Where Do I Belong: A Mixed Methods Study of Belonging

for First-Year Commuter Student Success

by

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ABSTRACT

Many college campuses institute residency requirements intended to provide intentional support, engagement, and assistance in the transition into life as a first-year college student. However, first-year students opting to continue living at home with family and commuting to campus each day has become a growing trend. This group of students can often be more sizable than some may assume and their developmental needs can be consistent with those of their on-campus peers. The objective of this mixedmethods action research study was to better understand how peer-to-peer experiences and opportunities are perceived and to describe and explore the concept of social capital and sense of belonging within the first-year commuter student population. This feeling of isolation can often expand to a lack of campus involvement and engagement in social opportunities. As a result of the perceived needs of this growing first-year commuter student population, a peer mentoring program was launched as a pilot to localize, personalize, and support students by providing a peer student leader in the form of a commuter peer mentor (CPM). Results from the qualitative and quantitative data collected as a part of this study demonstrated that first-year students value specific and easily-identified resources made available to their unique need cases and while many first-year commuter students may feel well supported and connected academically, they articulated challenges with social connections within the university setting. The understandings gained from this action research can inform higher education and student affairs practitioners as they seek to establish or improve programs, resources, and practices that intentionally and thoughtfully support first-year commuter students.

DEDICATION

I dedicate the words contained within this dissertation to my students, past and present, who have helped shape the student affairs practitioner and reluctant researcher I have become. Your authentic truths have inspired my continued quest to seek to better understand. To all of the first-generation and underrepresented students out there: believe in yourselves and trust your grit. Your narrative is so very important, and the world can benefit tremendously from your voices and your truths.

I dedicate this work to my commuter student liaisons Alexis and Ben and my commuter peer mentors whose passion and investment for this work have anchored my progress and driven me to keep on keeping on.

I dedicate the completion of this journey to each educator who has selflessly devoted themselves to my continued education and success, often walking alongside me, shepherding the way forward.

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I have often thought and conceptualized how a doctoral committee is like several extremely skilled Sherpas, helping to navigate sharp bends and jagged cliff faces. No doubt my committee has helped me scale this mountain, using their experience, grace, and perspective to help me reach the pinnacle of this experience.

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by example how this road can sometimes be rocky but that we must each stay the course and believe in the power of ourselves.

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CHAPTER 1

INTRODUCTION AND PURPOSE OF THE STUDY

Commuter students have not always been afforded the opportunity to pursue higher education in terms of accessibility and unhindered enrollment that has characterized universities' most recent efforts. Colleges and universities have generally viewed their roles as providing relevant skills and information to enhance students' abilities to pursue careers but the evolution of student affairs and student support services has provided support to students so they have attained much more than just an education and a degree. Today students' higher education has been facilitated through intentional learning outcomes, expectations, organized patterns of communication and, at times, location. Higher education is seen more visibly through admissions brochures and campus tours and has a rich history that dates back to the birth of the nation.

When reflecting on the higher education services currently provided by the four-year traditional university environment, it may be seen that many of the systems of support in place today have been extended from the foundations of the residential college experience of the last three centuries (Christensen & Eyring, 2011). These support systems may take many forms from having in-hall resident assistants, to tutoring centers in residential areas, and access to intentional programming. Further, there are many opportunities for organic interaction and engagement in a variety of on-campus facilities in the dining halls, shared bathroom, or community environments, or even students riding an elevator together after class. Despite the considerable influence of residential spaces on many college campuses, the evolving needs and preferences of college students have

resulted in more students choosing or having a necessity to reside off-campus and in private accommodation.

According to Compton, Cox, and Laanan (2006), "73% of all undergraduates are non-traditional in some way, making them the majority rather than the exception on today's campuses" (p. 73). While the term can have multiple meanings, non-traditional often refers to college students who are not attending postsecondary-level education straight from high school, may be outside the 18-21 years of age range of many college students, have dependents, or those students who are non-residential. As a result of increasing enrollment from student populations such as transfer, international, and students not residing on campus, some college administrators have found that current student service offerings are ill-equipped, overwhelmed, and often outdated with the sudden influx of more non-residential students into public and private four-year institutions. Possible need considerations could look like offering of off-campus meal plans or addressing an all too frequent lack of power outlets for students to ensure that their devices are charged adequately throughout the school day.

This trend of changing enrollment and a lack of institutional preparedness is not new. In a 2014 report, commuter students were identified as a majority population across the larger college student population in the United States (NCES, 2014). Commuter students may bring expectations not always in alignment with the realities of the larger, more traditional university experience. For example, many commuter students indicate a lack of satisfaction in commuter-specific amenities such as dedicated space for their needs, lockers for storage, ample and cost accessible parking options, just to name a few often-requested offerings for their use on campus. Further, as the anchor point for non-

residential students is not centered on the residential experience, commuter students may encounter delay or difficulty in finding their fit on campus or in building relationships with peers, faculty, and staff (Hatch et al., 2017).

Background Information & Situated Context

I currently serve as the Assistant Director of Marketing, Communications, & Student Transitions at the University of Colorado Boulder, within Off-Campus Housing & Neighborhood Relations (OCH&NR). My office is considered a cost-center, or office which operates through student fee funding received from the CU Student Government, one of the largest such student governments in the country. This funding approach centers our focus on student development and holistic support, and as a result, we strive to support the development of independent living skills. In the past three years, my role has expanded, with the support of my supervisor and leadership, to include a focus on what we have come to call 'students in transition.' Students in transition includes those individuals experiencing anticipated events such as moving off-campus for the first time, transferring into the university or country for one's studies, or commuting to campus. Our institution currently does not have a dedicated resource and outreach office for commuter, transfer, or nontraditional student populations.

The University of Colorado Boulder (CU Boulder) is a Research I university that serves as the flagship of the University of Colorado system and the State of Colorado. In recent years and as a result of declining state funding, the university has initiated a substantial investment in diversifying enrollment from domestic and in-state students. In fall 2018, CU Boulder had an enrollment of 35,528 students comprised of both undergraduate and graduate students (CU Boulder Office of Data Analytics, 2019).

Currently, the university maintains a mandated residency requirement for all incoming first-year students, which requires an accommodation in an on-campus residence hall. The rationale for this mandate has been based on university administrators' beliefs that living in a residence hall during the first year of college increases retention and student success. In this regard, Alexander Astin (1999) stated, "living on campus substantially increases the student's chances of persisting and of aspiring to a graduate or professional degree" (p. 520). Based on initial first-year projections, it was becoming increasingly unlikely that bed-space inventory on campus would be able to accommodate continued enrollment growth of first year and continuing students. In response to these housing demands, the university opened a new 700-bed residence hall in the fall of 2019.

First-year commuter students make the decision to reside off-campus for a variety of reasons including family, financial, or medical accommodation needs. First-year students wishing to live off-campus must complete an exemption process through the CU Boulder Occupancy Management office to be granted permission to secure alternative living options. During the 2018-2019 academic year, 80% of exemptions submitted were approved, resulting in 460 first-year commuter students (CU Boulder Occupancy Management Office, 2019). Moreover, due to rising housing costs both in the City of Boulder and metropolitan Denver coupled with the rising general cost of education, our population of first-year students commuting to school from their family home has been increasing. Starting in summer 2017, a new policy was enacted in which first-year students applying after the housing deadline were not guaranteed housing, which

continues to have the potential to contribute to a meaningful increase in the first-year commuting population.

On average, 72% to 74% of the total CU Boulder student population resides off-campus in any given year (CU Boulder Office of Data Analytics, 2018). Of the entire CU Boulder student population 6,000 students, or 20%, of our student population, on average, resides outside of the City of Boulder city limits and commutes to campus on a daily or weekly basis (Office of Data Analytics, 2016). According to the most recent census data, the incoming 2019 first-year student body was comprised of 7,113 first-year students (CU Boulder Office of Data Analytics, 2019), with 94% of the first-year class residing in on-campus accommodations and 6% commuting from other locations.

Identifying a Need for Further Research

According to Berger and Malaney (2003), "students who do not actively engage with peers in social activities are less likely to be satisfied with all social aspects of campus life" (p. 23). In the past, students exempted from living on campus largely were on their own to discover and use university resources, engage with peers, and learn more about the campus and its programs and services. To address this challenge and to provide dedicated outreach and resources, OCH&NR, launched an initiative called "Commuting Buffs" in the fall of 2015 to provide intentional student engagement, retention, and academic support for first-year commuting students.

Despite these efforts towards the intentional growth of student development and service offerings for the commuter student population, there still exist substantial challenges with respect to the scaling and sustainability of these initiatives. Currently, the largest challenges include peer-level support and mentoring, university touchpoints with

staff, resources, social programming, offices, and academic connections with academic support services and faculty. The inequitable distribution of resources and absence of individualized student attention has been one problematic contributing factor as can be evidenced by university assessments which have shown that the first-year commuter students retain at a lower rate (75.6% versus 88.5%) than their residential peers (CU Boulder Office of Data Analytics, 2018).

In a traditional university model, residence life functions are closely aligned with academic program support and outside the classroom engagement. Thus, one of the primary reasons students found success in the residence halls was due to the infusion of academic resources such as tutoring or academic-minded programming, peer-level support in the form of resident assistants, and introduction to university offices and resources. In an analysis of previous research conducted, Pascarella and Terenzini (2005) found that "living on campus (versus living off-campus or commuting) was the single most consistent within-college determinant of the impact of college" (p. 603).

Purpose of the Study

The problem of practice which was further explored for this action research study related to a better understanding of how the introduction of a peer mentoring program may impact the student perception of, and sense of belonging with, a postsecondary environment with first-year commuter students. CU Boulder has invested considerable resources and energy into the development of programmatic initiatives for the roughly 7,500 students residing on-campus, but at present, the resources for commuter students and other students residing off-campus (whether in the areas adjacent to campus or beyond) have been limited, inconsistent, and at times, absent. By further exploring the

lived experiences of this first-year commuter student population with focus given to how students perceive or develop their sense of belonging and mattering at the university, additional resources and support services can be developed to assist in the successful retention and persistence of not only first-year commuter students but also students from other specific student populations such as those living off-campus in subsequent years as well as post-traditional or transfer students.

Innovation

The innovation which served as the focus of this study was the development of a first-year student success plan comprised of a peer-mentoring program for first-year commuter students. The key components of this peer-mentoring innovation included commuter peer mentors and the commuter student liaison, immersive social experiences for first-year commuter student participants through programming and in-person meetups, and dissemination of first-year commuter focused resources such as information on tutoring, getting involved, and more through a Microsoft Teams virtual community and a weekly newsletter, *The Commuter Compass*. Each of the elements of this innovation is described in further detail below.

Commuter peer mentors. The commuter peer mentors, or CPMs, are the primary focus of this innovation, serving multiple roles in social connection and community building in addition to serving as the chief disseminators of information and resources. For this innovation, CPMs were recruited from the lists of previous first-year commuter students as well as from within existing mentor and student leader groups such as the Journey Leaders, or orientation leaders, from the New Student Welcome & Family Programs office. Each CPM was assigned a "cluster" of students which corresponded

most closely with their own geographic location in an effort to further localize the experience. These clusters were distributed along the Front Range of the Denver metropolitan area in seven unique groupings near suburbs such as Aurora, Golden/Lakewood, Louisville, Longmont, and Boulder. Cluster sizes averaged around 50 students per each of the seven commuter peer mentors. The ultimate goal was to try to get a similar ratio of first-year commuter students per CPM to be similar to the RA to resident ratio, which on average is somewhere between 25-45 residents to an RA.

Although the CPM position is not a paid student leader position, funding was identified to provide each CPMs with an 80 swipe off-campus block meal plan for each semester that they serve as a mentor. CPMs also received other infrequent tangible incentives with previous examples including a CU branded backpack and other on-going incentives as a thank you for volunteering their time to be part of the program. The intent of providing a block meal plan was to give the CPMs something that may be perceived as a value to students residing off campus. Some CPMs also chose to use their block meal plan to take meals with their first-year commuter cluster members although this was not an expectation of their role. On-going evaluation of this compensation mechanism has shown that CPMs have an high level of satisfaction with the off-campus block meal plan.

Commuter peer mentors are asked to commit a minimum of 5 hours a week to their role as a CPM and are encouraged to provide on-going, in-person meet-up activities and engagement opportunities for their assigned commuter cluster (a full CPM position description is in Appendix M). To assist in the facilitation of these planned activities, CPMs are provided an individual programming budget for the fall and spring semesters in addition to events that may be planned for the entire *Commuting Buffs* population such

as commuter appreciation stations co-sponsored with the Environmental Center,
BuffBites lunch events, and other on-going and in person events. Some examples of
individual cluster events hosted by CPMs include sushi night, meetups at local and oncampus coffee houses, and movie nights at local theatres.

Commuter student liaison. Prior to the introduction of the commuter peer mentors, the commuter student liaison (CSL) position was created in Fall 2015 as an hourly, paid student staff position in the Off-Campus Housing & Neighborhood Relations office to provide assistance for commuter specific programming and outreach. One challenge shared by the inaugural position holder was the difficulty of providing personable touchpoints with the sizeable cohort of first-year commuter students. Upon introduction of the CPM role, the CSL position assumed a lead mentor role, assisting the full-time assistant director with administration of the *Commuting Buffs* program and commuter-dedicated programming, and editor of *The Commuter Compass* email newsletter.

Another primary responsibility of the CSL was to assist the assistant director in organizing agendas for the bimonthly CPM team huddles and the semesterly CPM retreat schedules. The CSL also filled in as a mentor for a commuter cluster in instances where a CPM was unable to complete their mentor duties for an entire academic year or in cases where a CPM was temporarily unavailable.

Commuter peer mentor training and retreat. CPMs attended a kickoff training meeting prior to beginning their assigned duties and each mentor also received a CPM facilitation guide to assist in having one on one conversations with each of their cluster members. The facilitation guide covers topical areas sequenced with particular

transitional and developmental tasks as well as the academic calendar. The CPM training provided information about a variety of campus resources, offices, and general engagement strategies. Facilitated training sessions allowed the peer mentors to engage in co-constructed program curriculum development, providing ideas and perspective based on their status as previous first-year commuter students. Topics were also generated during this kickoff training that could then be explored in greater depth during on-going team huddles with the entire CPM team throughout the semester.

During the start of the fall and spring semesters, each CPM was invited to partake in a retreat (an off-site, overnight retreat in the case of spring semester) where semester goals were established and reiterated, programming was planned for the upcoming semester, and check-ins were conducted with each CPM to reflect on the semester, if applicable, and future planning for their individual commuter student clusters. The CPM retreats also provided an intentional and dedicated time for teambuilding and bonding amongst the entire CPM team.

First-year commuter student experiences. Social connection was a vital component of this innovation. Social experiences for first-year commuter students included an immersive all-day orientation opportunity prior to the start of the fall semester to assist first-year commuter students in their transition to the CU Boulder as well as on-going cluster activities such as movie outings and visits to various campus facilities such as the CU Recreation Center. Selected campus partners such as our Career Services office, the Academic Success and Achievement Program, Center for Student Involvement, and Study Abroad staff were invited to present resources, either in-person or passively through other means, on their respective areas on topics such as the strengths

assessment, tutoring and time management skills, utilizing faculty and office hours, and becoming involved on campus in student clubs and organizations.

Microsoft Teams virtual community. Commuter peer mentor interactions with their assigned cluster participants were tracked through email, text messages, and utilization of a virtual community created for the first-year commuter students on Microsoft Teams, a collaboration tool that combines message boards, file sharing, video conferencing, and individual chat capabilities. Microsoft Teams was selected as the CU Boulder Office of Information Technology had recently introduced Teams to the campus community and every student, faculty, and staff member has free access to the entire Office365 suite. While offerings such as Slack may be more well known, it was speculated that the integration with other Microsoft products and cloud-based file sharing made the learning curve of Teams less intimidating and a more user-friendly experience overall as students could log in with their existing university-provided login credentials.

The Commuter Compass Email Newsletter. One of the original components of the Commuting Buffs program that predates this innovation is *The Commuter Compass*, an email newsletter curated by the commuter student liaison and distributed on a weekly basis. The newsletter is created in MailChimp, an email newsletter system, and is distributed to the entire *Commuting Buffs* cohort. Content often includes upcoming campus events, links to academic resources, workshops, and features offices or departments, and a unique peer-authored article based on a personal interest or peer advice from the commuter student liaison or commuter peer mentors.

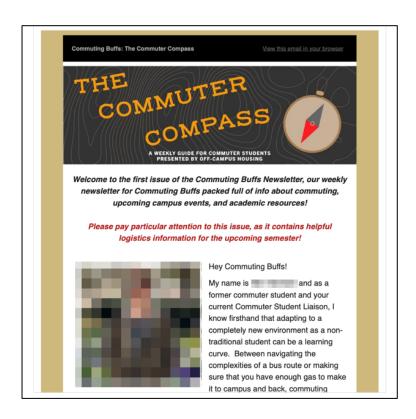


Figure 1. Example of a The Commuter Compass E-Newsletter

While the content, style, and distribution mechanisms have evolved since the effort began in 2016, this has traditionally been one of the primary communication mechanisms between the commuter student liaison, myself, and the first-year commuter students. One challenge of an email newsletter is the one-way style of communication that does not allow for discussion or continued engagement between students which prompted exploration of additional communication channels such as the Microsoft Teams virtual community to allow for on-going, on-demand of content, announcements, and reminders between the weekly distributions of *The Commuter Compass* issues.

Components of the innovation in fostering change. The *Commuting Buffs* program encompassed several innovative engagement strategies to provide support for the first-year commuting students with the largest being the development of a

comprehensive peer mentorship program connecting upper-division commuter peer mentors (CPMs) to first-year commuter students. This mentorship program sought to emulate the resident/resident advisor relationship the commuter students would get if they lived in the residence halls. In future years, first-year commuter students have the opportunity themselves to become CPMs for the next incoming class of students.

The second aspect of this innovation was aimed at improving or supplementing the connection these first-year commuter students have to their peers and the institution. Past efforts to connect this commuting population in person have had limited success due to a lack of ongoing social connection opportunities to expand on the initial efforts offered traditionally at the beginning of each academic year for events such as convocation and orientation programming. With a mixture of in-person meetings, emails, or text messages with each first-year commuter student and their CPM combined with larger, cluster-wide events such as movie outings, lunch or dinner meetups, and more, there was a diversity of social offerings for students to take advantage of and the opportunity for the program to be flexible towards differing student interests.

Theories of change. In order to provide scaffolding for this innovation, design thinking was applied through rapid prototyping and small experiments in order to visualize the tangible and actionable steps of how the innovation could be implemented. With this information, I was better positioned as the change implementer to make modifications and tweaks to the innovation along the way.

