.25 points for the Connectedness subscale from pre-survey to post-survey, indicating participants rated the Connectedness items more favorably on the post-survey than the pre-survey. However, the mean score decreased slightly (from 10.63 to 10.5) for the Learning subscale between pre- and post-surveys, indicating the participants rated the learning items less favorably.
Table 2

*Means and Standard Deviations of Subscales of the CCS-SF from Pre-Survey to Post-Survey*

| CCS-SF Subscale | Pre-Survey | | | Post-Survey | | |
|-----------------|------------|---|---|-------------|---|
|                 | n | M | SD | M | SD |
| Connectedness   | 8 | 10.13 | 3.758 | 11.38 | 3.068 |
| Learning        | 8 | 10.63 | 2.722 | 10.50 | 3.251 |

In addition to pre-and post-survey results from the CCS-SF, quantitative data was also collected on the pre-survey regarding participant familiarity with Facebook. Participants overwhelmingly indicated they were both familiar and comfortable using the Facebook platform. 94% of participants selected that they were “Very Comfortable” with viewing posts, viewing videos, and reacting to content posted (like, dislike, etc.). The other 6% indicated they were “Somewhat Comfortable” with these actions within the platform. Participants were less comfortable overall with commenting and responding to comments from others in the group. 69% of participants stated they were “Very Comfortable” with commenting and 31% indicated they were “Somewhat Comfortable.” For the item that asked participants to rate their level of comfort with replying to the comment of another group member, 88% were “Very Comfortable” and 12% were “Somewhat Comfortable.”

On the post-survey, participants were asked about the frequency with which they engaged with the Facebook group. Answer options for the multiple choice question included: “Daily”, “2-3 times per week”, “4-6 times per week”, “Once per week”, and “Never.” 12.5% of participants indicated they interacted with the content on a daily basis, 25% indicated 2-3 times per week, 25% indicated 4-6 times per week, 12.5% indicated once per week, and 25% indicated they never engaged with the content.
Qualitative Results and Analysis. Two types of data were included in the summative qualitative results and analysis. Data from the semi-structured interviews conducted following the close of the Fall 2020 semester were coded and analyzed, as were data from the open-ended responses included in the post-survey.

Semi-structured Interview Data. Following the transcriptions of the semi-structured interviews, First Cycle coding was completed by hand using a combination of Descriptive, In Vivo, and Process codes (Miles, Huberman, & Saldaña, 2014). The variety in coding strategies allowed the essence of the interviewees’ thoughts to be captured by placing value on the nouns, verbs, and short quotes that make up the content of the interviewee responses. 18 codes were assigned during the First Cycle coding. Six themes emerged from these codes during Second Cycle coding, where the initial codes were analyzed and grouped into like categories that are more meaningful units for analysis (Miles, Huberman, & Saldaña, 2014). The themes that emerged included: “Information,” “Online,” “Connectedness,” “Identity,” “Institutional Connection,” and “Facebook Group.” Figure 18 displays initial codes and the themes derived from those codes during the Second Cycle of coding.
The Second Cycle coding process is helpful in cross-case analysis by helping to identify and describe common themes from multiple sources of data (Miles, Huberman, & Saldaña, 2014). The subsequent narrative descriptions of the themes, with First Cycle codes included in italics are intended to communicate and synthesize participant viewpoints on the transition process from community college to the fully-online BK Program at WCU.

The first theme that emerged from the interview data in regard to the improvement initiative was that of “Information Provided.” An interviewee stated, “When you posted stuff [in the Facebook group], it was interesting and needed info that was helpful.” Advising was also viewed as a way participants received information and clarification that helped participants with
registration and other activities. In reference to her advisor, an interviewee stated, “He explained the information well enough that I was able to understand it. He called me and we made a plan, so as long as I stick to the plan, I think I’m okay.” Helpful information and clarification were also provided within the Facebook group. An interviewee shared that information provided, “was helpful to keep me on track because in the Facebook group you would clarify things from…announcements and emails we received from the university or our advisor.”

“Online Learning” was the second theme that emerged during the interviews. The transition to a new LMS proved to be difficult, even for experienced online learners. “I struggled a little bit with finding stuff on Blackboard. I was used to a different LMS and think it was a lot easier,” said one interviewee. Another emphasized that the transition to a new LMS was, “probably, honestly the most difficult part…” of the transition to WCU. While interviewees were used to online learning, the change in aesthetics and functionality of the LMS was a “struggle.”

The switch to accessing fully online services and utilities, such as advising, registration, etc. was also a change. While completing online coursework was familiar, the interviewees indicated the change from face-to-face advising and access to the physical campus that they experienced at the community college has been a major shift.

Participants experienced “Connectedness” in multiple ways, both in the BK Program and through the Facebook group. One interviewee stated, “I think it’s great to be connected to the program and not feel like you’re isolated by yourself. Kind of, in internet learning or online learning, you are isolated by yourself, but this group allowed me to be able to meet other people that are in the program with me.” These personal connections were developed within the Facebook group, but also expanded outside the group when members “friended” each other on their personal accounts. “I ended up requesting to be friends with two of the other group...
members because they both reached out to support me when I needed help and asked a question in the group. And so now I see their stuff on Facebook and one of them posted her grades the other day and how she finished her semester and I thought she did such a good job,” shared one interviewee. The other interviewee stated that it was, “so helpful and encouraging to connect with other students new to the program.”