An additional theory of change was employed for this innovation was Innovation Configuration Mapping, or ICM (Hall and Hord, 2006). The ICM process can be an efficient way to not only communicate an innovation concept to various stakeholders but

also as a way to heighten the potential that the innovation could be successfully implemented and maintained across an organization. As change processes can be complex and occur often, there can exist a level of confusion over how an innovation might unfold or how those tasked with carrying out the implementation activities can actually carry out the objectives of said project. Hall and Hord share that "a major reason that widespread change often occurs only modestly across a school is that the implementers, change facilitators, and policymakers do not fully understand what the change is or what it will look like when it is implemented in the envisioned way" (2006, p. 111). In an innovation configuration map, such as the one in Figure 1, green indicates the ideal level of change, orange indicates a desirable level of change, and red indicates a limited to unsuccessful level of change.

	1	2	3	4	5
Component 1 Knowledge of General University Resources	The peer mentor is able to identify University resources for the student including support, recreation, and academic resources. Peer mentor is able to conduct a referral to University support offices for additional resources or information, as needed, and conducts followup with their mentees to ensure they received the appropriate information required	The peer mentor shares information about University resources with their mentees on a regular basis and times this information based on potential "activation" periods such as finals (i.e.: tutoring support resources)	The peer mentor has a limited knowledge of University resources. The peer mentor makes resources available to their mentees, but does not tailor the information to the student or proactively provide this information to their mentees	The peer mentor has a limited knowledge of University resources and only provides information reactively but does not provide follow-up with the student.	The peer mentor has no knowledge of University resources or provides inaccurate or inappropriate referrals.
Component 2 Academic Support and Retention	The peer mentor conducts regular check-ins with their mentees (at least 2 times a month) and ensures that they are aware of who their academic advisor is and that they are registered for courses on time. The PM also provides tutoring resources and referrals to ASAP tutoring center as needed	The peer mentor conducts regular check-ins with their mentees (1 time per month) and provides passive tutoring or academic resource information (such as a handout). The PM is aware of ASAP tutoring and provides this information occasionally to mentees	The peer mentor only provides information to mentees when they are contacted with questions or concerns from their mentees. The PM only checks in with mentees on a semi-regular basis	The peer mentor has irregular contact with mentees related to academic support. Knowledge of tutoring and advising resources is limited	The peer mentor does not maintain contact with mentees and is unaware of academic and tutoring resources
Component 3 Social and Civic Engagement	The peer mentor actively promotes upcoming events, both on campus and in local communities, to their mentees. The PM explains and connects mentees with opportunities for organizational and community involvement (i.e.: service learning) and tailors these recommendations to the individual mentee	The peer mentor makes active suggestions for upcoming events and makes recommendations for organizational involvement. The PM uses limited interaction data to inform their recommendations to mentees	The peer mentor makes broad, generalized announcements about upcoming events and actively promotes resources such as the Center for Student Involvement and Volunteer Resource Center as well as opportunities occurring off campus	The peer mentor has a limited understanding of social opportunities happening on campus and only promotes activities that are of interest to them. The PM does not have an understanding of resources that extend beyond campus	The peer mentor does not promote any social or civic engagement opportunities to their mentees

Figure 2. Innovation configuration map for the commuter peer mentor innovation

In reflecting on challenges that could have been encountered in implementing this innovation, one way I sought to prevent any implementation burn-out from occurring and to later assist in scaling the innovation was to invest considerable resources (both tangible and intangible) into Rogers' (2010) concept of communication channels. Rogers describes these channels as the primary means for communicating an innovation between individuals. In order to more effectively communicate the details of an innovation and the

adoption of said innovation, Rogers postulates that a communication channel is necessary in order to have the best chance at clearly communicating the details and nuances of the innovation (Rogers, as cited in Perry, 2010). Establishing effective communication channels mean that the work and tasks of communicating the change process can be shifted solely from one change facilitator to many other change implementation agents, thereby distributing the workload out further.

In the case of my innovation, this change communication was facilitated through email newsletters that are already distributed across our organization to staff and faculty, as well as through presenting at central staff/organization meetings and mini conferences that occurred on campus throughout the academic year. Additionally, I was also able to take advantage of opportunities to share updates of my efforts with the first-year commuter students and their families directly through in-person new student welcome sessions at the beginning of the year and on-going opportunities such as family weekend and through direct email outreach. My hope with these varied efforts was to get to a place of critical mass, or a place "when enough individuals have adopted the innovation that the innovation can be self-sustaining" (Perry, p. 66).

Earlier Cycles of Action Research

One of the reasons action research is so popular and adaptable within educational environments is because of the multiple cycles of action research inquiry. As Mertler (2017) explains, the process of action research is comprised of "four stages: planning, acting, developing and reflecting" (p. 37). While the action research process is intended to be cyclical, each action research project may differ in scope and complexity.

Therefore, it is up to the researcher to devise how they will sequence and plan each of

their action research cycles and how they intend to pivot or modify their plans as a result of their findings with the goal of iterating on each subsequent cycle from the understandings of the preceding cycle of inquiry. In the following section, I will briefly outline what modifications I made between my cycles of inquiry.

Key takeaways from previous cycles of action research. For each respective action research cycle, I was able to extrapolate key findings that were then employed in subsequent cycles. The findings for each cycle are outlined briefly below:

Cycle 0. Further exploration of topic and research was substantiated by university staff represented from the Office of the Registrar, Office of Admissions, and the Office of Occupancy Management. Key takeaways included a perception by university staff that first-year commuter students were a subpopulation that was not well understood or known of at the campus level compared to the narrative of on-campus first-year students residing in the residence halls. Depending on the staff member's exposure to the population, there were varying levels of knowledge and experiences working with first-year commuter students.

Cycle 1. Key takeaways were that larger group programming and resourcing was underutilized. Students interviewed indicated a desire for more intimate or 1:1 interactions.

Following the Spring 2018 commuter peer mentor (CPM) pilot, CPMs were surveyed to better understand their perceptions of their CPM role, their workload and responsibilities, and the compensation mechanisms. The feedback from all four of the CPMs was that they did not wish for the position to be a paid, hourly student assistant position and that they enjoyed the flexibility to serve in a capacity that allowed them to

contribute to the university community and assist their peers while also developing valuable leadership skills. One CPM commented, "I am excited to be part of this program because I heard a lot as a freshman that "oh your college experience must be SO different from everyone else" or the idea that I wasn't able to find community here."

Cycle 2. Key takeaways included the role of siblings as informants and that students appreciated having a CPM but that they were still not actively utilizing their CPMs on an on-going basis. Further clarification of what a CPM can assist first-year commuter students with is needed as well as additional marketing and communication of the Commuting Buffs program at large.

As I continued to better understand my problem of practice throughout the previously discussed cycles of action research, my research questions also continued to evolve to match my understanding of first-year commuter students. Additionally, as action research often builds upon previous research, I reviewed similar studies that had been conducted with a focus on commuter students and their sense of belonging or connection. The result of these efforts was the creation of my primary research question and five secondary research questions, presented below, which further examined specific areas within my problem of practice.

Modifications made between cycles of inquiry. The quantitative instruments employed throughout cycle 1 were directly influenced by information collected throughout cycle 0 including potential "stress points", resource needs, or perceived challenges culled from the interviews conducted with university faculty and staff at that time. These instruments included a brief, 7-question survey administered online through Qualtrics as well as a focus group session with invited participants from the *Commuting*

Buffs first-year student group (see questions for both the Qualtrics survey as well as the focus group in Appendices H, I). Invitations for these opportunities were distributed through an existing email listsery utilized to communicate with students in the Commuting Buffs population.

In order to further explore responses provided to the Qualtrics survey for cycle 1, a semi-structured focus group sought to better understand participants' lived experiences through direct, in-person interviewing. It was a desire to also explore organic patterns and themes that emerged throughout the focus group setting (Jones, Torres, & Arminio, 2006). Responses from the focus group were recorded to an audio file for later review and transcription.

Further, within cycle 1 I developed the commuter peer mentor (or CPM) position (a full CPM position description is in Appendix M), initially called the off-campus peer mentor, and recruited the first group of CPMs. Based on available resources during cycle 1, I was able to on-board four CPMs and task a current position, the commuter student liaison, to also serve as a CPM in their role. While the original intention was to be inclusive of students living both in Boulder as well as those in-commuting into Boulder with calling the role an "off-campus peer mentor", the title provided some initial confusion with students and campus stakeholders alike as the term "off-campus" is often seen by campus affiliates as individuals living predominantly within the City of Boulder. As a result of the feedback received, the position title was modified during cycle 3. It is also hoped that with future potential scaling of off-campus peer mentoring opportunities, a similar naming convention can be followed (e.g. transfer peer mentor, or TPM).

For cycle 3, I assigned peer mentor clusters based on geographic location. The goal of this structure was to make it easier for commuter peer mentors to program activity closer to students' residential addresses. This idea was gleamed from preliminary focus groups conducted within cycle 2 and participant feedback which showed a lack of engagement with *Commuting Buffs* programming that had, at that time, largely been hosted exclusively on the CU Boulder campus.

Research Questions

This study was connected to assess the overall question, "Does a peer mentoring program impact a perception of social connection(s) and a sense of belonging with the first-year commuter student experience at the University of Colorado Boulder?" The study was reinforced and guided by the following research questions, of which questions 1-3 were inspired by Bloomquist (2014):

- 1. What are the characteristics of first-year commuter students at the University of Colorado Boulder?
- 2. What are the most important self-identified needs of the first-year commuter student population at the University of Colorado Boulder?
- 3. To what degree do incoming first-year commuter students feel that they matter to other groups on the University of Colorado Boulder campus (to staff, faculty, and to their peers)?
- 4. How does the student perceive the importance of, and their satisfaction with the information they have received from their commuter peer mentor on various issues (e.g. getting involved, transportation options, academic support)?

5. How do first-year commuter students describe the impact the commuter peer mentoring program had on their experiences with belonging and social connection?

CHAPTER 2

THEORETICAL PERSPECTIVE AND RESEARCH GUIDING THE PROJECT

In Chapter 1, I provided a broad overview and perspective on the purpose of this action research study. The local and situated context was described in greater detail, as well as my positionality within this topic of inquiry. In this chapter, I present theoretical perspectives including Schlossberg's transition theory, Tinto's theory of student integration and Astin's theory of student involvement to help anchor and frame this study and problem of practice. Second, I present a general overview of the previous research conducted on students' sense of belonging and relevant literature. Third, I will present a review of relevant literature specifically related to commuter students and their perception or development of a sense of belonging. Although there is considerable work related to the transitions and sense of belonging for traditional residential students on college campuses, there is much less research that focuses on undergraduate commuter students and their sense of belonging and the impact that this belonging (or lack of) may have on commuter student retention and student success, both inside and outside of the classroom. Finally, implications and considerations related to the aforementioned theoretical perspectives and supporting scholarship are shared and explored.

Theoretical Perspectives

Although many student development theories exist that could have been utilized to frame this action research project, several specific theoretical perspectives have been selected as the primary perspectives guiding this research. These theories, including Schlossberg's transition theory, Tinto's theory of student integration, and Astin's theory of student involvement provide explanations about the numerous opportunities and

challenges that students might encounter and explore as they begin their undergraduate studies and start to make meaning of their role and participation in their larger institutional community. These theoretical perspectives also help to provide additional insight into how an innovation such as a peer-mentoring program, can be designed, structured, and implemented, to support the academic and social needs of these unique student populations.

Schlossberg's transition theory. Every student who has entered into a higher education environment has undoubtedly undergone some form of transition, regardless of whether they were considered traditional residential students or could be identified as commuter students. As students seek to make meaning of their unfamiliar environment and the stimuli in it, they may find themselves experiencing a series of new feelings, needs, and beliefs, through which they have to work to integrate these new perceptions with their current understanding. In her transition theory (illustrated in Appendix A), Schlossberg (1989) describes the relevance of environment and timing and how these factors have influenced the psychosocial development of individuals throughout various points in their lives. Schlossberg notes these transitions affect individuals differently depending on whether they are anticipated or unanticipated, and whether they are ongoing or one-time occurrences. Later updates to this transition theory suggest that the importance of the transition on one's daily life is in many ways more important than the collective transition itself (Schlossberg et al., 1995).

The theory is comprised of the idea that young adults often experience various transitions during these years of crucial educational development. Schlossberg defines these transitions as nonevents, anticipated events, and unanticipated events that have

some bearing or impact on one's life, identity, responsibilities, or perspective (Chickering & Schlossberg, 1995). Further, Schlossberg's transition theory discusses the relevance of environment and timing and how these factors can weigh heavily on the psychosocial development of an individual throughout various points in their lives (Schlossberg et al., 1989).

These transitions can differ greatly between individuals, even in the case of individuals experiencing and perceiving the same event in two separate ways. For example, for some students the act of attending college may be an anticipated event whereas for a first-generation college student or students with varied socioeconomic status determining if they may live on or off-campus may serve as an unanticipated event due to a variety of on-going factors, considerations, and concerns. Certain things, such as the anxiety one might feel about navigating a new campus might serve as nonevents if a student anticipates having difficulty but does not encounter such a challenge. In these situations, the anticipation of such transitions and the weight they can carry on the well-being and emotions of the individual experiencing such a situation, should be evaluated when planning for, or supporting transition processes (Schlossberg et al., 1995).

This theoretical perspective was chosen as it helps to articulate the processes in which students and young adults often undergo as they move into, through, and out of their undergraduate and collegiate experiences. Throughout these phases of transitions, students likely experience a range of emotions and needs which can often be overlooked by administrators or the students themselves, and as such may not be as thoughtfully planned for, or not anticipated as part of formalized experiences such as onboarding, training, or orientation opportunities. As my action research seeks to better understand

how commuter students can best be served by their transition to university life as well as how they develop or perceive a sense of belonging on campus, Schlossberg's transition theory provides a robust theoretical understanding and accompanying methods by which to conceptualize the process of acclimation.

Building on Schlossberg's Transition Theory

In addition to providing a robust and comprehensive framework and theoretical understanding for transitions as they pertain to young adults and students in general, Schlossberg's transition theory is truly impactful when applied to specific transition situations. For example, when reviewing the "4S's" of situation, self, support, and strategies (outlined in Appendix B), this action research study has the potential to build on various transition scenarios that could be encountered again and again by the institution, allowing the organization to not only be more proactively aligned to student needs from the start but also likely assisting in retaining the same students by better serving their needs in a sustained fashion through persistence to their degree attainment.

Further, Schlossberg's transition theory was connected to the innovation for this action research by seeking to: 1. Help first-year commuter students make further meaning of the transition they were going through; 2. Help in the appraisal process that is often assigned with how individuals view transition periods by perceiving them either as negative, positive, or indifferent; 3. Evaluate what resources might be needed to assist in the acclimation period(s) the student may experience (Evans, 2010). These connections were established front-facing with the first-year commuter students directly through dissemination of relevant and timely resources sequenced with key developmental stages like orientating to the university, finding their classes, preparing for midterms, and more.

Additionally, each commuter peer mentor was provided with a facilitation and engagement guide that provided learning outcomes and engagement strategies sequenced with critical transitional times within the semester calendar.

By sequencing key developmental tasks with the semester programming and communication plan with the commuter peer mentors, I was able to plan for anticipated events such as students need to locate their classrooms, finding parking, identifying places to eat, and planning for support throughout the semester. Further, I often discussed with the commuter peer mentors how to create an environment that was inclusive and welcoming for first-year commuter students. Commuter peer mentors did this through personal featured articles in the weekly newsletter, *The Commuter Compass*, as well as peppering the Microsoft Teams virtual community with personal notes and messages of inspiration around higher stress points throughout the semester.

Tinto's theory of student integration. The concept of student integration within the academic and social fabric of a higher education institution has often been studied within four-year institutions and with traditional undergraduate students who reside in institutionally owned and provided housing. The capabilities for university staff to provide outreach, connection, and meaning-building activities and experiences in these settings has been well documented through literature, assessment reports, and even the adoption of field-specific standards such as the Council for the Advancement of Standards in Higher Education (Sandeen & Barr, 2006).

Tinto's (1993) student integration framework and model presents a way for practitioners to understand students' integration pathways as they navigate the institution. Tinto proposes that students subscribe to and deepen their connection to institutions as a

result of their academic and co-curricular activities, or social life related to their membership as part of that academic community. Thus, students can strengthen their connections to their universities through engagement in activities such as student clubs, Greek life, or intramurals, or even through connections to faculty members. Tinto suggests that interactions with various campus stakeholders, whether it be staff, faculty, or peers, can have positive effects on overall student retention and can greatly assist in the acclimation and socialization of a student to their institution. Further, by having increased interactions between the various players within an institutional setting, a student is more likely to have increased engagement and affinity with their institution overall (Pascarella and Terenzini, 1983).

Tinto's theory of social integration also provides initial understanding for why some students chose to depart their institutional communities as a result of limited engagement and integration opportunities. Tinto suggests students' primary reasons for departing from an institution were not simply due to academic dismissal or dropout related to other academic challenges. Rather, Tinto claims departures are often due to students deciding to leave an institutional community because they faced barriers with respect to integrating into the university community.

In terms of my innovation planning, Tinto's theory allowed me to conceptualize the importance of peer group interactions and subsequent social integration. By finding ways to brand and customize programming, resources, social and peer connections to first-year commuter students, I sought to foster an environment that allowed for students to find stronger institutional commitment as a Buff and affinity as a commuter, or *Commuting Buff*.

Astin's theory of student involvement. Astin's (1984) theory of student involvement postulates the idea that in order for a student to become involved in the social fabric of the campus, one must "devote physical and psychological energy" into their involvement (Astin, p. 36). A strongly held stereotype on many college campuses is that because students commute, they either have no time or no interest in being involved in activities and engagements beyond when they need to be on campus for academic commitments or that they have conflicting demands on their time (National Resource Center for The First-Year Experience and Students in Transition [NRC], 2001).

As commuter students' accessibility to campus events may be more limited than that of their on-campus peers, it is important to evaluate and understand what barriers, if any, exist for first-year commuter students and if the amount of investment needed from both the student and has any sort of impact on a student's campus involvement. Astin himself states that "simply by eating, sleeping, and spending their waking hours on the college campus, residential students have a better chance than do commuter students of developing a strong identification and attachment to undergraduate life" (1999, p. 518).

A long-held stereotype of commuter students is that they are not interested in attending campus events and that they simply come to campus for classes and leave to return home immediately following. Similar to the common statement that actions speak louder than words, Astin (1999) asserts the importance of behavior in that "it is not so much what the individual thinks or feels, but what the individual does, how he or she behaves, that defines and identifies involvement" (p. 518). By using Astin's theory of student involvement, student affairs professionals along with faculty can conceptualize

how to design learning environments that are more inclusive, accessible, and meaningful.

Characteristics, Needs, and Concerns of Commuter Students and Their Sense of Belonging

Characteristics of commuter student populations. To analyze the unique experiences of first-year commuter students, it is important to first define and position commuter students within the university environment and how their experience may vary from their residential peers. Moreover, given the higher educational setting, it is essential to consider what activities or variables contribute to a "traditional" post-secondary experience. Depending upon context and setting, a traditional student can be characterized in several diverse ways. Levin (2007), viewed traditional students as those who:

- "continued their education from high school to college or university, thus their age at college entry is seventeen, eighteen, or nineteen" (p. 6).
- attained "high school completion, second or next generation of postsecondary education attendance within a family, and English as a first language" (p. 6).
- "live on campus, are from middle-class backgrounds, and have clear degree aspirations [as compared] to those who are commuter students" (p. 6).

Chickering (1974) defines commuter students as those students living off-campus who have chosen to live with family and commute to campus on a daily basis or in some situations, have obtained their own off-campus housing in an apartment or house. Jacoby (1989) also presents a similar definition stating that a commuter student is any student who does not live in accommodation owned by the institution. However, as commuting

and housing trends and preferences have shifted over time, it may also be reasonable to consider how the needs of off-campus students living within proximity to campus may differ from those requiring the use of mass transit or a personal vehicle to in-commute, or travel *into* the town, city, or region where the institution may be located. As Jacoby (2000) shares, "no matter where commuter students live or what type of institution they attend, the fact that they commute to a college profoundly influences the nature of their educational experience" (p. 6).

To this end, this action research evaluated demographic and geographic information to see how distance may have impacted the planned innovation. One change made from earlier cycles of inquiry based on the literature and research review was to distribute first-year commuter students into geographically-assigned commuter clusters with commuter peer mentors who were also living in or commuting from roughly the same areas to assist with in-community engagement, discussion topics, and potential carpool or transit-riding opportunities together.

Commuter student self-efficacy. In a study of commuter student self-efficacy, Dugan, Garland, Jacoby, and Gasiorski (2008) provided perspective about how commuter students might be viewed based on their levels of self-dependency on others. In their research, Dugan et al. introduced the concept of the dependent commuter student as an individual who lives "in the home of a parent, guardian, or other relative (pgs. 282). This provides some demarcation between commuter students who are independent of family or other social support structures, at least with respect to their housing needs, and who reside in private houses or apartment units.

In their study, Dugan et al. (2008) discovered that of those commuter students who identified as independent commuters, there was a "greater sense of leadership efficacy than their dependent commuter peers" (p. 296). Additionally, they discovered that "sociocultural conversations had the most influence in shaping students' sense of self-efficacy for leadership" (p. 298). This is an important consideration for practitioners to consider, specifically how topics of values, identity, multiculturalism, and sociopolitical issues are being integrated into programs, initiatives, and resources.

A final key predictor from the study was how commuter students' engagement with formal leadership opportunities that were infrequent, short, or one-time in nature were "more predictive of leadership efficacy than long-duration programs (e.g., academic major or minor, multi-semester programs, certification programs)" (Dugan et al., 2008, p. 300). This insight has important bearing on programs such as *Commuting Buffs* as the intent is to provide valuable in-group community while also empowering program participants to establish sustainable, long term connections to student groups, academic support mechanisms, and one another. Evaluation of shorter duration and one-time programs such as the commuter student welcome day, although sometimes more limited in findings, allowed me to more readily pivot in subsequent cycles of inquiry.

In the case of my innovation, this is achieved through an in-tact cohort of first-year commuters and a mixture of on-going, consistent programming while also promoting one-off, occasional programs through key institutional partners such as the New Student Welcome experience, programs through the Center for Student Involvement such as the Be Involved Fair, and more. Through engagement in these infrequent social

and academic engagements, it is hoped that students can build social capital and interpersonal skills for their continued success at the institution and beyond.

Evaluating the needs and concerns of commuter students. Like their residential peers within the institution, commuter students most likely will have specific, unique needs at various times during their transition into the institution and throughout various acclimation periods. In fact, with an estimated 86% of postsecondary students potentially being classified as commuter students, the diversity and variability in these needs is likely quite substantial (Jacoby, 2000). Nevertheless, these needs and concerns less frequently are researched or described in literature exclusive of a residential experience due to many institutions putting extreme focus and resource allocations on the residential experience.

As many on-campus residential environments have been structured around supporting the growth and development of students in and outside of the classroom, co-curricular engagement rates often are far higher with students residing in residential housing compared to students commuting from home or living in independent living options (Jacoby, 2000). In a traditional university model, residence life functions are often closely aligned with academic partnerships that can allow for opportunity for engagement outside of the classroom such as in-hall tutoring assistance and at some institutions, live-in faculty.

Another common collaboration and program opportunity at many institutions are living-learning communities. Frazier and Eighmy (2012) state that "learning communities also provide an opportunity for academic affairs and student affairs personnel to work together to create a holistic learning experience for students" (p. 12), and that "students

involved in learning communities take a more active role in their learning and have shown an increase in their residence hall and university involvement" (p. 14).

Due to their living situation, commuter students often are physically separated from campus *and* at times, from campus activities because of their living situations. Thus, they are less likely to have on-going interactions with faculty and peers and have tended to be more withdrawn in collaborative learning environments (Curley, 2003). This has presented challenges in finding organic opportunities to connect with peers as well as institution staff and faculty (Frazier & Eighmy, 2012).

The lack of proactive connections has led, at least in an academic sense, to greater commuter student needs for proactive resources such as tutoring and connecting with faculty in ways that may not be as easily accessible as their residential peers, particularly when those resources are offered conveniently in the same location that the student resides throughout the academic year (Curley, 2003).

Sense of belonging, marginality, and mattering. It is important for individuals to feel like they are part of a group to continue to be engaged with the said group (Bollen & Hoyle, 1990). Sense of belonging has become increasingly important as university staff members have worked to identify barriers to student success and retention and improve the overall student experience. But what constitutes a sense of belonging? Cheng (2004) explained that at a minimum, students needed to feel a fit or connection with an institution or community, be unrestrained in expressing who they were, to feel as though there was a perception of being cared about, supported more holistically, and the existence of mutual respect. Cheng also provided considerations for supporting ethnic and cultural groups and the importance of creating nurturing environments that worked to

proactively respond to and address feelings of marginalization. By helping students feel like they mattered to the overall community, there was a much higher chance students perceived they had a sense of belonging and positionality within a community or institution.

Despite being somewhat nebulous, the concept of a sense of belonging has been defined from a cognitive and an affective perspective. Bollen and Hoyle (1990) concluded:

At the cognitive level, judgments of belonging include accumulated information about experiences with the group as a whole and with other group members. At the affective level, judgments of belonging include feelings that reflect the individual's appraisal of their experiences with the group and group membership (pp. 482-483).

Based on Bollen and Hoyle's research, it appears that the sense of belonging is connected to students' academic and co-curricular successes *and* to their emotional and mental wellbeing. This notion is also supported by Pittman & Richmond (2008) who found that individuals who do not have a sense of pride in their own educational attainment or their institution tend to experience higher levels of depression and social isolation and increased levels of stress.

Significance and Context of Action Research Focus

Significance in professional context. In a review of higher education studies, Pascarella and Terenzini (2005) determined that:

Living on campus (versus living off-campus or commuting) was the single most consistent within-college determinant of the impact of college. Net of important background traits and other confounding influences, living on campus had statistically significant, positive impacts on increases in aesthetic, cultural, and intellectual values; liberalization of social, political, and religious values and attitudes; development of more positive self-concepts; intellectual orientation, autonomy, and independence; tolerance, empathy, and ability to relate to others' and the use of principled reasoning to judge moral issues (p. 603).

The focus and benefits of the residential experience and specifically the first-year residential experience has long been documented. For the focus of my action research study, I examined and conducted a further inquiry into the needs and experiences of first-year commuter students on my campus. I have found in my professional work that this unique student population often encounters barriers, either institutionally or otherwise, in navigating their transition into the university environment as well as throughout their time as a member of the institutional community.

In addition to further seeking to understand these students' experiences, my study also sought to:

- Understand what resources or services the University of Colorado Boulder can provide to best accommodate, orient, and retain members of this student population
- Identify common themes, patterns, and shared experiences to co-construct
 what institutional barriers exist for first-year commuter and potentially, the
 broader off-campus students at the University of Colorado Boulder

 Assess how and to what degree a peer mentoring initiative impacts firstyear commuter student's sense of belonging and social connection with their institutional environment

Significance in the broader and contemporary context. The challenges faced by first-year commuter students at the University of Colorado Boulder are not atypical. Many students may make a decision to commute to campus during their first year due to financial considerations, a similar trend seen with upper-division off-campus students commuting to campus in later years of postsecondary study due to the prohibitive costs of housing in the areas closest to campus. Despite a gradual increase in first-year commuter students seeking on-campus exemption and commuting their first year, research surrounding this area of study is still limited and largely undocumented. It is the hope of this action research study to further efforts to explore student narratives, inform future direction, and to share implications to professional practice.

CHAPTER 3

METHOD

This chapter will explore the methods and procedure that were employed for this action research study of first-year commuter students and the accompanying innovation of a peer mentoring program. The chapter is broken into the following sections: setting, role of the researcher, participants, research design, instruments, procedure, mixed methods research, data analysis, and a summary.

Setting

This study took place at the University of Colorado Boulder, a Research I institution located in Boulder, Colorado. CU Boulder is primarily a residential campus for first-year students, housing up to 7,500 students within the on-campus residence halls. In recent years, the majority of students living in the residence halls have shifted considerably to be almost exclusively first-year students, due to a rapid and recent growth in the incoming first-year population and a university residency requirement. On average, about 375 to 400 first-year students are exempted from this residency requirement which states that all first-year students at CU Boulder must reside in institutionally owned and managed housing. Although reasons for student exemptions vary, these students traditionally live with their families who most often reside within the on-campus housing exemption threshold of a 30-mile radius and commute to campus daily either through personal transport or by utilizing regional transportation options such as the bus.

In Fall 2015, Off-Campus Housing & Neighborhood Relations (OCH&NR) launched an initiative called "Commuting Buffs" to provide intentional student engagement, retention, and academic support for first-year commuting students. The

program is currently overseen by my role as the Assistant Director and one commuter student liaison, who was added to the office staff in the Fall of 2015.

Role of the Researcher

In this action research study, my role was that of a researcher, but also at times, a facilitator as well as the chief assessor of the overall program. For the past four years, I have served as the lead staff person on our campus administering student support programs for commuter and transfer students. These programmatic efforts range from resource sharing activities to community-building opportunities, and more passive communication mediums such as electronic newsletters curated by student staff employed in my office.

As part of the lead-up to the study, I worked with colleagues to continue the development of a commuter peer mentoring program for the first-year commuter student population and to lay the foundation for immersive social programming to be primarily facilitated by commuter peer mentors. Additionally, I created a facilitation guide for the commuter peer mentors and provided training and additional materials to support the ongoing interactions between the mentors and their assigned student clusters. As the action researcher for this study, I collected data for the study, including raw data sets such as occupancy and retention information for previous commuter cohorts for further analysis from the Institutional Research office at the institution. I solicited the commuter peer mentors for regular feedback regarding their outreach efforts, and towards the middle to end of the action research/innovation implementation cycle, I conducted a survey with the student participants that sought to better understand student participant's

satisfaction of their relationship with their commuter peer mentor as well as their feelings of connection and sense of belonging on campus.

In addition to participant and peer mentor feedback, I kept a researcher journal that contained research notes from the study outlining preliminary trends, patterns, or themes as they emerged throughout the duration of the study. These notes contained detailed information on each participant interview including a detailed description of the study participant, the flow and processing of each interview session and finally, the time, date, and location of the interview (Jones, Torres, & Arminio, 2006). Following these data collection efforts, I thoroughly reviewed and reflected upon all of the one on one interview transcriptions and research journal notes kept throughout the study to gather a more comprehensive understanding of what phenomenon exists, if any. During this time and also during a secondary transcription reading, initial thoughts or questions were recorded in the researcher journal so that they could be reviewed later.

Participants

This study was comprised of a primary participant population: first-year commuter students exempted from living in on-campus accommodations, but a secondary population who were also part of the study was the previously discussed commuter peer mentors (CPMs). I invited all 460 first-year students who were participating in the *Commuting Buffs* program to participate in my research through an email invitation and Microsoft Teams messages (copies of the email invitation and reminder email are included in Appendix E). All first-year commuter students are automatically enrolled in the *Commuting Buffs* program after their on-campus housing exemption has been approved and this list of students is shared with me directly by our Occupancy

Management office on a weekly basis through automatic reporting. Participants were new students to the institution, having begun at the institution during the fall 2019 academic semester. During the 2019 academic year, 72.5% of first-year commuter students reported living with a parent or guardian or being a dependent commuter, 22.5% reported living on their own, or being an independent commuter (living in a private apartment or home), and 5.0% reported living with another relative (Office of Occupancy Management, 2019). Of the 460 first-year students, 61.4% commuted from within a 1-10 mile radius, 28.0% commuted from a 11-19 mile radius, and 10.6% commuted from a 30-45 mile radius.

To obtain as broad a perspective as possible, a convenient sample was obtained for the first-year commuter student population and all students were asked for their interest in participating in my research and were provided informed consent information. Informed consent forms (Appendix F) were utilized that contained information about the study, procedures to use in the study, benefits, and risks of participation, contact information for the researcher, and information on participant incentives for study participation. Participants who volunteered to be interviewed for the study received a meal swipe incentive to one of the on-campus dining facilities. Ages for participants were anticipated to be in a similar range with participants in the commuting population tending to be more traditionally aged, ranging between 18 and 20 years of age with the average age being 18.

It was envisioned that this sample would possess characteristics which represented a diverse sample of academic colleges, commuting originations and mode (i.e.: bus, car, bike, etc.), and potential reasons for commuting during their first year at

the university, amongst other characteristics, identities, and experiences. Participants were also invited to complete a survey at the end of the Fall 2019 semester which was followed up by a series of focus groups and individual interviews to further explore concerns or opportunities which emerge from the quantitative data collected.

Of the 460 first-year commuter students, 42 completed the survey and seven agreed to participate in an interview (See Table 1 for further demographics).

Table 1
First-Year Commuter Student Interview Participants

Name	Gender	Race/Ethnicity	Age	Average	Living
(Pseudonyms)	Identity			Commute	Situation
				Time	
Andrea	Female	Asian	18	30-60 mins	With family
		American			
Dan	Male	Asian	18	20-30 mins	With family
		American			
Isabella	Female	Hispanic	19	60 or more	With family
		_		mins	
Thomas	Male	Caucasian	19	20-30 mins	Independent
Tory	Male	Caucasian	19	10-20 mins	With family
Samantha	Female	Caucasian	18	30-60 mins	With family
Susan	Female	Caucasian	20	10-20 mins	Independent

Addressing potential challenges of defining participant group. One initial challenge of this action research was defining the student population that serves as the primary participant group. This definition challenge often presents itself when attempting to define or classify which students would be defined as "commuter" versus "off-campus" students and how the needs of first-year students residing in the areas adjacent to campus may have varied needs from those first-year students commuting sizeable distances. To mitigate this particular challenge, I employed a broad classification and definition used by Jacoby (1989) for commuter students that classifies a first-year

commuter student as any first-year student who does not live in university-owned or managed housing accommodation. This definition takes into account the diversity of our first-year commuter students including those living within the City of Boulder and those residing and commuting from the larger Denver metropolitan area.

Commuter peer mentors. Commuter peer mentors, or CPMs, are seasoned, upper-division students who were first-year commuters during their time at the institution. Each CPM was tasked with providing support to a cluster of first-year students comprised of an average of 50 students which is dependent on the total number of CPMs in a given year. CPMs were recruited through email solicitation and word of mouth to previous *Commuting Buffs* cohorts and each CPM candidate was interviewed by the Assistant Director and commuter student liaison in the Off-Campus Housing & Neighborhood Relations office. CPMs were not compensated hourly for the estimated five hours of work they completed each week, but they did receive an 80 block off-campus meal plan for each semester they worked in addition to a variety of other tangible items and valuable leadership and facilitation skill-building opportunities.

CPMs were asked to utilize Microsoft Teams to assist in tracking intentional oneon-one and group conversations between CPMs and their assigned commuter clusters.

This app was piloted with the CPMs in order to more easily identify which students may need direct follow-up and to assist in the collection of qualitative data on interactions the CPM was having individually with each first-year commuter student. Each CPM was provided a facilitation schedule that was sequenced with key transition time frames throughout the semester with topical areas such as adjusting to college life, navigating campus, and academic readiness in advance of midterms.

Although the first-year commuter students were the primary participants in this research study, the CPMs contributed actively to the continued development of this action research and data collection through their weekly efforts and observations which contributed to the data collection efforts in the primary form of journaling and documenting related activities through the Microsoft Teams app and biweekly CPM Team Huddles scheduled with the entire CPM team (copy of sample reflection questions included in Appendix K). Each CPM was asked to sign a consent form (Appendix G) to indicate that they were comfortable with data from their role being incorporated into this research study.

Research Design

As the purpose of this study is to better understand the experiences of the study participants, I explored my research questions with a phenomenological approach. Phenomenology serves as a complementary approach as it "questions the structure and essence of lived experiences" (Rossman & Rallis, 2017, p. 6). As this study was most interested in understanding how participants view their relationship and affinity to their institutional community, a phenomenological approach and method helped guide this action research and allowed me as the researcher to further refine the study and questions as it progressed.

One example of this was through semi-structured interviewing and allowing the responses of the participants to guide follow-up questions and to allow me to dig deeper where most appropriate. Additionally, a constructivist approach was inherently employed through various stages of the data collection through the co-construction of knowledge between the researcher and the study participants through means such as inviting

participants to bring artifacts to their interview session to further describe or represent their experiences as a first-semester commuter student at the university. Constructivism allows the researcher to transform information and knowledge through the construction and exploration of experiences, and ideas (Crotty, 1998). This knowledge and meaning generation allow the researcher to explore the experiences of participants as well as their ideas on their environments and interactions within these environments.