Both interviewees spoke to their perceptions of themselves, or “Student Identity,” as students in the fully-online BK Program at WCU. They categorized themselves, without prompting from a question, as adult learners and distance students who are, “not experiencing all the things that the college kids are experiencing. Which I’m not saying that I need to, because I’m old.” Family support was important for the interviewees as well, with both noting various ways their families had supported them in their education. One interviewee with adult children expressed that her daughters had taught her how to use the computer and the other interviewee shared how her young children play school alongside her so she can do her homework. Balancing work and family responsibilities were shared as noteworthy challenges of being adult learners. They also shared that the academic expectations at the university were more stringent than at the community college with one interviewee sharing, “I think the biggest thing for me was that I had been at a community college for a while, and I knew the standards would be different from community college to a four-year university. Whenever I began this program, I wasn’t sure that I was capable of getting through it while working and having children and all the other responsibilities that I’m sure a lot of people in the group are facing too, because we are all online together. This Facebook page, it made me feel more confident that I was capable of not only passing, but also trying to exceed my own expectations of myself.” The acknowledgement
of self-doubt when entering the four-year university and how connections in the group resulted in a greater sense of self-efficacy were prevalent.

“Institutional Connection” is a theme that emerged from three initial codes: Connection to Campus, Lack of Institutional Connection, and, “Didn’t Apply to Me.” One interviewee felt the content of the Facebook group helped her have a greater connection to campus, “…since I’m not on campus, I don’t get to participate in any of the extracurricular events, so I feel like it does help me to feel like I’m a part of Western and not just on my own island by myself.” Conversely, another interviewee, when asked about whether the Facebook group helped her feel a greater connection to WCU, answered, “Probably not. But…I wasn’t expecting to feel like it. I mean, I guess because I’ve gone back to school, I don’t expect to. I don’t have a Western t-shirt or anything. I know when my daughter got into her university, they sent her a package that had a wall plug thing and a key chain. So it’s not like I got anything that was like, ‘Oh, you’re part of Western,’ because I’m distance. I’m also not 20 anymore, so I guess it isn’t that important to me. But it didn’t make me feel like a student at Western.” This lack of institutional connection was also evident when an interviewee said, “Sometimes you posted stuff that was interesting and sometimes it was stuff like pictures of campus or things going on at Western that didn’t apply to me.”

The final theme identified, “Facebook Platform,” consists of information the interviewees shared that were directly related to the Facebook group and its content. The efficacy of the Facebook group was noted, with interviewees sharing that it was an effective form of communication and community building. One interviewee stated, “Realistically speaking, we’re not going to make connections on campus because we’re not there, so really, the only way you’re going to make connections with somebody is through the Facebook group as opposed to even
online classes. Because I know I sent an email out to all the people in my class one time because some assignment wasn’t loading or something and a couple people responded back, but you don’t really get to know them. I feel like you got more of a bond if you could have connection with someone on Facebook.” The efficacy of the Facebook group was also noted in the context of the platform and how it notified members when something new happened that allowed them to go back and comment at their convenience. The interviewees also stated that it was convenient to have the group accessible on their phones and not just on the computer and that it was nice to not have to log in to a separate system to ask a question or communicate with their peers. Both interviewees also largely felt the content of the group was helpful, positive, and provided timely reminders and encouragement. They appreciated that the group highlighted supports and resources specifically targeted to distance students. The interviewees also had suggestions for the group moving forward, including adding Facebook Live or Zoom sessions occasionally to let people touch base synchronously, asking students to share what courses they are taking at the beginning of the semester, and adding new students to the existing group so the current group members could support new students and act in a mentorship-type role. “I’ve got this first semester under my belt, so I think I would be able to help people next semester,” shared one interviewee, indicating her support of adding new students to the existing group. Interviewees also indicated a desire for increased engagement and interaction within the group.

**Open-ended Survey Responses.** Optional open-ended follow-up questions were provided on the post-survey to allow participants to describe how they were impacted by participation in the group and to provide suggestions for building community within the BK Program. In response to the prompt, “Please share any additional information about how you were impacted by participation in the Facebook group,” responses were perceived as primarily positive. Figure
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19 provides the full text of each response to the open-ended question items, categorized by their perceived positive or negative tone. Commonalities within the positive responses for Question 1 include: Helpfulness of information shared, importance and impact of connectedness within the group, and the efficacy of the group in building community. The perceived negative response focused on lack of applicable information and lack of the receipt of notifications about activity within the group. Only one person responded to Question 2, expressing an appreciation for the group, her efforts to be engaged, and a desire for others to heighten their levels of engagement.

**Figure 19**

*Responses to Open-Ended Items on the Post-Survey*

<table>
<thead>
<tr>
<th>Post-Survey Open-Ended Items</th>
<th>Perceived Positive Responses</th>
<th>Perceived Negative Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Please share any additional information about how you were impacted by participation in the Facebook group.</td>
<td>“I enjoyed interacting with those that posted and commented. Sometimes I do feel alone doing this online, however, I did reach out with some questions through class email and that was helpful.”</td>
<td>“Never got any notifications of anything posted in the group. And the notifications I did get was nothing that interested me.”</td>
</tr>
<tr>
<td></td>
<td>“Information has been helpful”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“I was able to find help in one of my classes by connected with a fellow student. I was struggling but it seemed she was as well so it felt better knowing I was not the only one.”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“I love what this group is trying to achieve and I am glad we have a safe place to vent, seek information or help or just feel connected to others like us.”</td>
<td></td>
</tr>
<tr>
<td>2. Please share any suggestions you have about building community in the BK Program.</td>
<td>“I like the Facebook group idea. I wish more people would be involved. I tried to engage and interact with posts, even when others did not.”</td>
<td></td>
</tr>
</tbody>
</table>

**Mixed-Methods Results and Analysis.** Both the formative and summative data gathered during the improvement initiative provide insight into the efficacy of the initiative. As a result of
the collection of multiple forms of both qualitative and quantitative data across the initiative, triangulation of the emergent themes is possible. Cresswell (2013) validates the use of triangulation as a way to support and corroborate evidence from different methods of data collection, helping to ensure the stated results are accurate and credible (p. 259). Figure 20 summarizes the multiple sources of data used for triangulation in this improvement initiative.

**Figure 20**

*Integrated Matrix of Data Sources*

<table>
<thead>
<tr>
<th>Themes</th>
<th>Qualitative Data Source(s)</th>
<th>Quantitative Data Source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>Semi-structured Interviews, Facebook Posts/Comments</td>
<td>Mean score/Standard Deviation from Learning Subscale of CCS-SF</td>
</tr>
<tr>
<td>Provided</td>
<td></td>
<td>Ratio of Comments to Posts Related to Learning</td>
</tr>
<tr>
<td>Online Learning</td>
<td>Semi-structured Interviews, Facebook Posts/Comments</td>
<td>N/A</td>
</tr>
<tr>
<td>Connectedness</td>
<td>Semi-structured Interviews, Facebook Posts/Comments, Open-ended questions on post-survey</td>
<td>Mean score/Standard Deviation from Connectedness Subscale of CCS-SF</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ratio of Comments to Posts Related to Connectedness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ratio of Student-Initiated Comments to Posts</td>
</tr>
<tr>
<td>Student Identity</td>
<td>Semi-structured Interviews, Facebook Comments/Posts</td>
<td>N/A</td>
</tr>
<tr>
<td>Institutional</td>
<td>Semi-structured Interviews, Facebook Comments/Posts</td>
<td>N/A</td>
</tr>
<tr>
<td>Connection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facebook Platform</td>
<td>Semi-structured Interviews, Facebook Comments/Posts, Open-ended questions on post-survey</td>
<td>Likert-type questions on pre-survey</td>
</tr>
</tbody>
</table>

Results related to the themes of “Connectedness,” and “Facebook Platform” were supported strongly by both quantitative and qualitative data sources. Related to the theme of
“Connectedness,” students expressed how meaningful and helpful the Facebook group was in helping them feel supported and form connections to each other in the semi-structured interviews. Facebook posts and comments seeking connection and responding to the needs of other participants also support the theme. An additional qualitative measure that supports a positive change related to Connectedness are the responses to the open-ended questions on the post-survey. The answers to these questions emphasized how connectedness within the group helped mitigate the feelings of isolation that can be associated with distance learning.

Quantitative data sources that support a positive change in relation to Connectedness include the increase in the mean scores on the Connectedness subscale from pre-survey to post-survey on the CCS-SF. The ratio of comments to posts related to Connectedness and Student-Initiated comments that were reported as part of the formative data analysis also demonstrate that the Facebook content designed to promote Connectedness did garner responses from group members. Student-Initiated posts, where students initiated the conversation with a question or comment, resulted in the highest number of comments, indicating a greater level of interaction and connection.

“Facebook Platform” as a theme also demonstrated consistent positive results across quantitative and qualitative data sources. In semi-structured interviews and open-ended questions on the post-survey, participants indicated support for the goals of the Facebook group and shared that it was an effective way to communicate and develop bonds with others. It was also indicated multiple times that Facebook was an effective platform for information sharing. Participation and engagement in the group through commenting, viewing, posting, and reacting also indicate engagement and the efficacy of the platform. Results from the Likert-type questions on the pre-survey which asked participants to rate their own comfort level with various aspects of Facebook
indicate that choosing it as a social media platform was a good choice, as most participants were familiar with its setup and at least somewhat comfortable with navigation and engagement.

Mixed-methods analysis for the “Information Provided” theme was more contradictory. While qualitative data sources, such as the semi-structured interviews and Facebook comments/posts, indicate that the Facebook group was very helpful in providing and clarifying information, as well as being a place where answers to questions could be sought. However, quantitative data sources indicate otherwise. The low ratio of comments to Learning posts indicates minimal engagement within the Facebook group on posts with the goal of Providing Information. A decrease in the Means between pre-survey and post-survey on the Learning subscale of the CCS-SF also indicated lower perceptions of student learning on the post-survey. In particular, the CCS-SF item stating, “I feel that it is hard to get help when I have a question,” showed a decrease from pre-survey to post-survey, while other items in the Learning subscale remained constant.