Data Collection Characteristics. To complement a phenomenological approach, this study employed an explanatory mixed methods design and provided the opportunity to triangulate data (Mertler, 2017). I began with a quantitative assessment which was administered through Qualtrics to get a general understanding of current student demographics, self-identified characteristics, and satisfaction with their experience (see survey in Appendix H). Following this data collection and analysis, I utilized the understanding(s) from the quantitative portion of my action research such as how students got to campus each day and their familiarity with the commuter peer mentoring program to inform the creation of an interview guide for my first-year commuter student focus group and to refine my focus group questions (see questions in Appendix I). Although the quantitative methods of this study were prioritized in order to inform the design of the qualitative approach for this study, the focus on participant input to inform the direction of the study and to most accurately capture the lived experiences of commuter students to learn more about their perceptions and sense of belonging was deemed essential to my innovation implementation (a data collection inventory is contained in Table 2). This lived experience further served as an important foundation for the overall study findings and is differentiated from quantitative research in that it can help the researcher to pan the natural setting organically through the interview process, ask follow-up questions as needed, and most accurately capture first-hand the phenomenon of engagement and involvement on the participant's experiences (Creswell, 2014).

Table 2

Data Collection Inventory

Data Source	Purpose of Data Collection	Related Research Question
Existing Data Sources	To help situate the PoP within the current setting and context with participants	 RQ1 (commuter student characteristics) RQ2 (Self-identified needs)
Demographic Survey (Quant)	To obtain a better understanding of the participant group and the various identities and commuting profiles contained within	 RQ1(commuter student characteristics) RQ2 (Self-identified needs)
CPM Satisfaction Survey (Quant)	To understand students' satisfaction with their CPM and the Commuting Buffs program innovation	 PRQ (Peer mentoring impact on belonging) RQ4 (CPM satisfaction) RQ5 (FY student impact CPM on belonging)
CPM Journal Entries (Microsoft Teams App) (Qual)	To track ongoing interactions and engagement with first-year commuter students	 RQ2 (Self-identified needs) RQ3 (Mattering to others)
Researcher Journal (Qual)	To track preliminary trends, patterns, or themes as they emerge throughout the duration of the study	 PRQ (Peer mentoring impact on belonging) RQ1 (commuter student characteristics) RQ5 (FY student impact CPM on belonging)

Focus Groups/Individual Interviews (Qual)	To further explore concerns or opportunities which emerge from the quantitative data collected. Artifacts will help explain the student's experience.	 PRQ (Peer mentoring impact on belonging) RQ1 (commuter student characteristics) RQ3 (Mattering to others) RQ5 (FY student impact CPM on belonging)
Online Discussions/Emails	Tracking and panning themes, challenges, and opportunities and to better understand students' transition and self-perceptions of mattering	 RQ3 (Mattering to others) RQ4 (CPM satisfaction)

Two specific qualitative data collection techniques were employed: individual interviews and "pod" style focus groups of two or more participants. Both techniques were semi-structured in nature to allow for organic dialogue between researcher and participant while also having a level of consistency amongst the various interviews (Creswell, 2014). Participants were provided with information and reminders about the study and interview prior to their interview date. An added technique which was employed within the interviews was the use of artifacts. Participants were asked to select an object or photograph that they feel most accurately illustrated their first several weeks as a commuter at CU Boulder and bring this with them to their interview session and to be prepared to explain how they felt the item represented their experience(s) as a first-year commuter student thus far into the semester and academic year.

Instruments

Instruments included interviews of first-year commuter students, interviews with the commuter student liaison/commuter peer mentors, and a Qualtrics survey of students as well as existing university data collected through the Office of Institutional Research (Qualtrics survey and interview questions are included in Appendices H and I). These

datasets include historical retention data for cohorts of students, as well as student satisfaction surveys that have been administered through various offices. Additionally, student demographic data such as a home address was utilized to extrapolate the commuting distances of students. Specific information about instruments that were employed for this study is described below in greater detail.

Quantitative. I collected the following quantitative data:

- First-year commuter student survey (Primary)
- Email open rates and click-throughs for *The Commuter Compass* e-newsletter (Secondary)
- Existing CU Boulder Office of Institutional Research and Office of Data
 Analytics data sources collected at the institution level (Tertiary)

Existing data sources. I began by conducting a thorough review of current data collected by the university to make the most conducive use of current resources, in addition to the new data collected by my Qualtrics instrument. This search began by contacting the CU Boulder Office of Institutional Research and Office of Data Analytics, as well as working with the Office of Assessment within the Division of Student Affairs. After getting an idea of what surveys had already been administered and what data was collected, I began by evaluating the raw data already collected by the researchers in the Office of Data Analytics. These datasets included historical retention data for previous cohorts of students (both commuter and on-campus residential), as well as student satisfaction surveys that have been administered through various offices.

As explained by Butin (2010), "it is critical that the existing data be the actual raw data and not the summary or aggregate data" (p. 89). Most of these pre-existing data

sources included 6-point Likert-scale assessments, climate survey(s), and satisfaction surveys. As I also oversee the administration of the *Commuting Buffs* program within the office of Off-Campus Housing & Neighborhood Relations, this program, and its outreach efforts such as newsletter open rates, program attendance, and student needs assessment surveys were used to measure engagement for use in this action research.

First-year commuter student survey. First-year commuter students were asked to participate in a 17-item Qualtrics survey at the end of the fall term which sought to better understand a participant's level of satisfaction with their commuter peer mentor and how they self-identified with their engagement and sense of belonging and mattering on campus. This survey was distributed to all 460 first-year Commuting Buffs through multiple email and Microsoft Teams announcements resulting in 42 completed surveys. A copy of the Qualtrics survey is included in Appendix H.

Email open rates/ click-throughs for The Commuter Compass e-newsletter. As one of primary means of communication with the Commuting Buffs group, these data points provide important understandings of content resonance and perceived resource interests or needs. While some of the content included in the newsletter is syndicated from other offices such as our Center for Student Involvement in regards to upcoming campus events, each issue features an original article curated by either the commuter student liaison or one of the commuter peer mentors focusing on an aspect of their college experience or a personal interest piece. Data points for The Commuter Compass were collected for each of the 16 weeks the newsletter was distributed.

Qualitative. To supplement the quantitative data collected for this research, I also collected the following qualitative data:

- Participant interviews with first-year commuters and the commuter peer mentors
 (Primary)
- Commuter peer mentor journaling/documentation (through the Microsoft Teams app (Secondary)
- Researcher journal (Secondary)
- Microsoft Teams discussion posts/student emails (Tertiary)

First year commuter student interviews. To collect the participant's experiences, qualitative data was collected through semi-structured participant interviews consisting of a 45 to 50-minute session between the participant and myself. Examples of interview items included: "do you feel your experience this year has differed from your residential first-year peers? If so, in what ways might you say it has differed? and "are there specific resources or services you have utilized on campus more than others? Is there any reason you have utilized this service or resource more than others?"

Participants were asked, in advance of the interview, to reflect on and bring an artifact to the interview that represented their first semester at the institution. Through this activity, I was able to better understand each participant's perspective, thought process and experiences in a unique and personal way that may not have been made possible through other means. This strategy also provided an organic and low-risk way for me as a researcher to dive deeper where needed, or to ask follow-up questions, as appropriate.

These first-year commuter student interviews were utilized to gather the participants' descriptions of their experience with encouragement on providing a full description of their experience, including their thoughts, feelings, images, sensations, and

memories. By using a semi-structured interviewing technique, I was afforded maximum flexibility when interviewing research study participants. Through guided open-ended questions as well as opportunities to elaborate upon participant responses, I was able to capture acutely and accurately the perspectives of each participant. Further, by utilizing a semi-structured interview format, the participants were able to further explore specific areas that may pertain to their unique experience and as a result, I was able to further explore themes, patterns, and trends that organically emerged (Jones, Torres, & Arminio, 2006). The full list of questions asked in student participant interviews is provided in Appendix I.

also conducted individual interviews with each of the seven commuter peer mentors and the commuter student liaison. These interviews either took place during the spring 2020 commuter peer mentor retreat or, in instances when CPMs were unable to attend the retreat, we scheduled an interview time following the start of the spring 2020 semester. Each interview session lasted around 45 minutes. The purpose of these interviews was to better understand the CPM's individual perceptions of their cluster, a self-evaluation of their effectiveness as a CPM, and their understanding of their first-year commuter mentees. This interview time also provided an opportunity for each CPM to reflect from one semester to the next on specifics such as their commuter cluster programming efforts in alignment with their specific first-year commuter student mentees self-identified needs. The full list of questions asked in commuter peer mentor interviews is provided in Appendix J.

Commuter peer mentor journaling. As a part of their on-going responsibilities, CPMs were provided discussion topics and prompts (examples of reflection prompts included in Appendix K) to respond to better understand what trends, patterns, or needs they were encountering in their roles. One examples of a discussion prompt included, "What are some of the ways you feel you have connected the most with your assigned commuter cluster this semester?" The hope of these journal/discussion prompts was to provide an intentional opportunity for CPM reflection and accountability on their progress and investment in the role throughout the semester. This information was collected several ways including within Microsoft Teams messaging, on the bimonthly CPM team huddles with each CPM, one on one meetings with CPMs, or via email or text message. As the researcher, I collected this information throughout the semester and aggregated the information to see if there were emerging trends, themes, or areas for immediate follow-up.

Microsoft Teams discussion posts/student emails. While the commuter peer mentor program was piloted prior to data collection efforts conducted during the Fall 2019 semester, this stage of my action research was the first to include the addition of a Microsoft Teams virtual community for the Commuting Buffs group (screenshot pictured in figure 3). Prior to the start of the fall semester, the CU Boulder Office of Information Technology (OIT) began rolling out the use of Microsoft Teams more fully across the campus. However, there were no case studies available at that time for the creation and facilitation of an online peer-mentoring group within a higher education setting using Microsoft Teams. Some benchmarking was able to be conducted with a similar offering

created by ASU's University Technology Office in the spring of 2019 with the digital campus provided through Slack ("What is Slack?", 2019).

The decision to employ Microsoft Teams versus another product, service, or offering was based on the bundled availability of Teams to every student, staff, and faculty member at CU Boulder within the University's existing Office365 contract, therefore requiring no additional financial investment as well as official support by the CU Boulder OIT (Office of Information Technology) office. Prior to the start of my innovation, I met with the chief messaging and collaboration staff member on the CU Boulder campus to explore potential limitations, challenges, and ideas for employing Teams as a virtual peer-mentoring community. The launch of the *Commuting Buffs* virtual community was announced during the Commuter Student Welcome which was a part of the New Student Experience, and a brief demo was shown on the screen in front of the 102 participants present during the session. commuter peer mentors were also asked to follow-up with each of their assigned commuter clusters to explain how students could download the stand-alone Teams app for their computer or smartphone and how to enable and customize their notification settings.

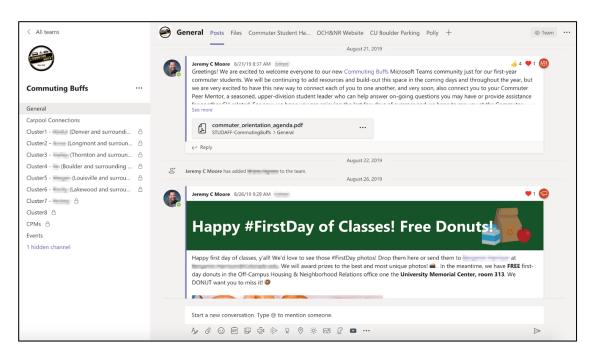


Figure 3. The "general" channel serves as the hub for the Commuting Buffs virtual community.

Each CPM had assigned channel for their commuter cluster within the Microsoft
Teams community in addition to general channels for the entire group such as a
carpooling posting board and upcoming events. To facilitate on-going engagement,
CPMs were encouraged to post regularly within their commuter cluster channels.

Examples of postings included encouragement for upcoming midterms or finals or
information on academic resources such as the writing center or tutoring help hours.

Some CPMs also devised other engagement strategies such as a weekly trivia question or
reflection prompt for their mentees. An additional touchpoint was also individual student
emails received by either the commuter student liaison, commuter peer mentor, or myself
regarding a question, concern, or need from a first-year commuter student. In the cases of
the commuter student liaison and commuter peer mentors, I requested that they
summarize the topical nature of email communication on a regular basis and share that

with me so that I could aggregate the information to see if there were emerging trends, themes, or areas for immediate modification, as I also did with the CPM journaling previously mentioned.

Researcher journal. In addition to participant and peer mentor feedback, I kept a researcher journal that contained research notes from the study outlining preliminary trends, patterns, or themes as they emerged throughout the duration of the study. These notes contained detailed information on each participant interview including a detailed description of the study participant, the flow and processing of each interview session and finally, the time, date, and location of the interview (Jones, Torres, & Arminio, 2006). Following these data collection efforts, I thoroughly reviewed and reflected upon all the one on one interview transcriptions and research journal notes kept throughout the study to gather a more comprehensive understanding of what phenomenon exists, if any. During this time and during a secondary transcription reading, initial thoughts or questions were recorded in the researcher journal so that they could be reviewed later.

In total, I conducted seven interviews with first-year commuter students, five which were one on one in style and one of which was a "pod-style" with two student participants who did not know one another prior to the interview session. Additionally, I conducted seven one-on-one interviews with the seven each commuter peer mentor and the commuter student liaison. Interviews lasted on average around 45 to 50 minutes. All interviews were recorded and transcribed.

Procedure

During spring 2018, the commuter peer mentors were recruited by soliciting the last two years of previous first-year commuter students and conducting interviews with eligible candidates. In fall 2018, I conducted a pilot study (timeline and procedures in Appendix L) with five first-year commuter students and commuter peer mentors to establish a recruitment protocol and to further inform the on-going training aspects of the peer mentoring program. This information was then used in spring 2019 to plan for the fall 2019 innovation and data collection.

Once the fall 2019 group of commuter peer mentors had been identified the CPM training/retreat was scheduled and planned for early August 2019 before classes began. Study observations and journaling began at the CPM training/retreat. During the training/retreat, each peer mentor received a facilitation and engagement guide that contained one to one discussion topics sequenced with the timing of the semester such as initial adjustment to college life, preparing for midterms, and resources around topics such as cold and flu season.

This guide was developed from information created for the residential experience, or ResX process. ResX represents a thoughtful approach for engagement and outreach by resident assistants within the CU Boulder residence life program. The hope of repurposing and building on these learning goals, learning outcomes, and engagement strategies was to provide a consistent first-year experience regardless of whether the student lived in the residence halls or commuted, to the level manageable within the unique differences inherent in each of these populations and their needs. An outline of these engagement strategies in included in Table 3.

Table 3

Fall Semester Commuting Buffs Engagement Strategies

Sequence	Launch Date	Learning Goal	Learning Outcome	Туре	Engagement Strategy	Buff Chats
Pre- Arrival	Pre-Arrival	Community	(CR) Students will examine how their actions affect the campus community	Passive	Newsletter 1 (Student Code of Conduct & Honor Code)	
	Ongoing but initial info shared before student arrival	Personal	(PR) Students will identify resources to aid in their personal health and wellness	Passive	Newsletter 2 - Health Promotion/CRC/Rec Services (intramurals) teasers	
	Ongoing but posted before students arrive	Community	(GR) Students will explore how their values and actions as globally conscious citizens impact society	Passive		
Welcome Week	Welcome Week	Global	(GR) Students will explore how their values and actions as globally conscious citizens impact society	Passive		Period 1- Community Outreach; Start: August 18th,
	Welcome Week	Academic	(AR) Students will develop relationships with faculty and staff to increase opportunities for mentorship and academic support	Active	ASAP (Academic Success and Achievement Program) tutoring resource & faculty mingler	Midpoint: September 1st, End: September 15th; Total Days: 4 Weeks, 29 Days
	Welcome Week	Community	(CR) Students will foster responsibility within their community and gain awareness of how their actions impact others.	Active	Information about AOD (Alcohol and Other Drug) - CPM Meetup	
	Welcome Week - September 15	Personal	(PR) Students will explore their own personal values and beliefs	Active	Buff Chat Period 1	

	Welcome Week to Week 3	Community	(CR) Students will develop interpersonal skills to build healthy relationships with others	Active	CPM 1:1 meetups w/ cluster members (exploring social connections and campus involvement)	
Sequence	Launch Date	Learning Goal	Learning Outcome	Type	Engagement Strategy	Buff Chats
	September	Community, Personal, Global, Academic	(PR) Students will identify resources to aid in their personal health and wellness	Passive	Newsletter 3 - Health Promotion/AOD information	
	September	Personal	(PR) Students will explore their own personal values and beliefs	Passive	Newsletter 4 - Know the Code information (Student Conduct & Conflict Resolution)	
	September	Community	(CR) Students will examine how their actions affect their larger communities	Passive	Newsletter 5 - Bystander Intervention	
	Ongoing but starts in September	Personal	(PR) Students will identify resources to aid in their personal health and wellness	Campus Partner	Peer Wellness Coaching and AOD (Alcohol and Other Drug) Group Sessions	Period 2- Transition; Start: September
Fall 2019	Ongoing but starts in September	Academic	(AR) Students will discover relevant academic resources and services available on- campus	Campus Partner	Career Services Session in Off-Campus & Commuter Student Lounge	16, Midpoint: October 7th, End: October 27th; Total
	Ongoing but starts in September	Personal	(PR) Students will identify resources to aid in their personal health and wellness	Campus Partner	Ask the Question	Days: 42 Days
	Week 1	Community	(CR) Students will develop interpersonal skills to build healthy relationships with others	Active	Dinner with your Commuter Cluster	
	Week 1	Personal	(PR) Students will engage in self- discovery and evaluate the personal impact of their choices	Campus Partner	Involvement Fair	

Week 2	Community	(CR) Students will develop interpersonal skills to build healthy relationships with	Active	CPM Commuter Cluster Meetups	
Week 3	Academic	(AR) Students will discover relevant academic resources and services available on campus	Campus Partner	Academic Fair	
Week 4	Academic	(AR)Students will discover relevant academic resources and services available on campus	Active	Buff Chat Period 2	
October	Community, Personal, Global, Academic	(PR) Students will identify resources to aid in their personal health and wellness	Passive	Newsletter 6	
October	Academic	(AR) Students will build a strong commitment to learning by applying their out-of-classroom learning to their academic pursuits	Passive	Newsletter 7 - Time Management Tips	
Launch Date	Learning Goal	Learning Outcome	Туре	Engagement Strategy	Buff Chats
October	Community	(CR) Students will foster responsibility within their community and gain awareness of how their actions impact others.	Active	Dinner with your Commuter Cluster	
November	Community, Personal, Global, Academic	(AR) Students will discover relevant academic resources and services available on campus; (PR) Students will identify resources to aid in their personal health and wellness	Passive	Newsletter 8 - Self Care and Wellness	

November	Personal	(PR) Students will engage in self- discovery and evaluate the personal impact of their choices	Active	Buff Chat Period 3	
November	Academic	(AR) Students will discover relevant academic resources and services available on campus	Campus Partner	ASAP (Academic Success and Achievement Program) Tutoring	
November	Global	(GR) Students will develop sustainable practices in their day-to-day lives	Active	Sustainability Lunch + Learn	
December	Community	(CR) Students will examine how their actions affect their campus community	Active	CPM Fall Closing Commuter Cluster Meetups	

(Adapted from CU Boulder Office of Residence Life Residential Curriculum - ResX)

An online file share was created and introduced to everyone associated with the program. This file share contained all the relevant files needed for each CPM and their first-year commuter cluster, including a digital copy of the facilitation guide, suggested email and communication templates, instructions on creating a welcome video, and engagement strategies to improve the mentor-mentee relationship.