While the themes “Online Learning,” “Student Identity,” and “Institutional Connection” did not have support from both quantitative and qualitative measures, findings were supported and corroborated through the use of multiple types of qualitative data sources, also considered acceptable in data triangulation (Cresswell, 2013). In “Online Learning,” data from the semi-structured interviews as well as Facebook comments and posts indicated that LMS-related issues were a primary source of frustration/difficulty, even for experienced online students. Understanding how to access and utilize campus-based services as students who transferred into an online program was also a commonality. “Student Identity” was not addressed directly through a quantitative measure, but both semi-structured interviews and Facebook post/comment data clearly corroborates the idea that many participants view themselves as a unique population
of adult, distance learners with specific needs related to supports, information, and processes. “Institutional Connection” was also found as a theme in multiple data sources, with mixed results. Some interview data indicates that the Facebook group did help participants feel more connected to WCU as an institution. However, other interview data would suggest the opposite. Interaction and engagement with Facebook posts designed to promote Institutional Connection was also very low, potentially supporting the idea that there is a lack of connection between BK transfer students and WCU.

Discussion

In an Improvement Science framework, one fundamental question to be addressed with any initiative is, “How will we know that a change is an improvement?” (Langley et al., 2009). The theory of improvement for this initiative held that: Participation in an online community will provide students who transfer to the Birth-Kindergarten Program at Western Carolina University with heightened senses of belonging, thus increasing the students’ overall perceptions of sense of community and ultimately increasing student persistence and degree completion. In this case, multiple sources of evidence indicate that, in the short-term, an increase in perceptions of connectedness to peers and the BK program as well as an increased sense of community occurred as a result of the initiative. Both quantitative (survey results and Facebook comment ratios) and qualitative (interviews, Facebook posts, and responses to open-ended questions) measures suggest meaningful growth in connectedness and sense of community as a result of the use of Facebook as a platform and participation in the Facebook group. This growth in sense of community and connectedness through the use of social media is supported by Exter et al. (2009) who found that students in fully online programs desired opportunities to interact with others in their program outside the confines of the academic setting. Exter et al. (2009) also found that
positive interactions with peers also helped promote a sense of connectedness at the program-level. The positive results of the implementation of the initiative in the first semester of enrollment are supported by McLeod (2019) who found that program-level initiatives helped students feel a greater sense of community and connectedness to the program and institution.

Sources of data related to increased institutional connection as a result of participation in the Facebook group varied. Both quantitative and qualitative data highlighted some key considerations in how students in the fully-online BK Program view their relationship with WCU. Some of the factors contributing to the perceptions appear to be directly connected to their interactions with people and processes at the institutional level, such as how they are notified of acceptance and supports provided to distance learners during the transition. Dostis (2012) reported that many transfer students, “feel neglected by school officials,” (p. 1), emphasizing the importance of strong transitions and positive initial institutional impressions for transfer students. Perhaps most striking, however, is how perceptions of student identity appear to impact institutional connection. Semi-structured interview data particularly highlighted how the fully-online students viewed themselves as being in a completely different category and student population. This perception appears to be, in part, a result of participant impressions of themselves as adult learners. Many BK students are part-time students who work full-time and have families and significant responsibilities outside their studies. Gulley (2016) stated that in many cases, “…by not being aged 18 to 24 and a full-time student, these “nontraditional” students have entered college thinking they do not belong,” (para. 2). The separation from the physical campus and face-to-face extracurricular activities also seems to impact student connection to the institution. The initial code identified during qualitative analysis seems to sum up participant feelings about many institutional activities: They “didn’t apply to me.” While most
participants were familiar with online learning and an increased sense of connection to the program and peers developed over the course of the initiative, results related to connections to the institution were less definitive.

Rovai (2002) describes the Learning subscale of the Classroom Community Scale (CCS) on which the CCS-SF was based as representing, “the feelings of students regarding the quality of the construction of understanding and the degree to which they share values and beliefs concerning the extent to which their learning goals and expectations are being satisfied” (p. 325). While qualitative results support perceptions of the Facebook group interactions and content as supportive of student learning, the small decrease in Mean ($M$) from pre-survey to post-survey on the CCS-SF does not indicate a positive change related to learning. This decrease is minimal and Measures of Central Tendency are more apt to be sensitive to small sample size. Given that sources of evidence are in conflict about perceptions of learning, results are inconclusive.

**Limitations**

Primary limitations in this improvement action include the small sample size and low response rate for both the pre- and post-surveys. The initial number of participants who completed the pre-survey (16) diminished by half by the end of the initiative, with only eight participants completing both instruments. The number of participants who completed both the pre- and post-surveys limits the generalizability of the findings of this study. Findings cannot be generalized to the whole population of BK Transfer Students, but do provide insights about the participants who did complete both instruments. Therefore, the analyses that were completed, the results, and the recommendations presented are limited to the participants of this initiative. It is important to note that, while the sample size decreased related to the survey instrument,
participation in the Facebook group remained consistent across the implementation of the initiative.

An additional limitation of this improvement action is that the Facebook group is one of several ways that BK Transfer students interact with other students, WCU, and the BK Program during their first semester. They may be taking multiple classes, participating in the BK Online Experience course, interacting with various instructors, receiving support from different advisors, and accessing a variety of supports on campus. Participant experiences in the Facebook group had the potential to be impacted by any or all of the other contexts in which they experience the BK Program at WCU.

Section VII. Recommendations for Campus Leaders

Based on the outcomes of this improvement initiative, participation in the Facebook group did provide new BK transfer students with heightened senses of belonging and increased their overall perceptions of community and connectedness to peers and within the program. There were also mixed results related to connectedness to the institution. The literature strongly supports the implementation of both academic and social supports for transfer students (Berger & Malaney, 2003; Flaga, 2006; Rhine, Milligan, & Nelson, 2010; Rodriguez-Kiino, 2013; Shaw & Chin-Newman, 2017; Tinto, 2017a; Tinto, 2017b; Townsend & Wilson, 2006; Wang, 2009; Wheeler, 2019). Recommendations for campus leaders related to the implementation of academic and social supports at the individual, programmatic, and institutional levels follow.

Institutional Supports

Across the United States, some institutions are making a dedicated effort to meet the needs of fully-online and transfer students in holistic ways that address both social and academic needs. The Transfer Playboook: Essential Practices for Two- and Four-Year Colleges provides
three overarching recommendations for institutions to promote transfer student success: 1) Prioritize transfer student success; 2) Create clear pathways and high-quality instruction; and 3) Provide advising tailored to the needs of transfer students (Wyner et al., 2016). One example of an institution designating online transfer student needs as a priority is the University of Florida’s “UF Online” program where a redesign of the student services unit began with an in-depth look at the characteristics, needs, and behaviors of students in the program (Allen, 2019). Based on this analysis, they made changes to marketing, admissions and recruitment efforts, and student services offerings that met the needs of their students. Allen (2019) stated that while students must bear some responsibility for their successful transition to a four-year university, “institutions must be willing to share in the responsibility of transfer success by evaluating the unique needs of students they serve,” (p. 37).

While the data related to perceptions of connectedness to WCU as an institution varied, it was clear that transition supports that had been provided to BK students were largely at the programmatic and individual levels. WCU, as in the case of many institutions, focuses transition and orientation supports on residential students and offers the transition opportunities in a primarily face-to-face modality (Chan, 2019). Interview data supported what has been found in previous research related to online transfer students; that the lack of a targeted institutional orientation left them feeling isolated and unconnected (Tinto, 2012). A desire for early engagement, online-specific resources, and tangible connections to the university were also present in student feedback. These results are supported by the work of Britto and Rush (2013), who emphasize that online students should develop a connection to the brick and mortar campus, but should be provided with transition services and resources tailored to the digital campus, which will be their primary point of access. Study results indicate that navigating a new LMS
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was a significant barrier in the first semester at WCU; an issue related to campus capital that may require explicit instruction, training, or orientation (Shaw & Chin Newman, 2017).

Based on best practices identified in the literature in conjunction with results from this study, the following recommendations can be made related to institutional supports for online transfer students:

1. An in-depth analysis of the characteristics, needs, and performance of WCU’s online transfer students should be conducted to ensure we understand the particular type(s) of students attracted to online study at WCU.

2. Prioritize online students by hiring dedicated support professionals and establishing resources and processes that meet the needs of online learners.

3. Orientation programming, targeted to the needs of online transfer students, should be provided prior to enrollment. The orientation programming should mirror residential orientation, but be tailored to the needs of distance, online learners. The orientation programming should include synchronous instruction/experiences focused on navigating the LMS.

4. Provide online transfer students with tangible objects to promote a sense of institutional connection. Students receive branded items at residential orientations, and distance students should also have the opportunity to demonstrate their WCU affiliation.

5. Consider working with community colleges and other four-year institutions to streamline programs and services across the system to ease transfer student transitions. In particular, choosing a common LMS for use across the UNC System and NC Community College System could help remove barriers to success and persistence.
6. Adapting residential campus initiatives to include online students and investing in marketing these opportunities to online students. Student research symposia, professional development opportunities, and providing opportunities to serve in advisory or advocacy roles with institutional leadership would provide representation of the online student body on the residential campus.

Program-level Supports

Without clear support structures on an institutional level, the onus for transition support and orientation programming for online transfer students has been left to fully-online programs to develop and implement themselves. The BK Program at WCU offers a variety of supports to new students upon admission/enrollment, including participation in the asynchronous “BK Online Experience” course and asynchronous professional development content on topics ranging from Academic Dishonesty to Cultural Awareness. Adaptations to some services have also been made to accommodate the needs of online students. Faculty often survey students to meet the needs of adult learners related to synchronous instruction and coursework, and the BK advisors offer evening, weekend, and group advising options to accommodate students who work full-time and often have families.