Over the summer of 2019, first-year commuter students were contacted and assigned to a commuter student cluster based on their home address. At the end of August 2019, the commuter student welcome day took place in which all first-year commuter students were invited to participate. Students were notified of this opportunity through emails from the New Student & Family Programs office as well as a physical mailing in which each commuter student family received a copy of *A Guide for Families of Commuter Students: Supporting Your Student's Success*, created by the National Association for Orientation, Transition, and Retention in Higher Education and the

National Resource Center for First-Year Experience and Students in Transition. Inside of each packet was a physical invitation for the commuter student welcome day.

Institutional Review Board (IRB) approval for this study was obtained in August 2019

(Appendix C).

Throughout September, October, November and December 2019, the commuter peer mentors utilized the facilitation and engagement guide provided to them at the beginning of the semester and tracked engagement with each of their assigned cluster cohort participants. Commuter peer mentors were encouraged to use the five or so hours asked of them for the CPM role each week to connect with their assigned clusters and mentees several times each month or to connect individually with each member of their assigned cluster at least once a month via email, Microsoft Teams, phone, or in-person. Additionally, CPMs were asked to complete an least one program for their cluster each month. For many CPMs this took the form of a causal cluster meetup at a coffee shop in the area or grabbing lunch or dinner as a group. To assist in the facilitation of these programs and engagement opportunities, each CPM was provided programming funding for their respective cluster. Each CPM was asked to track the engagement points they were having with their clusters and this information was requested at each CPM team huddle or one on one meeting with myself and the commuter student liaison if it had not already been provided by the CPM.

The commuter student liaison also assisted with the administration and facilitation of *Commuting Buffs* programs for the entire 460-person group several times each semester. Examples of these larger programs included celebrating national cheese pizza day with 25 participants, commuter appreciation stations with free coffee and breakfast

burritos with 3 separate events and an average attendance of 60-70 students, and a commuter student week co-sponsored by the CU Student Government with 43 students. One of the more popular larger events hosted during the fall semester was a commuter donut meetup with donuts from Voodoo Doughnuts, a well-known Portland, Oregon donut shop with newer outposts in downtown Denver. This event garnered participation by over 70 first-year commuter students.

Towards the end of November 2019, I began recruiting first-year commuter students to complete the end-of-semester first-year commuter student survey. Following the administration of this survey, I sent invitations to participate in an in-person focus group (Appendix E). While I was able to conduct one, two-person "pod-style" focus group prior to the end of the fall 2019 semester, the proximity to finals and the winter break provided additional complication and challenge in working to set up these sessions. In response, I modified by IRB process (Appendix D) to allow for video-conference enabled focus groups or one on one interviews over the winter break. While I was unable to get the response I had initially hoped for with this modification, I was able to recruit a sufficient number of in-person interview participants following the start of the spring 2020 semester.

One item I included in the interview protocol was to ask first-year commuter student participants to think about an item that had strong resonance for them when considering their first semester at CU Boulder as a commuter student and to be prepared to either bring this artifact with them to our scheduled interview time or to discuss the item and its symbolism for them. It was hoped that by providing this space for reflection it would allow each participant to have a chance to think, in advance, about their first

semester as a commuter and to help provide a higher level of self-authorship¹ for the students and their experience as a commuter.

The complete overview of the research timeline is further illustrated in Table 4.

Research Timeline (Adapted from Moore 2017a)

Table 4

Timeline and Procedures of the Study

The Development or Perception of Sense of Belonging in Commuter Students

Objective: Better understand the needs of the first-year commuter student population at the University of Colorado Boulder

Action Step	Time Frame	Actions	Procedures	Evaluation
Study and Plan	July 2019	IRB Approval	 Approval obtained in July 2019 by ASU Approval process submitted to CU Boulder (work context location) 	IRB reviewed at the start of Summer 2019 to ensure it still meets current research parameters
Study and Plan Collect and Analyze Evidence	Early-Mid November 2019 Mid-End of November 2019 (Quant. data analysis)	Survey study participants (First-Year Commuter Student Cohort $n = 42$) Quant. data analysis	 Review of current data available through CU Boulder Institutional Research Office Creation of an instrument (Qualtrics survey) to better understand student's institutional experience (perceived/actual) 	Collection of survey results Creation of interview guide for focus group

¹ "Self-Authorship is the capacity to internally define a coherent belief system and identity that coordinates mutual relations with others" (Baxter Magolda, 2004, p. 8).

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Collect and Analyze Evidence	Mid- December 2019	Utilization of results of the survey to inform focus groups Focus groups/Ind. Interviews (n=7, 1 site) Qual. data analysis	 Review of the raw quantitative dataset; analysis and creation/refinement of questions for focus group Host focus group(s) 	Gain individual and group perspectives on development or perception of a sense of belonging for first-year commuter students
Collect and Analyze Evidence	Late December - Early January 2020	Qual. data analysis for focus groups/Ind. Interviews	Analyze all data collected from the focus group; work to better understand relationships, themes, or categories that may exist	Better understand qualitative data and experiences of focus group participants based on thematic and categorical exploration; coding
Take Action	Mid to Late January 2020	Integration of quantitative and qualitative results	Review of all results and interpretation/explanat ion of these datasets	Synthesis of findings
Reflect	January - February 2020	Consolidation of collected data	Document findings and translate findings into innovation implementation/adapta tion of future cycles of inquiry	Drafting of findings and implications

Mixed Methods Research

The sequential, or exploratory, quantitative → qualitative mixed methods action research (MMAR) study design (shown in Figure 4) incorporated "key methodological characteristics" of mixed methods research by including two stands, one quantitative, and

one qualitative, in order to "pos[e] a question, collect and analyze data, and interpret results", with the priority being given to the quantitative methods to inform the subsequent qualitative strand (Ivankova, 2014, p. 19). Further, in the latter stages of the study design, I worked to connect and subsequently integrate both the quantitative and qualitative aspects of this study with the goal of obtaining a more well-rounded and comprehensive perspective into my action research. This study followed and adhered to the practices outlined by Ivankova (2014) through:

- Focusing the research within a framework of theory and philosophy
- Employing multiple measures including a questionnaire, and a focus group in order to obtain data points
- Being intentional about integrating each of the quantitative and qualitative measures in order to best inform the research study

By employing both qualitative and quantitative methods in this study, I had hoped to have had data points that could build on and complement one another as well as strengthen the study and research design (Ivankova, Box 1.1, p. 5). Further, by utilizing a MMAR research design, my intentionality was to explain a problem or situation by eliciting perspectives or narratives that may not have been able to have been obtained with just a single approach on its own.

Data Analysis

As previously discussed, this study utilized a MMAR research design beginning with quantitative data collection. At the conclusion of the quantitative data collection, I analyzed these data primarily through descriptive statistics including a review of the data to ensure completeness, preparation for analysis, analysis, and data reporting (Clark and Creswell, 2010). Data analysis was conducted both natively within Qualtrics utilizing the built-in descriptive statistics functions as well as SPSS, when needed.

Qualitative data was reviewed in chronological order and was analyzed through thematic analysis starting with familiarization of the data to ensure the completeness of my transcription and error checking, the general to focused coding process, generation and categorization of relevant themes, a review of generated themes, further definition and labeling of themes, and documenting each of the themes through evidenced examples.

Summary

This mixed-methods action research study sought to explore and further explain the lived experiences of the first-year commuter students engaged with the *Commuting Buffs* program and the commuter peer mentor program. Data were collected in two sequential strands starting with quantitative data collection and analysis which informed the second qualitative strand. At the conclusion of data collection from both strands, I was able to triangulate and synthesize both sets of data to further explain if, and how a peer mentoring program may have impacted first-year commuter students and their sense of belonging and social connection towards their institutional community. In the following chapter, I will explore these data results in additional detail.

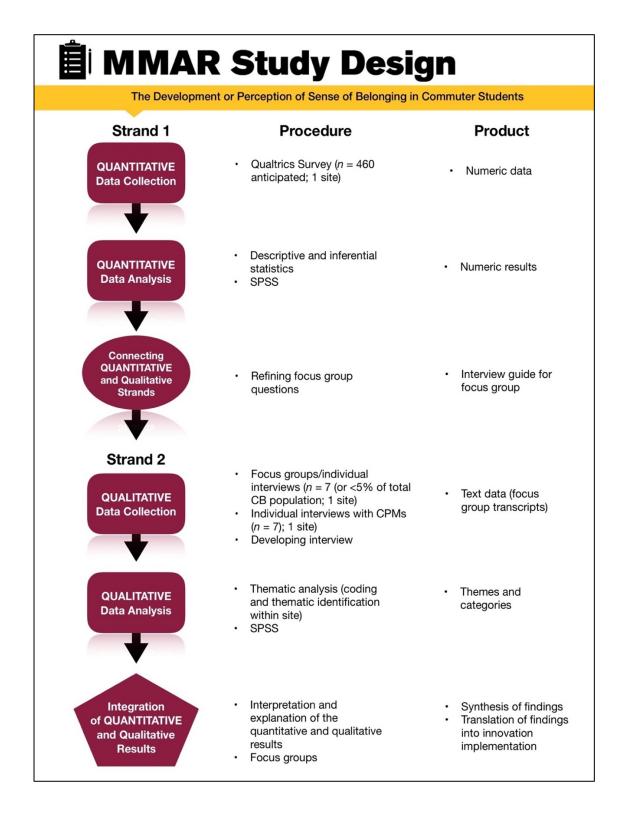


Figure 4. Mixed Methods Action Research Study Design. (Based on Ivankova, 2014)

CHAPTER 4

DATA RESULTS

This chapter provides the results of my data collection primarily from my commuter peer mentoring innovation, a first-year commuter student survey, and subsequent interviews conducted with study participants. As previously discussed, this action research study employed an exploratory mixed-methods approach, starting with a quantitative survey that was shared with the entire first-year commuting student group, *Commuting Buffs*, that was administered via an online Qualtrics survey. The second phase of my data collection efforts included semi-structured interviews with first-year commuter students and the student leaders serving as commuter peer mentors. This chapter will first explore an overview of the quantitative and qualitative data before further exploring each individual research question and the data collected to answer each question.

Quantitative Data Results

For the purposes of this action research study, quantitative data was needed to establish further clarity around the makeup of the *Commuting Buffs* cohort such as commuting distance and demographic information on the population. I was able to collect my quantitative data through three primary sources including administering an online Qualtrics survey, collection of open rates and click-through rates from *The Commuter Compass* e-newsletter, and reviewing existing CU Boulder institutional research.

First Year Commuter Student Survey

In December 2019, a survey was distributed via Qualtrics to the entire *Commuting*Buffs cohort comprised of 460 students and received TKTK responses. The survey

included seventeen questions and focused on student involvement, the commuter peer mentor program, academic and social well-being, and social capital within the campus community. To determine the survey's reliability, Cronbach's alpha was calculated utilizing SPSS v. 26 and was found to be .88. While what can be deemed an acceptable measure for the internal consistency of an instrument varies, the acceptable values of alpha are most often seen between the ranges of "0.70 to 0.95" (Kline, 2000, p. 13).

Qualitative Data Results

Following the administration of the first-year commuter student survey, quantitative data was analyzed to assist in the curation of semi-structured questions for focus groups with first-year commuter student participants and commuter peer mentors.

First-year commuter student focus groups/interviews

The purpose of the focus groups and interviews was to better understand information collected during the quantitative strand of data collection to see what themes might emerge. A semi-structured approach was employed to provide a consistent structure and flow for each interview while also allowing for participants to elaborate on their experiences as needed. Seven first-year commuter students were interviewed with two participating in a "pod" style format and five participating in a one on one style interview. Following the collection of interview data and immediate analysis, it was determined that I had reached data saturation in that many of the responses from study participants and survey responses were able to be triangulated to achieve consistency amongst themes.

Commuter peer mentor and commuter student liaison interviews

In addition to the interviews conducted with first-year commuter students, each of the seven commuter peer mentors (CPMs) and the one commuter student liaison were interviewed in a one on one interview setting. The purpose of these interviews was to better understand the experiences of each of the student leaders and their perceptions of their commuter clusters and their sense of belonging and connection to the program and the campus-based on their observations during the fall semester. These interviews each took place during the commuter peer mentor retreats for those in attendance. For CPMs that were unable to make the retreat, follow-up interviews were scheduled for a later date.

Qualitative Coding and Development of Themes

Following the completion of interviews with the first-year commuter students and student leaders, the interview transcripts were reviewed and coded using an open, line-by-line coding approach (Corbin & Strauss, 1990). Following the open coding, codes were evaluated based on frequency and commonality to develop categorical themes and subthemes to assist in reflecting the experiences shared by the participants in the best way possible. By using this approach, I was able to better detect consistency and overlapping, emerging themes better within each interview transcript. As a result of the coding processes, fifty-three codes were identified which were organized into four primary themes. These themes included: (1) awareness of commuter specific resources, (2) commuter student self-efficacy, (3) social capital challenges, and (4) commuter student identity and sense of belonging. Table 5 further articulates each theme that emerged from interview data and provides associated assertions.

Table 5

Themes, Components, and Assertions of First-Year Commuter Student Sense of Belonging

Themes and Components	Assertions		
Awareness of Commuter Specific	First-year commuter students have many		
Resources	conflicting priorities during the start of		
1. Students generally knowledgeable of the	their fall semester which provides added		
commuter newsletter	complications around the education of		
2. Limited time for exposure to resources	resources, services, and support services		
during the fall semester and orientation to	related to their potential need scenarios.		
the Commuting Buffs program	Passive opportunities are generally		
3. Lack of understanding of commuter peer	better received than active opportunities.		
mentor program and how one would utilize			
CPM			
4. Peer mentor role ambiguity across			
campus			
Commuter Student Self-Efficacy	Due to the additional demands of a		
1. Students grasp of academic resources and	commuting lifestyle, first-year		
utilization of academic support services	commuter students must manage their		
2. First-year commuter students report	time and commitments thoughtfully and		
having a strong handle of time management	technology plays a significant role in		
and organization skills as it relates to	peer engagement.		
academic responsibilities			
3. Using technology to supplement in-			
person interactions			
Social Capital Challenges	First-year commuter students lack the		
1. Some students expressed anxiety over	same opportunities extended to their on-		
engaging with campus activities or	campus peers and must seek out		
connecting with peer groups	engagement opportunities more		
2. Non-academic opportunities are not seen	independently which can result in		
as a "high need" area by many commuter	avoidance, anxiety, and stress over		
students	managing conflicting priorities.		
3. The inconvenience of events and			
engagement opportunities hinders the			
organic development of social capital			
Commuter Student Identity & Sense of	First-year students may derive a sense of		
Belonging	identity and/or pride from their		
1. Commuter students generally understand	commuting status but may be apathetic		
the differences between themselves and	or indifferent in understanding what		
their residential peers	their needs may actually be outside of		
	those of an academic nature.		

- 2. Sense of pride and satisfaction derived from saving financial resources by commuting
- 3. First-year commuter students articulated general satisfaction with current service and resource offerings
- 4. Limited feedback on the progression of services or resources for specific need cases

Results by Research Question

Primary Research Question: Does a peer mentoring program impact a perception of social connection(s) and a sense of belonging with the first-year commuter student experience at the University of Colorado Boulder?

Commuter Student Identity & Sense of Belonging. One subtheme which emerged was the identity that commuter students had taken on and how they self-described and reflected on the differences they had experienced between themselves and their on-campus first-year peers. Andrea shared the challenges with timing and commuting: "I feel like if you're a commuter student you just don't have enough time to interact with those particular communities [student groups] sometimes because you maybe can't stay as late to things and stuff like that." Dan expressed a narrative surrounding some of what he considered to be "negative" aspects of the commuting identity: "I kind of want to explore different places. And I've just found myself in a loop of just endless monotony and monotonous stuff."

Despite the barriers and negative feelings articulated with some participants, many first-year commuter students interviewed also shared a general feeling of pride and satisfaction (word cloud generated from participant interviews shown in Figure 6).

Thomas immediately responded when asked to reflect on things they may have

considered to be "positive" of their commuting identity: "Oh yeah, you've got food anytime, so you don't have to worry about that. Cheaper. Everything is basically cheaper when you live at home."



Figure 6. Word cloud generated from participant interviews

Social Capital Challenges. Unlike students living in the residence halls, first-year commuter students often must forge into social opportunities proactively and independently. As a result of social opportunities being less organic, as can sometimes be the case in shared living situations, to feeling more forced and more exclusively self-directed, some participants expressed feelings of anxiety, isolation, and disconnection. However, the presence of organized and collective events with peers provided comfort for some. One participant, Susan, shared that while she had been struggling with anxiety prior to the start of her first year at the institution, attending a college day hosted by her college and having the chance to meet peers was a source of great relief: "at lunch that [orientation] day, it helps you feel better, like, yeah, everyone's in the same boat with you and so you kind of understand then that you are not alone".

While opportunities with virtual engagement largely showed that one to one connection made a larger and more evidenced impact, with in-person events some participants expressed strength in numbers. This sentiment was expressed during an interview with one participant, Dan, who stated: "if I'm going in with the group...I feel much more comfortable then like, if I go alone and I just feel like the black sheep." Many commuter students also shared challenges and stress related to making friends. Isabella, a commuter who lived outside of Boulder, shared that "making friends is hard when you commute. Even going to things like parties, even though I don't go to parties. But, like, you have access to more things [in the residence halls], and I just feel like it's a lot easier."

RQ1: What are the key characteristics of first-year commuter students at the University of Colorado Boulder?

Makeup of first-year commuter student population. The first-year commuter student population for the Fall 2019 semester was comprised of students completing the first-year on-campus housing exemption process (n=460). The reasons for an exemption for first-year students can vary significantly from student to student. Of the first-year commuter student population, 68% of students were exempted from the residency policy due to living in proximity to campus, 11% were approved due to living with a sibling or other relative, 8% were approved due to being "over 21 or under 17" at the time of application, 13% for "other" reasons which include special scholar programs and having graduated high school more than 1 year ago, and 4% were approved automatically due to their application for housing after the priority deadline. Less than 1% were approved for medical or religious accommodation reasons. Of the group, 52% were self-identified as

female and 48% were self-identified as male. Within the group, 90% of students came primarily from the United States (n=403), with the Middle East and China with the second most concentrations at 10% (n=57). Due to the complexities of individual student credits and admission to the university, 11% of students within the population were classified as "transfer" students with the primary reason being AP credit transfer or post-secondary enrollment while in high school.

The first-year commuter student population can often see significant changes in the demographics of students from year to year. This was evident when exploring where first-year commuters were living during the 2019-2020 academic year compared to the previous academic year. Of the 460 students included in the 2019-2020 cohort, 73% shared that they were currently living with parents or other relatives, 23% were living in a private home, unit, or apartment on their own, 5% shared they were living with other relatives, and one participant was participating in a homestay program. During the 2018-2019 academic year, 52% of the roughly 425 first-year commuter students reported living with a parent or guardian, 42% lived in a private home, unit, or apartment on their own, and 5% lived with other relatives.

RQ2: What are the most important self-identified needs of the first-year commuter student population at the University of Colorado Boulder?

Self-identified commuter student needs. Participants generally articulated similar needs when asked to self-identify the things most important to them as a first-year commuter student.

Two participants shared that while they understood they needed to ask for help, they did not always understand what the actual problem was or how to specifically go

about asking for help: "just not knowing my problem, we're like, what's wrong and why am I confused with this." In a similar vein, when students did ask for help and did not feel a genuine interest in the other party supporting them, they felt much less inclined to solicit help in the future.

For first-year commuter students, time management was a key theme that came up both derived from a sense of pride over one's handle on the concept but also from a place of difference and as a barrier for involvement. Andrea, a student who often commuted on the bus, commented, "and I feel like if you're a commuter student you just don't have enough time to interact with those particular communities [student groups] sometimes because you maybe can't stay as late to things and stuff like that."

Commuter student skill development. A sub-theme that emerged in several interviews included the development of skills that many participants felt were due to their identity as a commuter. Dan shared how he had been able to develop a schedule on his own, learning more about how to proactively reach out to others, as well as how to utilize the bus system for the first time in order to get to the CU Boulder campus each day. The theme of time management and organization came up in several participant interviews with the idea that a chief priority were the academic goals put forward by the students themselves. One surprising data point was the amount of time first-year commuter students shared that they were on campus. Of the seven interview participants, four indicated they spent 4 or 5 days on campus each week. Survey respondents (n=42) shared that they either spent a lot (defined as 5-10 additional hours on campus outside of classes) of time on campus, with 38% of respondents selecting this option, or very little (defined as 1-3 additional hours outside of classes) of time on campus, also with 38% of

respondents selecting this option. These data points indicate that first-year commuter students may be spending more time on campus than common stereotypes might otherwise suggest.

Advocating for accommodation. Several first-year commuter students shared the challenges they would sometimes have to overcome in getting others on campus to understand how their identity as a commuter sometimes provided additional barriers compared to their on-campus peers. One example that stood out was from Isabella, a commuter whose mother often drove her to the nearby bus stop so that she could take the bus to campus each day. During inclement weather in the late fall semester, Isabella shared the following incident that occurred after her mother felt uncomfortable with her commuting to campus:

When I cannot get out from home but people here [on campus] can just walk to their classes. And one time, my mom was like I'm not gonna take you because it's too dangerous, but I had to turn in my math homework. So I emailed my TA and he said I'm sorry I cannot. The policy will not let me accept it because you were not here. And I'm like, okay, it's okay I won't turn it in, but, it's not fair.

The Commuter Compass email newsletter. Sent on a weekly basis, The Commuter Compass is an email newsletter curated by the commuter student liaison and distributed to the Commuting Buffs email listserv. In Fall 2019 the publication changed names from "Campus Confidential" to "The Commuter Compass" based on student feedback collected during the Fall 2018 research pilot. Students are automatically signed up for the listserv upon their exemption from the residence halls. This email listserv is also employed to send out semi-regular reminders for key action items such as parking

permit purchasing and course registration. Each week's regular newsletter includes a welcome from the commuter student liaison or an article written from the perspective of a commuter peer mentor as well as campus events and activities coming up during the following week. Links to social media, a Spotify playlist created for commuter students to listen to on their commute, and information about the free first-year tutoring opportunity, Academic Achievement & Success Program (ASAP), is included at the bottom of each issue.

Email open rates were monitored each week following distribution to assess open rates and click-throughs to hyperlinked information contained within the newsletter or email (full open rate information is available in Table 6). This information was then utilized to further refine future content creation. During the Fall 2019 semester, a series of various times were experimented with to see if the timing of email distribution impacted the open rates for *The Commuter Compass*. Emails sent during the earlier morning tended to have higher open rates than those sent later in the day after 12 pm. During the sixteen weeks of the fall semester, only five students unsubscribed from the email listsery.

While the open rate information was informative and actionable, the click-through rates allowed for a basic understanding of what needs, amenities, or services may be of most interest for first-year commuter students. The most common click-throughs throughout the fall 2019 semester (n=118) were for things to do, whether on or off-campus at 63% of total click-throughs, 13% for information on the writing center and study spots on campus, and less than 10% each for printing and scanning resources on

campus, information on the Office of Information Technology device registration program for laptops and tablets, and resources for advising and tutoring.

Table 6

Commuting Buffs Weekly Newsletter Open and Click Rates

Week	Date Sent	Time Sent	Open Rate (%)	Click Rate (%)	Unsubscribes
1	8/26/19	7:00 am	70.3% (281)	4.5% (18)	1
2	9/3/19	8:00 pm	60.2% (240)	1.3% (5)	0
3	9/10/19	2:30 pm	60.2% (240)	1.0% (4)	1
4	9/18/19	7:00 am	51.5% (206)	4.5% (18)	0
5	9/25/19	7:00 am	50.3% (201)	3.3% (13)	0
6	10/2/19	10:00 am	16.5% (66)	0.5% (2)	0
7	10/8/19	7:00 pm	10.5% (42)	1.3% (5)	0
8	10/15/19	11:15 am	46.9% (187)	1.5% (6)	0
9	10/23/19	7:00 am	8.5% (34)	2.0% (11)	1
10	10/25/19 (Special Edition)	11:30 am	54.9% (219)	0.0%	0
11	11/6/19	11:30 am	12.1% (48)	4.0% (16)	1
12	11/12/19	5:45 pm	13.9% (55)	0.8% (3)	0
13	11/19/19	5:00 pm	17.7% (70)	1.8% (7)	1
15	12/2/19	7:00 am	44.4% (175)	1.5% (6)	0
16	12/9/19	7:00 am	41.0% (161)	1.3% (5)	0

Getting to campus. Just as the reasons for first-year students commuting varies from student to student, so did their methods of transportation to campus each day. Of the first-year commuter student survey respondents over 34% indicated that they utilized one of the Regional Transit District (RTD) lines, whether by bus and/or light rail. The next most popular option was driving a personal vehicle with 31% of participants indicating this as their preferred method of transportation each day. Walking or biking was the third most popular option selected at 14% (Figure 5).

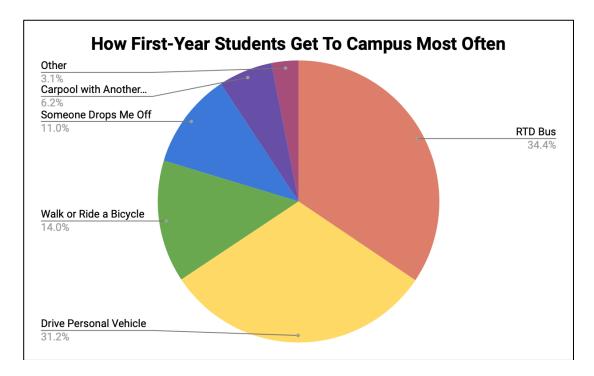


Figure 5. How First-Year Commuter Students Get to Campus Most Often

This diversity of transit options also serves to somewhat articulate the differences between those students residing within the City of Boulder and those residing in the surrounding suburbs and along the Front Range and how they choose to get around. Of the 460 first-year commuter students, 61.4% resided within a 1-10-mile radius, 28% reside within an 11-19-mile radius, and 10.6% reside within a 30-45-mile radius.

Information on where first-year commuter students are coming from, how far away, and what methods of transportation they are utilizing each day are important considerations to take into account for what resources and amenities commuter students may be seeking based on their commuting location. Examples of how this data was used included connecting commuters living within the City of Boulder with information on the campus bicycle mechanic and bike registration program. For those students taking the bus or seeking to carpool with other students, information was shared on how to use the bus and light rail system and information on carpooling programs in the area and the carpooling message board in Microsoft Teams.

Another data point collected by the first-year commuter student survey was where students spent the majority of their time when they were not in class but still on campus. Of the survey respondents (n=42), 23 respondents indicated they spent the most time in the University Memorial Center, often referred to as the "living room of campus". One of the seven libraries on campus were the second most selected campus location with 20 respondents followed by academic buildings with 14 responses, 10 for the CU recreation center, and 8 for the Center for Community, an administrative and student life building. Surprisingly, the campus dining halls and the residence halls received less response than anticipated with 6 and 4 responses, respectively.

A future project that has already been slated for completion for fall 2020 in the University Memorial Center is a commuter and off campus student lounge which is envisioned to value-add to an existing computer lab by building out lockers that off-campus and commuter students will be able to request use of on a semesterly basis in addition to a kitchenette with refrigerators for storing packed lunches and a microwave

for reheating food items. This space already has an abundance of comfortable seating, is somewhat removed from higher traffic areas but is still quite accessible in the lower level of the University Memorial Center, and has plenty of tables, workstations, and charging receptacles.

Fortunately, these were also needs articulated by interview participants when asked if there were additional things they would like to see the university doing to support commuter students. In our interview, Andrea presented her backpack as her artifact that she felt best represented her first semester as a commuter and stated that it was always with her and "carries everything from [her] lunch, to [her] books, laptop, and an umbrella for those pesky Colorado rain days that come without warning". Andrea expressed a desire to have a place to "unload" some of these things that maybe weren't needed as often or could be stored each day.

RQ3: To what degree do incoming first-year commuter students feel that they matter to others on the campus (to faculty/staff, to peers)?

While the concept of mattering has often been researched for first-year students residing on campus, this was not an area that I had seen explored as comprehensively in regard to first-year commuter students. Several of the questions asked on the first-year commuter student survey (full set of interview questions contained in Appendix H). focused on how first-year commuters identified with their sense of connection to various groups within the campus community.

To establish a baseline, I first asked if first-year students felt a connection as a student in general to the overall CU Boulder community. Of survey respondents (n=42), 43% selected "agree" as a response. The other response distributions were all under 15%

for the options including "strongly agree", "slightly agree", "slightly disagree", "disagree", and "strongly disagree".

Beyond understanding how first-year commuter students resonated with their sense of connection to the institutional community at large, I was curious to explore how first-year commuter students felt about their own peer group when asking whether or not they felt a connection to their fellow first-year students. While "agree" still was the most commonly selected response at 30%, more respondents resonated with the "slightly disagree" and "disagree" options with a 45% combined response (Figure 7 illustrates the answer distributions for both survey questions on the connection construct).

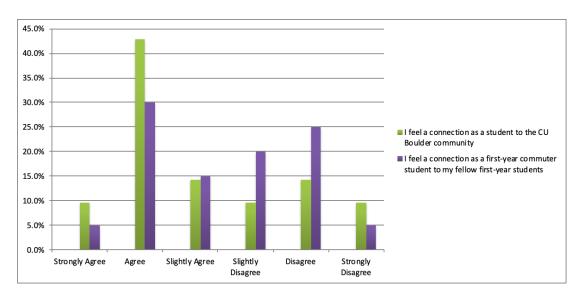


Figure 7. Survey responses to questions "I feel a connection as a student to the CU Boulder community" and "I feel a connection as a first-year commuter student to my fellow first-year students"

An additional survey question sought to classify how first-year commuter students felt when asked about their resonance with the idea of campus membership. Of survey respondents (n=42), 43% indicated they "somewhat feel like a member of the campus

community", followed by 35% indicating that they are "indifferent on whether or not [they] feel like a member of the campus community". While many studies have been conducted on first year students and peer interactions, there is not as much known about the influence and role that peers may play within the first-year commuter student population. In the case of first-year commuters, an interesting positive correlation was that 67% of survey respondents (n=42) indicated that a peer (defined as another student at CU Boulder), was a key individual who helped respondents think of themselves as a member of the campus community. When breaking this down even further, of respondents indicating they agreed that they felt like a member of the campus community (n=20), there was a significant relationship, or 40%, of respondents, who selected that a family member (defined as a parent, grandparent, cousin, or sibling) had influence on this perception.

The theme of peers, commuter student identity, and commuter students' anxiety over feeling alone was brought up several times and in specific when discussing engaging with campus activities or connecting with peer groups. Samantha compared her difficulties getting connected to her sister, who is also a commuter: "my sister also commutes and she has always made it [making friends] look so easy. It is so hard." Tory, another interview participant, also felt that the inconvenience of event timing made it more challenging to engage socially with peers. When discussing his experiences, he shared his perceptions about the potential social opportunities available to peers in the residence halls: I don't know what other things people do in the dorms as well, but I just know that you can make friends there." Peers also played a role in how respondents

perceived not feeling community membership with 15% responding that a peer had made them feel like they did not belong to the community.

Within participant interviews, multiple first-year commuters articulated the importance that faculty and staff members played when they considered whether they felt as if they mattered to the campus community. One student, Susan, shared of her interactions with her academic advisor: "she is always available to answer a question even when she probably isn't available. She helped me with things beyond just academic stuff and I never felt like my questions weren't important." Thomas articulated an experience in which he had attempted to attend a faculty member's office hours in a course with which he was having a particularly challenging time and felt dismissed: "it was at the end of class time and I walked up to him. He seemed in a rush and didn't really answer my question. Later he complained no one was asking him questions when they had a problem." When I inquired if Thomas would feel inclined to visit with faculty member again in the future should he continue to have problems he indicated he did not particularly feel comfortable doing so. Of survey respondents not feeling a sense of community with the campus, 5% indicated this was because of their interactions with faculty members.

Another participant, Isabella, presented her lunchbox as her artifact which she felt most represented her first semester as a commuter student. When asked to further explain, Isabella shared an experience where she had wanted to have lunch at the beginning of the fall semester with one of her friends who lived in the residence hall and how she thought she could just take her lunch with her into any dining hall even without a meal plan. The first time she attempted to do this the cashier informed her that she

would have to pay for meals going forward but that she could go in with her own lunch on that particular day and informed her of other options if she wanted to bring her own lunch while also still taking lunch with her on-campus friends. Isabella felt that the delivery of that message was compassionate and accommodating and it made her feel like her experience did matter.

RQ4: How does the student perceive the importance of, and their satisfaction with the information they have received from their commuter peer mentor on various issues (e.g. getting involved, transportation options, academic support)?

Utilizing commuter peer mentors. In general, there was a disconnect between students being aware of the CPM program and utilizing their assigned CPM or a disconnect between the value proposition between engaging with one's mentor and perceptions on how that might add to or aid the student in their first-year journey. In one interview, a participant, Samantha, shared, "yeah, I just never really had any reason to like reach out. I figured like the main reason to go to the mentors is academic help, or like, you know, bus lines or something like that and I've never really had any trouble so I just didn't reach out." This sentiment was supported by a second participant, Tory, who shared that while he was aware of the commuter peer mentor program and had contemplated reaching out to his mentor earlier on in the academic year, he couldn't think of anything they needed help with at the time, as he "didn't really need help with getting around campus or figuring out [his] classes."

In survey responses, an area of concern was that many students had difficulty remembering the name of their assigned commuter peer mentor but could recall the name of the commuter student liaison, the hourly, paid student staff member who assists me in

the administration of the *Commuting Buffs* program. This name recall may potentially be due to the commuter student liaison being one of the names most often sending mass emails, including a weekly focus article in *The Commuter Compass* e-newsletter with their name and contact information each week.

Another series of questions on the first-year commuter student survey were based on how the survey respondents felt and perceived levels of concern over dimensions of social and academic well-being (responses shown in Figure 8). Interestingly, an equal number, or 37% of respondents, selected "agree" for both social and academic well-being dimensions. Thomas shared that even though he wasn't as familiar with his individual CPM, he still felt that they would have concern for him: "I just think it is a peer student thing. They know what I am going through because they've already been here."

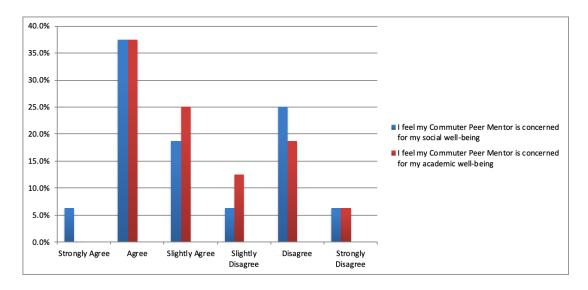


Figure 8. Survey responses to questions "I feel my commuter peer mentor is concerned for my social well-being" and "I feel my commuter peer mentor is concerned for my academic well-being"

Resonance with *The Commuter Compass* newsletter content. During participant interviews, participants shared a range of responses about their familiarity with the Commuting Buffs newsletter, The Commuter Compass. One constant was that students agreed that the newsletter content, such as the peer-curated articles from the commuter student liaison and commuter peer mentors, were some of the most helpful elements of the newsletter and being provided with first-hand information and tips from upper division peers was useful. One participant, Thomas, shared feedback on the publication schedule and would have preferred more notice regarding upcoming events: "I enjoy weekly but I enjoy being able to plan out a little bit further in advance so maybe every other, like every two weeks." Another participant, Sara, shared a similar sentiment, "I actually thought it was really well made, I thought the fact that they provided like events and you know, special dates and stuff like that that unless you read that might have like passed by, you know, I thought that was really helpful." When I asked both Thomas and Sara a follow-up question in regards to if they had attended an event after finding out about it through *The Commuter Compass*, Thomas explained that he had attended an open rink skating event put on by the LGBTQA group on campus that he attended with another friend after finding out about it from the e-newsletter.