However, study results correlated with findings in the literature that indicate social supports help students gain informal knowledge through peers, increase self-worth, and increase attachment to the program and institution; all of which increase academic performance and persistence (Tinto, 2012). These findings support the implementation of more personalized, synchronous, and interactive methods of orienting students to the BK Program and supporting them through the transition to WCU.
Recommendations made for program-level implementation do not assume change at the institutional level. However, if additional institutional initiatives were implemented, such as the recommendations provided in the previous section, they would only support, supplant, and strengthen transition and orientation work at the program level. Recommendations for program leadership include:

1. Reach out by phone to students after acceptance into the program to congratulate them, welcome them to the program, and offer support.
2. Provide BK or College of Education and Allied Professions branded materials to new students.
3. Host synchronous orientation sessions led by faculty to promote connection, interaction, and to answer questions.
4. Host small group sessions with faculty and advisors related to professional topics (e.g. jobs in early childhood, interview skills, equity in early childhood, etc.).
5. Complete a student needs assessment. The results of the assessment should inform content of the BK Online Experience course and other orientation and transition content provided to BK students.
6. Implement program-level initiatives, such as service learning projects, online book clubs, etc. that can involve students with WCU, the BK Program, and each other.

**Individual Supports**

Support provided to individuals as part of participation in the Facebook group demonstrated positive effects in connectedness and sense of community. These findings are supported in the literature, as a sense of community for online students is essential for success and persistence ((Bozarth, Chapman, & LaMonica, 2004; McLeod, 2019; Rovai, 2002; Sublett,
2018, Yang, et al., 2017). Results also corroborate the impact of both internal and external factors related to the individual needs of online students, as presented in Rovai’s Composite Persistence Model (2003). Social integration, outside encouragement, creation of a learning community, and the development of interpersonal relationships occurred through engagement with the Facebook group. The Facebook group also provided students with a space that provided connection, helped students see other students that were like themselves, and stave off the feelings of isolation that can be such a barrier in online learning (Dolan et al., 2017). However, participants also desired a greater level of engagement within the group, as well as the integration of students at different points throughout the BK program so informal mentorship opportunities could occur (Lockhart, 2019). These mentor/mentee relationships can provide social supports as described by Shaw and Chin-Newman (2017), while ensuring that the supports are targeted for the online transfer population (Townsend, 2008).

Recommendations for individual supports include:

1. Continuation of the Facebook group, with modifications. These modifications include adding new members to the group each semester when new transfer students enter the program, and encouraging the original participants to act in mentorship roles to the newly enrolled students.

2. Offering opportunities for social integration and the development of interpersonal relationships through informal synchronous events several times each semester (e.g. “Facebook Live” events). These synchronous opportunities might have a theme or focus (e.g. Support for Registration), or could just serve as a time to interact with others in the program.
3. Explore expanding into other types of social media, increasing access and the reach of the virtual community.

Opportunities for Continued Research

Based on the results of this study, continued research is needed to determine the impacts of participation in the Facebook group to the population of BK students at WCU. To measure the continuing impacts of participation in the group, additional assessment points can be added on a yearly basis as well as at program completion/exiting the group. These continued assessment points can also help track student progress toward the long-range outcome of persistence to program completion.

Orientation sessions implemented for online students should also be assessed prior to and after the sessions to determine if the goals and outcomes stated for each session were met and to gather information about future professional development needs. Additionally, future research could also focus on assessment of self-efficacy in addition to connectedness upon entry and exit from the program to determine if supports provided to students promoted higher self-efficacy as well as increased connectedness. These assessments should be provided to all online learners with each new admission cycle for the purpose of providing information for continuous improvement in the process.

Research on the area of student mentors in online programs should be explored in the future. The impacts of the mentoring relationship for both the mentor and mentee should be assessed to determine the influence on newly admitted students, as well as students who have longer tenure in the program. Allowing mentors to present content and build relationships with newly admitted students should be researched to determine the impact on self-efficacy and connectedness of students taking on this role.
Section VIII. Conclusion

Students who transfer from community colleges to online programs at four-year institutions need specific, targeted supports to help them be successful and persist to degree completion. These students are more likely than the typical residential student to be a first generation college student, Pell Grant recipient, or member of one or more minoritized groups. The improvement initiative in this proposal sought to address a missing, but vital, component in the support structure for BK students at WCU: Social supports during transition. Targeted supports provided to transfer students through the implementation of the Facebook group resulted in increased feelings of connectedness to peers and the BK Program. As the Facebook group adapts based on the needs and desires of participants, my hope is that it will be a powerful support in the lives of this group of fully-online transfer students. Further research is needed, but continued positive results can help inform both programmatic and institutional policies and processes related to comprehensive transition plans for online students that promote both persistence and retention.
References


OUT OF SIGHT, NOT OUT OF MIND


OUT OF SIGHT, NOT OUT OF MIND


doi:10.1080/10668920903304914


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OUT OF SIGHT, NOT OUT OF MIND


OUT OF SIGHT, NOT OUT OF MIND


Appendix A: Recruitment Email

Dear _____________,

Welcome to the Birth-Kindergarten (BK) Program at WCU! As a part of your first semester transition experience, you are invited to participate in a Facebook group that will focus on building community in the BK Program for students who have transferred from community college. The Facebook group is part of a research study about how participation in an online community impacts sense of belonging and sense of community within an online program.