Some participants interviewed expressed satisfaction over having a communication specific to the commuting student population. Tory shared: "It's got personality. Yeah, it's like the same thing [as the general campus-wide newsletter] but it's fun to read. I think it's more targeted even though this really isn't." Every participant did not share this perspective. Several other students interviewed expressed that *The Commuter Compass* felt all too similar to CU Boulder Today, a regular campus-wide

publication created by CU Boulder Strategic Relations and sent to all students several times a week.

Commuter student needs identified by commuter peer mentors. Commuter peer mentors shared that they believed some of the most common needs for their students included a sense of place or community but additionally, that with this community, there also be the element of support. One commuter peer mentor shared that they believed as first years it was important to "help us help them" by having open lines of communication when challenges arise. Another CPM shared that they believed it was important that first-year commuter students had a "group of people to grow with and to talk to so that they do not feel alone."

While interviewing the commuter peer mentors and through analysis of CPM journaling, a central theme was around thoughts on how they viewed their assigned cluster's engagement. One mentor articulated that their most successful outreach was when they personalized messages within their assigned Microsoft Teams channel. They felt that in more of a group setting, their mentees "were scared or like didn't know how that whole thing worked" according to one mentor. Another mentor felt that one on one conversations allowed both the mentee and the mentor to have richer dialogue and build a stronger relationship: "they [the mentee] wanted to have a serious conversation and have me give her my advice. She like straight up asked me for my advice. I think she knows that she can come to me and like, talk to me about anything, which is really nice."

Using technology to connect. Technology undoubtedly plays a significant role in many students' lives today and is something most students are quite comfortable engaging with on a regular basis. When inquiring what, if any, direct contact first-year

commuter students had with their assigned commuter peer mentor during the fall semester text messaging, the Microsoft Teams virtual community, and email made up the bulk of responses (33%) for those saying they had direct contact with their CPM.

When asked to bring an artifact to our participant interview that represented each participant's first semester as a commuter, Dan pulled out his laptop and explained that this was not only his entertainment device, his e-textbooks, and notes, but that it also allowed him to connect with his peers over social media, through games, and also to ask questions on forums including the Microsoft Teams virtual community. Dan shared an example of how he had connected with his CPM to ask about what classes he should take since his CPM is currently in the academic program he is interested in. When I inquired how that interaction went, he said he was surprised how quickly he got a response and was glad to have that advice and perspective.

RQ5: How do first-year commuter students describe the impact the commuter peer mentor program had on their experiences with belonging and social connection?

Familiarity with the commuter peer mentor program. When survey respondents were asked to provide a brief explanation of how they might describe the commuter peer mentoring program, the words and phrases used included:

Found the commuter program useful or helpful:

- "Helpful"
- "10/10 program that supports students who commute like me beyond academically"
- "Program for support"
- "Someone that helps you out"
- "A wonderful program that strives to help connect commuting students and make their college experience all the more enjoyable"
- "It was used during the major orientation when getting to know about campus"

- "A fellow commuter student that endeavors to help commuters adapt to college life and the particular challenges of commuting"
- "Someone I can turn to that has been through commuting to college before and still is"

Not familiar with the program or did not find it useful or helpful:

- "I'm not too familiar with the program itself"
- "Don't know what it is"

Not every first-year commuter student was familiar with the commuter peer mentoring program. Of survey respondents, 60% indicated that they were not aware or familiar of what the commuter peer mentor role was or were familiar with the term. For students who indicated they had not had any direct contact with their assigned CPM, 59% indicated they were not sure who their CPM was, 36% indicated they were not sure what they would ask or that they presently did not have any needs, and 5% indicated their CPM was too hard to contact from their perception.

Some recommendations from student participants were to share specific examples of what a CPM can help students with during their first semester and first year at the institution. There has also been a challenge with communication and getting in front of students earlier, even in the mid-summer, due to the potential of duplicating efforts or overwhelming incoming students with information from multiple offices and units at the same time. As a result, there is less time at the beginning of the academic year following the new student welcome experience to orient students to the *Commuting Buffs* program and their assigned commuter peer mentor.

Microsoft Teams engagement. While engagement within the Microsoft Teams community and with the commuter peer mentor (CPM) innovation was less than initially anticipated, participant and CPM feedback were helpful in determining what changes could be implemented mid-cycle to improve potential mentee engagement. During an

interview, one CPM shared that why they felt first-year commuter students might be reluctant to reach out to them: "I don't know who this person is [CPM] or what they're like or how they would respond to me if I ask this question they might think it's stupid, just how you would talk to professor in class. You are like should I raise my hand, but a lot of times you say, I don't need to, let's just save this until I really, really need to ask it."

This sentiment was furthered by a first-year commuter student who shared a reluctance to ask questions in a public forum but felt far more comfortable asking one to one. Following the winter break, the commuter student liaison piloted an "Ask Me Anything" session, popularized by the website Reddit. Engagement during this time within the Microsoft Teams community increased by week over week engagement by 64% with 36 individual messages exchanged within a three-hour period. While engagement was incentivized with a meal swipe for asking a question during the AMA, many students who took part asked more than one question and actively exchanged within threads related to other questions, aiding in the curation of crowd-sourced responses related to the best study spots and dining locations on campus.

Each CPM was supplied a private channel for their assigned clusters. Along the top of the "general" channel are reference materials such as the commuter student handbook, information on parking, commonly accessed files, and more. Student users can "heart" or "thumbs up/down" messages or threads to show interest, similar to other popular social media platforms such as Facebook or Instagram. Although student participants only utilized this functionality sparingly, each posting on the general channel within Teams averaged 2.5 "likes".

Interview participants were asked if they were familiar with the Teams virtual community. Of the seven participants, three shared that they were unfamiliar with the Teams community but that they had been receiving email notifications when activity occurred within the group and that they had reviewed those messages. Of the other four participants, all four shared they had been inside the group on average two to three days a week or when they received notification of activity within the group. All four of these participants also indicated they had enabled the push notification functionality on their smart phones, tablets, or computers to enable immediate notification of new activity.

While data analytics features within Microsoft Teams are still relatively new as of the start of spring 2020, an average of "active" users, based on when the user has last logged into the team, versus "inactive" users during January 2020 demonstrated a 18% active utilization of the resource. Active utilization indicates user activity through logging into the web Teams interface or desktop or mobile Teams application and/or having added activity with a Teams group through messaging, posting, or other engagement. During this same period within January 2020, 21 messages were logged as being exchanged within the primary channels (this number does not account for individual chat messages occurring between individual users such as the commuter peer mentors and their first-year commuter students). As this is a new resource and there

While the *Commuting Buffs* program currently does not employ social media as a means of communication with students, social media usage was discussed with each interview participant. All seven participants showed they utilized at least one form of social media including Facebook, Snapchat, Twitter, Instagram, Twitch, GroupMe, and TikTok. Students varied on which forms of social media they engaged with most often

and this typically skewed between different age ranges such as family members or the purposes of the particular social media channel. One participant, Isabella, shared that "people my age here don't use Facebook, but in Mexico [where the participant was born], everyone uses Facebook." Other students like Dan indicated that social media channels like Facebook were used primarily for communication or information sharing with organizations like CU Boulder. Thomas shared that Facebook was "great for finding likeminded groups. I joined a group on Facebook so that I could learn Vietnamese better." Many students agreed that Instagram and Snapchat were more of the types of social media places for fun or connecting with friends or fellow students. While Instagram is an area that some institutions, organizations, offices, or academic colleges have been slow to move onto, two participants who belong to the College of Engineering & Applied Sciences shared that they have been following that respective Instagram profile for the duration of the academic year after learning about the channel during their orientation.

An area of challenge related to communication has been student's desires for message delivery via text message and the prohibition of text messaging at an institutional or unit level. Of the interview participants, five indicated that text messaging was one of their favorite ways to stay in touch with the peers and others in their lives. Susan provided an example of using the popular app and text-message based service GroupMe to connect with other first-year commuters: "Because when we went to that big meeting [commuter student orientation] back in August a bunch of us that sat at the same table said "Hey, maybe we should exchange phone numbers!" And we did and we stayed in touch after that." While commuter peer mentors are not required to share their phone numbers, some choose to do so when their mentees wish to connect. From the

survey administered to the first-year commuters, 25% indicated they had direct contact with the CPM via text message, followed closely by the Microsoft Teams community and in-person interactions at 19% and 16%, respectively.

Identity or affinity-based impacts. When reflecting on the impact the commuter peer mentoring program had on his experience with belonging and social connection, Dan shared that he felt that his "CPM was extremely helpful in telling me about their time at CU. As a first-gen student, I'm not sure who else I would ask questions of." It was also seen in CPM journaling responses that many CPMs indicated that direct outreach they had received had been often linked to getting involved with academic-specific engagements like social fraternities sponsored by the college, honor societies, or other major-specific clubs and organizations. Recommendations from both participants and CPMs alike indicate that an "opt-in" model based on identity or affinity for commuter clusters may be one viable way to organize these groups in the future.

Closing Thoughts

First-year commuter student participants in this study expressed a range of feelings related to their identity as a commuter student at the university as well as how they self-described their sense of belonging and mattering. While the concept of belonging and mattering vary depending on the setting one may be exploring, for the purposes of this research students most often related the term belonging to social interactions with peers and the term mattering to academic interactions with faculty.

First-year commuter students articulated barriers that are often shared with any commuting student such as commute time, method of commuting, resources available for commuter students on campus, and challenges met because of living off-campus. While

the development of social capital is a challenge often faced by all incoming, first-year students, first-year commuter students also named specific examples of how their identity as a commuter disadvantaged their involvement with campus activities, social organizations, and even attending to academic commitments such as tutoring resources or office hours.

CHAPTER 5

DISCUSSION OF FINDINGS

The problem of practice which was explored for this action research study related to better understanding of how the introduction of a peer mentoring program may have impacted the student perception of, and sense of belonging with, a postsecondary environment with first-year commuter students. The primary research question for this action research was: does a peer mentoring program impact a perception of social connection(s) and a sense of belonging with the first-year commuter student experience at the University of Colorado Boulder? As the innovation for this action research, a peer mentoring program was developed with several communication and engagement mechanisms including a virtual community with Microsoft Teams and a weekly newsletter created exclusively for the first-year commuter student population.

During this action research, my innovation has continued to evolve based not only on my understandings from my preceding data collection efforts, but also from the fiscal and systematic challenges and opportunities faced by my office and institution such as first-year enrollment growth and availability of space within our residence halls. While 60% of survey respondents indicated they were unaware of the commuter peer mentor program, I must remember that at the start of my action research this innovation and the resources created to support the innovation did not even exist.

As such, a level of nuanced culture change has occurred and with these changes and the continued communication of my innovation, there may be students who did not previously feel the need to solicit the support or assistance of a mentor or who were unsure of what a mentor might provide that may, in the future, decide to seek the support

of the *Commuting Buffs* program. Within this action research there were also things that worked better than others. For example, *The Commuter Compass* newsletter had an open rate of 35% compared, which is much higher than the higher education industry average of 23% (Mailchimp, 2020). At the time that I began evaluating the use of Microsoft Teams for a virtual community, we were the first student-focused test case across the entire institutional community. In the months since, our world has rapidly changed, and institutions of higher education have been faced with unprecedented challenges in moving operations and student support into previously unconsidered virtual realms.

In this chapter, I will discuss the lessons learned, implications for practice, implications for research, recommendations for future directions, and concluding thoughts.

Lessons Learned

While elements of this action research study had been piloted or implemented previously, the framework of action research presented an organic and thoughtful way to iterate and combine efforts in a cohesive fashion. Further, action research served as a fantastic vehicle within this higher education environment where many variables changed during the course of research such as the number of incoming first-year commuter students/occupancy patterns for on-campus residence, the mechanisms by which we connect the mentors and mentees, changes to our weekly commuter newsletter, and outreach and engagement with this population.

While some lessons learned were more obvious, others such as the pivot to geographically assigned commuter clusters in cycle 3 were more surprising. In this instance, the original hope of geographically assigned clusters was to foster a better

potential for participant engagement where the students lived versus always hosting events on campus and to allow each CPM to plan programming opportunities in the community in which the first-year commuter students resided. One example of this geographic programming was a movie theater buy-out where first year commuter students could request two free tickets to a showing a popular movie at one of four different movie theaters located throughout the Denver metropolitan region. This event proved successful with each of the 250 tickets purchased being claimed within two days of the program's announcement.

However, cycle 3 also demonstrated that first-year commuter students found equal, if not even more, value in being able to connect with peers within their academic communities and colleges. In the future the cluster assignments adopt an "opt-in" model whereby first-year commuters could select their own cluster based on location, academic or career interest, or even identity or affinity.

While many believe commuter students to be a minority population within many campuses' student enrollment numbers, they are in many cases, in fact, a majority population. Through this action research and my associated innovation efforts, I am better able to advocate for first-year commuter students within my realms of influence as a scholar-practitioner. I look forward to providing input into other important commuter-related activities on campus such as our new student welcome and mentoring programs which have already been initiated within various academic units across campus. By hearing from students themselves, in their own voices, I felt empowered as a practitioner to bring to light these narratives in conversations with colleagues and administrators on

my campus as well as to advocate for additional resources and services to support this growing area.

This study also allowed me to find ways to serve as a storyteller for the phenomenon I was studying and to articulate the results of my efforts in meaningful ways through presentations, data analysis, and through the creation of charts and infographics. Further, I was able to practice and hone my skills in interviewing participants in a research setting. While I had experience with interviewing and conducting focus groups previously, my experience with this study allowed me to better understand how to structure the interview environment and participant recruitment in ways that are most conducive towards the participant and meeting the needs and requirements for academic research.

As a result of this study, I have a renewed sense of direction and better understanding of our first-year commuter students and their unique needs, while also being able to conceptualize how they are similar developmentally to their on-campus, residential peers. I also see pathways to scalability of the understandings and innovation from this action research to the other specific and unique student populations I serve in my professional role such as transfer and post traditional learners.

Implications for Practice

This study presents several primary implications to practice: (1) better understanding commuter students' self-identified needs as it pertains to comprehensive commuter student resources; (2) establishing mechanisms to assist first-year commuter students in their understanding of the campus environment and development of social capital within this environment; (3) conceptualizing developmental stages for first-year

commuter student success; and (4) equalizing accessibility to resources and considering inclusivity of non-residential first-years.

Better Understanding Commuter Students' Self-Identified Needs

As has been previously mentioned, commuter students are often seen on many campuses as a minority population when in fact commuter students have quickly become a majority population across the broader college student enrollment across the entire United States (NCES, 2014). For those campuses that serve the needs of commuter students, there are many time-honored resources such as commuter lounges that may be offered. Many commuter students may understand how their needs and experiences differ from their on-campus peers, but the negatives of this narrative are unfortunately all too often reinforced by faculty, staff, and fellow students all too often. As parents' roles in the collegiate environment has increased, many parents of first-year commuter students seek to better understand how they can equalize the experience of their commuter student and what resources the institution may be able to provide.

Specific resources, services, and engagement opportunities for first-year commuter students can be scaled well beyond the group to include many other sub-populations of campus life to equalize experiences and supply wider accessibility for the entire campus community. By better understanding the specific needs of commuters on different campuses such as four-year, community colleges, residential, or even commuter campuses themselves, higher education practitioners can advocate and champion the greatest match of services and resources as well as policies and processes to best serve their commuter student body.

Establishing Assistance Mechanisms and Development of Social Capital

This action research study demonstrated that students valued commuter-specific resources and having someone who was a little more "seasoned" and further along in their academic journey to provide "in-group" tips, tricks, and strategies for success.

Through the continued development and evolution of the Commuter Peer Mentor program, *The Commuter Compass* e-newsletter, and the introduction of the Microsoft Teams virtual community, a key takeaway was that no one size fits all approach exists for this group of students, their needs for assistance, whether it be social or academic, and the development of their individual social capital. Rather, there must be a persistent and agile approach of many different interventions working in coordination together to provide the best chances of resonance with the first-year commuter student population. Further, as the group can shift quite suddenly from year to year in terms of commuting location, distance, transit mode, and even how the student themselves may self-identify, practitioners would be well advised to consider how to employ continuous, sustainable needs assessment(s) on a yearly basis.

Conceptualizing Developmental Stages for First-Year Commuter Student Success

Arnett's theory of emerging adulthood. One theoretical framework which could serve to conceptualize developmental stages for first-year commuter students is Arnett's theory of emerging adulthood. As generational differences have been further examined and studied in recent years, the period between late adolescence and adulthood has been of particular interest, especially in the postsecondary environment. Arnett (2000) presents in his theory of emerging adulthood, that a more specific age of development occurs between the ages of 18-25. As Arnett explains:

Emerging adulthood is distinguished by relative independence from social roles and from normative expectations. Having left the dependency of childhood and adolescence and having not yet entered the enduring responsibilities that are normative in adulthood, emerging adults often explore a variety of possible life directions in love, work, and worldviews. Emerging adulthood is a time of life when many different directions remain possible when little about the future has been decided for certain when the scope of independent exploration of life's possibilities is greater for most people than it will be at any other period of the life course. (p. 469)

As the age period being examined during Arnett's theory is one of the most prone to change for young adults, there are many things such as one's living situation that can affect or influence development during this development period. For some students, this may look like moving away from home for the very first time to live in institutionally owned and managed housing. For others, this could be an independent living situation in a private apartment or house.

For many first-year commuter students, a developmental change could be less about the physical environment changing but the experience of instability and uncertainty in other aspects of their lives in interpersonal relationships, their educational pursuits, and sense of community (Goldscheider & Goldscheider, 1999). Interestingly, in a time where many post-bachelor young professionals are seen moving back in with family members to save money and avoid high-end or prohibitive housing markets, many first-year commuter students may have similar reasons for staying at home while beginning their post-secondary education.

While Arnett's theory of emerging adulthood provides a framework to better understand the development of young adults, the level of independence a student may or may not feel related to their commuting status could be an important variable to further examine within the scaffolding of student development theory.

Equalizing accessibility to resources and considering inclusivity of nonresidential first-year students

During this research, first year commuter students shared the narratives of their experiences, often working within structures and policies largely developed for a residential campus. While many participants seemed persistent and resilient in moving through potential obstacles or barriers when they were encountered, other situations such as the example of Isabella and having to take a zero for an attendance-based assignment due to inclement weather and her inability to make it to campus, stand out. The reality for many commuter students is that most are very aware of how their experience is different from their on-campus, residential peers.