What do I have to do to participate?

· Complete a short pre-survey (5-10 minutes)
· Participate in a Facebook group as much or as little as you wish
· Complete a short post-survey (10-15 minutes)
· Optional: Participate in a phone or Zoom interview following the post-survey (30 minutes or less)

If you are interested in participating in this online community, please use this link (Insert Qualtrics link) for more details about the project, to provide your consent to participate, and to complete the pre-survey (5-10 minutes).

Thank you in advance for your consideration. If you have any questions or would like more information prior to clicking on the link above, please contact Myra Watson (Co-Principal Investigator (PI), EdD Candidate, and BK Faculty Member) at mkwatson@wcu.edu or Dean Kim Winter (Co-PI, Dean of College of Education and Allied Professions, Disquisition Chair) at kkruebel@wcu.edu.

Best,

Myra K. Watson
Appendix B: Informed Consent

Western Carolina University
Consent Form to Participate in a Research Study

Project Title: Out of Sight, Not Out of Mind: A Disquisition Addressing the Lack of Transition Supports for Transfer Students Entering Online Programs at Western Carolina University

This study is being conducted by: Myra K. Watson, MAEd., Birth-Kindergarten Faculty and Graduate Student
Faculty Advisor/Disquisition Chair: Dean Kim K. Winter, Ph.D.

Description and Purpose of the Research: You are invited to participate in a research study about building community for students who transfer from community college to the fully-online Birth-Kindergarten (BK) Program at Western Carolina University. By doing this study we hope to learn how participation in an online community impacts sense of belonging and sense of community within an online program.

What you will be asked to do: If you participate in this study, you will be asked to complete a pre-survey, which should take 5-10 minutes. You will then be asked to participate in a closed Facebook group with other first-semester BK students who have transferred from a community college. The content of the Facebook group will focus on building community and providing information about WCU campus resources appropriate for fully-online students. The Facebook group will be active for the duration of your first semester in the program. You may participate in the group as much or as little as you wish. It is anticipated that you may spend anywhere between 0 minutes and 2 hours per week interacting within the Facebook group. However, there is no required time commitent, and the amount of time spent interacting within the group is based on individual preference. At the end of the semester, you will be asked to complete a post-survey, which will take 10-15 minutes to complete. In that survey, you will also have an option to volunteer to be selected to participate in an optional interview (by phone or Zoom web conferencing software) with the researcher. This interview should take less than 30 minutes. Interview audio will be recorded for voice transcription for phone interviews while both audio and video may be recorded for Zoom interviews.

Risks and Discomforts: We anticipate that your participation in this study presents no greater risk than everyday use of the internet.

Benefits: There are no direct benefits to you for participating in this research study. The study may help us better understand if fully-online transfer students experience a greater sense of belonging and community as a result of participation in the Facebook community group.

Privacy/Confidentiality/Data Security:

The data collected in this research study will be kept confidential. Participation in research may involve some loss of privacy. We will do our best to make sure that the information about you is kept confidential, but we cannot guarantee total confidentiality. Your personal information may be viewed by individuals involved in the research and may be seen by
people including those collaborating, funding, and regulating the study. We will share only the minimum necessary information in order to conduct the research. Your personal information may also be given out if required by law, such as pursuant to a court order. While the information and data resulting from this study may be presented at scientific meetings or published in a scientific journal, your name or other personal information will not be revealed.

We will collect your information through Qualtrics survey and through your participation in the Facebook group. Only group information from the Facebook group will be collected. This information will be stored in a password protected cloud-based folder and within the Qualtrics password protected web-based system, and in a locked storage cabinet in a secure location. For analysis and discussion, each participant will be assigned a study code. Only the research staff will have access to the key which connects identifying information to the study code. Confidentiality will be protected over the course of the study. All names will be replaced with study code numbers on all documents. To protect against disclosure of identifiers, code numbers will not have any embedded element related to names, dates, addresses or other identifiers. All quantitative results will be reported as overall patterns and group means and no individual will be identified by name. For qualitative (interview) data, no individual will be identified by name. Pseudonyms will be used in the write-up.

The research team will work to protect your data to the extent permitted by technology. It is possible, although unlikely, that an unauthorized individual could gain access to your responses because you are responding online. This risk is similar to your everyday use of the internet. Audio will be collected during this study and used to transcribe interviews. The recordings will be destroyed after transcription. The recordings will not be shared with the general public. You do not have to agree to be recorded in order to participate in the main part of this study.

If you give the research team permission to quote you directly, the researchers will give you a pseudonym and will generalize your quote to remove any information that could be personally identifying.

**Voluntary Participation:** Participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty. If you choose not to participate or decide to withdraw, there will be no impact on your grades/academic standing or affiliation with the BK Program. If you wish to withdraw at any time, please contact Myra Watson at mkwatson@wcu.edu.

**Compensation for Participation:** No compensation or extra credit will be provided.

**Contact Information:** For questions about this study, please contact Myra Watson at mkwatson@wcu.edu. You may also contact Dean Kim Winter, the principal investigator and faculty advisor for this project, at kkruebel@wcu.edu.

If you have questions or concerns about your treatment as a participant in this study, you may contact the Western Carolina University Institutional Review Board through the Office of Research Administration by calling 828-227-7212 or emailing irb@wcu.edu. All reports or correspondence will be kept confidential to the extent possible.

You will be given a copy of this information to keep for your records.
OUT OF SIGHT, NOT OUT OF MIND

I understand what is expected of me if I participate in this research study. I have been given the opportunity to ask questions, and understand that participation is voluntary. My signature shows that I agree to participate and am at least 18 years old.

(Consent to be provided electronically via Qualtrics)

If you would like to receive a summary of the results, once the study has been completed, please enter your email address (as legibly as possible) here:

_____________________________________________________________

I do □ or do not □ give my permission to the investigators to quote me directly in their research.

(Consent to be provided electronically via Qualtrics)
Appendix C: Pre-Survey in Qualtrics Software

Block 1

Please type your name in the box below.

Informed Consent Question—PLACEHOLDER FOR EDITING LATER

☐ Yes
☐ No

Is this your first semester in the BK Program at Western Carolina University (WCU)?

☐ Yes
☐ No

Did you transfer to WCU from a community college?

☐ Yes
☐ No

Do you currently have a Facebook account?

☐ Yes
☐ No

Are you willing to create a Facebook account to participate in the BK Facebook group?

☐ Yes
☐ No

What is your comfort level with the following aspects of Facebook?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Not comfortable at all</th>
<th>Somewhat comfortable</th>
<th>Very comfortable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viewing posts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Viewing videos</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commenting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replying to comments from another person</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reacting to posts (Like, dislike, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
OUT OF SIGHT, NOT OUT OF MIND

Below, you will see a series of statements concerning the BK Program. Read each statement carefully and choose the answer that comes closest to indicate how you feel about the program. There are no correct or incorrect responses. If you neither agree nor disagree with a statement or are uncertain, choose Neutral. Do not spend too much time on any one statement, but give the response that seems to describe how you feel. Please respond to all items.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel that students in this program care about each other</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I feel connected to others in this program</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I feel it is hard to get help when I have a question</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I feel uneasy exposing gaps in my understanding</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I feel reluctant to speak openly</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I feel that I can rely on others in this program</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I feel that I am given ample opportunities to learn</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I feel confident that others will support me</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
Appendix D: Post-Survey in Qualtrics Software
Please share any suggestions you have regarding building community within the BK Program.

Would you be willing to participate in a follow-up interview regarding your experience in the BK Facebook group?

- Yes
- No

Hold for electronic consent for semi-structured interviews

- Click to write Choice 1
- Click to write Choice 2
- Click to write Choice 3
Appendix E: Semi-Structured Interview Questions and Prompts

Questions:

1. How was your experience participating in the Facebook group this semester?
2. Did your participation in the Facebook group have any particular benefits for you?
3. Was there anything about participating in the Facebook group that negatively impacted you?
4. Did you make any meaningful connections with other students through your participation in the Facebook group?
5. If you felt discouraged or like you didn’t want to continue in the BK Program, do you feel you could reach out to the Facebook group or to individual members of the group for support?
6. If you hadn’t participated in the Facebook group and you felt discouraged or like you didn’t want to continue your studies, who would you reach out to for support?
7. What suggestions do you have for content that could be added to the Facebook group that would help students build community with each other?
8. What suggestions do you have for content that could be added to the Facebook group that would provide students with information or supports to be successful in the BK Program at WCU?
9. Did participation in the Facebook group change how connected you feel to WCU?
10. Is there anything else you would like to share about the Facebook group or your transition to the BK Program at WCU?
OUT OF SIGHT, NOT OUT OF MIND

Prompts:

“Why is that?”

“Tell me more.”

“Can you remember more about that?”

“And then?”

“So?”

“I see…”

“Really…”

“It seems to be that…” (Olsen, 2012, pp. 33-34)
Appendix F: Example Facebook Posts

Figure 21

Example of a Connectedness Post

Post a gif about how you're feeling about the beginning of classes. I know I'm excited about meeting all my new students! This is strange and unchartered territory for lots of people, but the BK Program has been online for a long time, so we are lucky to be able to be proceeding (fairly) normally! I hope this helps ease some worries!

Figure 22

Example of a Learning Post

Here's a link to the Spring 2021 Academic Calendar. Highlights include:
- Classes start January 25th.
- No class April 1-5 (Modified Spring Break)
- Last Day of Class is May 7th
- Final Exam week is May 10-14.

WCU.EDU
www.wcu.edu

Seen by 10
OUT OF SIGHT, NOT OUT OF MIND

Figure 23

Example of a Student-Initiated Post

November 3

Just curious, has anyone in the group registered for classes for the spring semester? Tomorrow at 8pm is the earliest I can register and I just want to know what to expect. 😊

6 Comments  Seen by 14

I think I just registered. It is my first time. I think I did it right.

View 2 more replies

no I did not.

View 1 more reply

The crn code is the 5 digit code before the class number

Like · Reply · 5w