Dan, an interview participant, shared that upon hearing that he was a first-year commuter during the first week of school, a faculty member made the comment that "[his] experience is going to be so different." No matter how well-intentioned such commentary may be, it does little to support the experiences of commuters, whether first-year or beyond, and can add further feelings of "othering" on top of what students may already been feeling.

Slight changes can have the potential to yield tremendous impact. Several years ago, I petitioned to expand free tutoring resources available to all students living on campus to our first-year commuter students. While it took some persistence, the move

cost little to the institution and yet provides a level of equalization of resources amongst all first-years. Current efforts are underway to further bridge the divide between residential and commuter first-year and transfer students by expanding a residential curriculum, or "ResX" from the residence halls to the *Commuting Buffs* and hopefully further down the line, to incoming transfer students. Additionally, it is my hope that we can adopt the *Buff Chats* app utilized by the resident assistants for the commuter peer mentors so that the dialogue topics and engagement strategies employed by the commuter peer mentors to their first-year commuter mentees are even more in alignment with what the resident assistants are doing with their residents in each residence hall on campus.

This work also suggests ways that classrooms can be restructured to be more inclusive. For example, recognizing that doing group work outside of normal class times may be more challenging for commuter students. Thoughtfulness should be exercised when considering what a reasonable accommodation might look like in the cases of inclement weather where the institution has not shut down yet students may still face challenges in getting to campus.

Implications for Research

Limitations

This action research study presented several primary limitations including, but not limited to, participation by study participants, awareness of the *Commuting Buffs* program, program resources such as the Teams online community and Commuter Peer Mentors, the ratio of Commuter Peer Mentors to student participants, and the duration of the study. Each limitation will be discussed in further detail below.

Participation by Study Participants

While the *Commuting Buffs* group was comprised of over four hundred students, the recruitment process for this mixed-method research was only able to capture around 10% of the total participants through successful completion of the survey shared with the entire group which resulted in a heavier descriptive analysis versus another analysis approach or combination of approaches. Of the open recruitment process for interviews or focus groups, seven first-year commuter students took part. The data collection and participation by study participants limited the generalizability of the results and articulation of specific phenomenon.

Program awareness, engagement, and participation

Many students surveyed and interviewed shared that while they may have been aware of the *Commuting Buffs* first-year commuter program, they did not always understand that the weekly email newsletters or that the Commuter Peer Mentors were also associated with the program. Earlier data collection efforts from previous cycles of this action research project have showed that student awareness with University services and resources can often be hindered during the first semester as there are many factors such as information "fatigue" that can overwhelm a student.

In the case of this action research study, the earlier cycles of inquiry served as a large determinant in the direction of subsequent cycles. While this can be advantageous, as Mertler (2017) explains, "the results should not be taken as a constant for the group surveyed— actions, perceptions, opinions, and even characteristics can change from one moment to the next" (p. 99). The change in population and participant characteristics can often be evidenced in each incoming group of new students with shifts in demographic

characteristics like dependent commuters vs. independent commuters. Other variables such as which communication mechanisms the peer mentoring program may employ are important considerations when thinking of these shifts in students that often occur from academic year to academic year.

Ratio of Mentors to Mentees

Another current limitation of the *Commuting Buffs* program is the ratio of mentors to mentees. On average, each commuter cluster of 50 students was overseen by one Commuter Peer Mentor. While this ratio was lower during the Fall 2019 semester than during earlier pilots of this innovation in earlier cycles of the action research innovation, the ratio still presents challenges towards one on one connections, follow-up, and engagements with commuting students within each cluster.

Duration of the Study

There are many developmental tasks that occur during the first semester for a first-year student such as getting oriented to a new institution, understanding what resources and services are available, and identifying the presence and availability of support structures, whether academic or social. While the *Commuting Buffs* program is intended to be year-long for incoming first-year commuter students, this action research study was only able to collect data for the first academic semester of the school year. I believe if the duration of the study was to be comprehensive of the entire academic year, it is reasonable to hypothesize that students may have more time to better understand their own social capital opportunities, the peer mentoring program, and their own sense of belonging on campus and with the contained variables therein.

While mixed methods can be of tremendous advantage within action research, there can also be inherent challenges with trying to utilize two unique forms of data collection. Creswell (2014) states that mixed methods research "provides a stronger understanding of the problem or question than either by itself" (p. 215). Having a multistrand mixed methods action research approach can help further inform interviews or focus groups and allows the researcher the flexibility to reinforce direction(s) while data collection is being conducted. However, mixed methods can also prove challenging when the data collection window is narrow, as was the case with this research.

Future Directions

While at times there may have been limited data available due to study participation during this action research, the study did demonstrate that students were interested in having resources and a dedicated commuter community for first-year students available at the university. Further, many students shared that although they had not actively utilized their peer mentor during the fall semester, they were interested in programming and communication efforts that specifically targeted their unique student population and they felt more comfortable with the presence of current offerings than if there were no specific outreach or engagement services available for first-year commuter students.

It is possible that a study taking place over an entire academic year might uncover additional understandings such as if the social connection and a sense of belonging is more important or salient for first-year commuter students during the spring semester, after they have had a chance to better master their understanding of the campus and their academic responsibilities during their first semester. As this action research study

explored the lived experiences of first-year commuter students, a limiting factor was a lack of inclusion of data from on-campus first-year students. By having this data, a baseline could have been established to compare the sense of belonging self-reported by first-year commuter students compared with peers living in the residence halls.

Additionally, an area for further study would be to pursue continued evaluation of persistence within the first-year commuter student population from their first to second year at the institution and what implications, if any, the *Commuting Buffs* program may have on student persistence. While a complete picture is not currently available for the 2019-2020 cohort of first-year *Commuting Buffs*, historical data from Fall 2017/2018 shows that on average 92% of first-year commuters continued into their first spring (compared to 95% for their on-campus first-year peers) and 84% of first-year commuters from Spring 2017/2018 carried onto active enrollment with their 2nd fall at the institution (compared to 88% for their on-campus first-year peers). At present, 93% of the 2019-2020 cohort of first year *Commuting Buffs* have continued onto the Spring 2020 semester (compared to 96% for their on-campus first-year peers).

Future research could focus on the expansion of resource sharing and communication prior to the start of the fall semester to aid more intentionally with the onboarding of first-year commuter students into the university environment. As Microsoft Teams achieves higher user adoption on college campuses, the medium or another similar solution such as Slack could be further evaluated and researched to see if these emerging technologies aid first-year commuter students in accessibility of resources, information sharing, and a sense of connection or belonging to their respective campus.

On average, the first-year class at CU Boulder is about 16% first-generation, or the first in their family to pursue a college degree (CU Boulder Office of Data Analytics, 2019). While the dimension of first-generation student status was not explored in great detail, this was an aspect that I attempted to account for with my program planning and even with the selection of commuter peer mentors. A future research direction could be to further explore this student dimension of first-generation status within the first-year commuter student population in addition to legacy students, or students who have family members who have previously attended the same institution of higher education. During my cycle 2 of inquiry, an initial key finding was the strong influence that sibling involvement played and the role of informant that many older legacy siblings took on for their younger commuter brother(s) or sister(s).

While this informant role supplied understanding into how one could navigate the campus, both systematically and physically, this sibling involvement rarely extended fully into various social spheres. This theme did not emerge as fully during my cycle 3 did not have as many first-year commuter students who shared that they had an older legacy sibling, but both exploration of first-gen status and legacy sibling involvement could have bearing on program planning and the potential for pivots year-to-year when shifts in the cohort enrollment may necessitate such changes.

Technology play a significant role in my innovation through the development of a virtual community for our first-year commuter students within Microsoft Teams. One alternative solution that was evaluated for this action research innovation was the *Buff Chats* app, a cloud-based application that connects with the campuses central IT (Information Technology) infrastructure and was developed in-house by the institution's

housing IT (Information Technology) staff originally for use with our on-campus residential communities and resident assistants. While the Buff Chats app was unable to be employed for the purposes of this action research due to time constraints and a need to further modify the application to provide functionality for non-residential students, it could be a viable option to explore further in the future.

Unlike the current functionality provided by Microsoft Teams, the *Buff Chats* app could be used to allow each CPM as well as myself to see at a glance what the level of engagement was with each member of a CPM's respective assigned commuter cluster through a color-coded system using green to indicate that an CPM has completed an interaction with a student, and red for students who an CPM has not yet connected with yet during that particular period.

Additionally, CPMs would be able to input journal entries related to their engagements and code these interactions based on the type such as an email, phone call, or in-person interaction. The *Buff Chats* app allows for visualization through Microsoft Power BI of initial data points and analytics based on the interactions that each CPM had with their individual cluster. Due to the added complexities of the application, additional CPM training on how to use the app would be needed during the CPM fall training.

The critique of providing specialized and directed resources and support towards one population of students versus the entire study body can, at times, be at odds with larger conversations held by the academy and administration as it relates to resource allocations and organizational philosophy. Based on initial data collection during cycle 2 efforts, I discovered a trend that many students on our campus experience "role confusion" when considering the wide variety of peer mentoring programs that exist and

that a student may be asked to partake in while attending the institution. As a result of the proliferation of many mentoring programs on campus, students have shared that they often do not understand why they might engage or reach out with a particular mentor working with one program versus another mentor working with another program when roles are not clearly delineated. This preliminary information could be employed to explore the impact of multiple peer mentoring programs assigned to the same group(s) of students and if indeed "role confusion" or "role ambiguity" does exist and is a threat to utilization of peer mentoring programs across campus.

Finally, based on information obtained during this action research, efforts have been untaken to scale the initial Commuter Peer Mentor program to CU Boulder's transfer student population through the development of a Transfer Peer Mentor role, creating a consistent naming convention and intentional student engagement in both the commuter and transfer student populations. As many transfer students also reside off-campus and commute to the university daily, it is hypothesized there may be a significant amount of overlap between the challenges and barriers first-year commuter students face in their commuting identity and challenges and barriers faced by incoming transfer students. While the Transfer Peer Mentor program is envisioned to be more of a self-selected program opportunity for transfer students, many of the lessons learned from this action research and the innovation contained within will help inform the development and scalability of this effort.

Conclusion

For many institutions of higher education, there exists a limitation on the availability of on-campus housing but also with the increasing cost of education, many

students may opt to commute to campus with ever-increasing regularity. As higher education professionals, it is our responsibility to ensure that our services and resources are in alignment with the current needs of our students and to pivot institutional offerings when necessary. While students may have individuals they can lean on for academic support, the engagement and connection to campus can often be a stressful and anxiety-producing situation for many first-year students, whether or not they reside on campus. For those students commuting, this challenge is even further exacerbated and cannot be solved through social media or digital engagement alone. By supplying resources and services attune to needs, institutions can provide a value proposition and affirmation of the decision to commute for students choosing such an option whether for medical, financial, or other reasons.

Further, by better understanding student demographics and need profiles such as those of many commuter students, institutions can better serve the specific needs of their student bodies, whether it be in or outside of the classroom. Faculty and student affairs professionals alike should be cognizant of how to create inclusive policies for situations when a student may not be able to make it to class due to weather or other commuting-related situations as well as how to provide social and engagement opportunities that are more accessible and equalized for students not residing on campus. These investments can help organizations become more agile and flexible in meeting the needs of *all* students.

I reflect on what one study participant, Samantha, shared as a challenge with getting time with a TA during study room hours due to the extreme demand from students. Samantha recounted having to wait over an hour to speak with someone, which

she said she was happy to do, but just expressing hope that they may be able to get to her in time before she had to catch her bus home, over an hour and a half away, and the anxiety that caused her. In cases such as this, how can we as practitioners and educators rethink when, how, and even *where* we may host office hours or opportunities to connect? In what ways can we as practitioners and educators employ technology and digital intervention and/or engagement to help bridge divides in both space and time?

While this research focused on a four-year public institution setting, the findings are transferable to other institutional profiles whether it be private or community college settings. In some cases, these types of institutions may already be better equipped to provide relevant and dedicated resources but with the continued virtualization of higher education, the concept of a sense of belonging is more complicated than ever.

Compromise may look like finding ways to bridge the desire and importance of in-person engagement with on-going support for the development of social capital through online networks such as social media or virtual communities in mediums such as Microsoft Teams or Slack.

As our world grapples with the unprecedented impacts and challenges of COVID-19 which have resulted in a need to move large portions of organization's workforces towards working from kitchen tables and makeshift offices and institutional settings that have quickly moved to remote operations, many students now find themselves taking classes and engaging with their peers exclusively online and often from a family home. I believe that by taking lessons learned from supporting unique student populations such as first-year commuter students, higher education can be more agile and responsive to shifts

occurring beyond the four brick and mortar walls of the physical classroom and the treelined borders of our campuses and parking lots.

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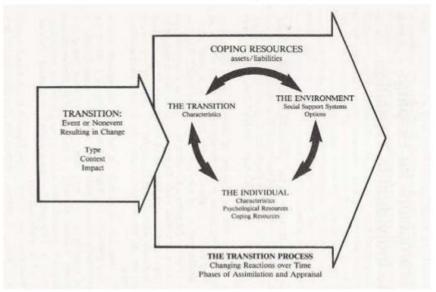
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APPENDIX A THE INDIVIDUAL IN TRANSITION

The Individual in Transition (Schlossberg, 1984)



Schlossberg's transition theory (Schlossberg, 1989, p. 13).

APPENDIX B

SCHLOSSBERG'S THE FOUR "S'S"

THE FOUR S's				
SITUATION	SELF	SUPPORT	STRATEGIES	
 Trigger Timing Role change Duration Concurrent stress Who is responsible 	Personal / demographic:	Social Networks: Intimate Family Friends Institutions / Communities	To cope:	

The "4Ss" as part of Schlossberg's transition theory. Adapted from Chickering & Schlossberg (1995, p. 5).

$\label{eq:appendix} \mbox{APPENDIX C}$ ASU INSTITUTIONAL REVIEW BOARD APPROVAL



EXEMPTION GRANTED

Ruth Wylie Division of Educational Leadership and Innovation - Tempe 480/727-5175 Ruth.Wylie@asu.edu

Dear Ruth Wylie:

On 8/12/2019 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Where Do I Belong: A Mixed Methods Study of
	Belonging for First-Year Commuter Student Success
	Does a peer mentoring program impact a perception of
	social connection(s) and a sense of belonging with the
	first-year commuter student experience at the
	University of Colorado Boulder?
Investigator:	Ruth Wylie
IRB ID:	STUDY00010485
Funding:	
Grant Title:	None
Grant ID:	
Documents Reviewed:	Jeremy Moore Recruit - CPM Individual Interview
	Consent Form Draft FY Commuter.pdf, Category:
	Consent Form;
	DRAFT questions for Commuter Peer Mentors.pdf,
	Category: Measures (Survey questions/Interview
	questions /interview guides/focus group questions);
	• DRAFT questions for First Year Commuter Student
	Focus Groups-3.pdf, Category: Measures (Survey
	questions/Interview questions /interview guides/focus
	group questions);
	• Jeremy Moore HRP-503a-
	TEMPLATE_PROTOCOL_SocialBehavioralV02-10-
	15.docx, Category: IRB Protocol; • Jeremy Moore Recruit - Focus Group Consent Form
	• Jefelly Moofe Recruit - Focus Group Consent Form
	D. G. EV. C 16 C. t C F
	Draft FY Commuter.pdf, Category: Consent Form; • First-Year Commuting Buffs Survey 2019.pdf,
	Category: Recruitment materials/advertisements
	/verbal scripts/phone scripts;
	• First-
	Year Commuting Buffs Focus Group 2019.pdf,
	Category: Recruitment materials/advertisements
	/verbal scripts/phone scripts;
	Jeremy Moore Email Survey Recruitment Email-
	3.pdf, Category: Recruitment Materials;
	CU IRB Note.pdf, Category: Off-site authorizations
	(school permission, other IRB approvals, Tribal
	permission etc);
	r

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 8/12/2019.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

cc: Jeremy Moore Jeremy Moore

APPENDIX D

ASU INSTITUTIONAL REVIEW BOARD APPROVAL: MODIFICATION FOR REMOTE VIDEOCONFERNCING INTERVIEWING OF PARTICIPANTS



APPROVAL: MODIFICATION

Ruth Wylie
Division of Educational Leadership and Innovation - Tempe
480/727-5175
Ruth.Wylie@asu.edu

Dear Ruth Wylie:

On 10/10/2019 the ASU IRB reviewed the following protocol:

-	
Type of Review:	Modification/Update
Title:	Where Do I Belong: A Mixed Methods Study of
	Belonging for First-Year Commuter Student Success
	Does a peer mentoring program impact a perception of
	social connection(s) and a sense of belonging with the
	first-year commuter student experience at the
	University of Colorado Boulder?
Investigator:	Ruth Wylie
IRB ID:	STUDY00010485
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• Jeremy%20Moore%20HRP-503a-
	TEMPLATE_PROTOCOL_SocialBehavioralV02-10-
	15-2.docx, Category: IRB Protocol;

The IRB approved the modification.

When consent is appropriate, you must use final, watermarked versions available under the "Documents" tab in ERA-IRB.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

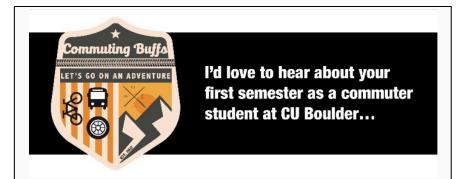
IRB Administrator

cc: Jeremy Moore Jeremy Moore

APPENDIX E

PRELIMINARY/SECONDARY EMAIL INVITATION TO PARTICIPATE IN INTERVIEW OR SURVEY AND INTERVIEW EMAIL REMINDER

Preliminary Email Invitation to Participate



Dear First-Year Commuting Buff Student,

My name is Jeremy Moore and I am a doctoral student in the Mary Lou Fulton Teachers College (MLFTC) at Arizona State University (ASU) and I also serve as the Assistant Director of Off-Campus Housing & Neighborhood Relations here at CU Boulder. I am working under the direction of Dr. Ruth Wylie, a faculty member at ASU and we are conducting a research study on first-year commuter students to better understand how peer-to-peer experiences and opportunities are perceived and to describe and explore the concept of social capital within this population.

You are receiving this message because you are eligible to participate in our research study and we would appreciate your consideration in completing a brief online survey we have created that we anticipate will take no more than 10 minutes to complete. Participation is voluntary and choosing to not participate will not affect your standing with the Commuting Buffs program. Data collected from the online survey will be helpful in determining future directions for the commuter student population at CU.

Following this survey, you will also be given the chance to share your interest in participating in an upcoming focus group. All focus group participants will receive a meal swipe to the oncampus dining halls as a thank you for their participation.

If this sounds like an exciting opportunity, <u>please click here for more information</u> or click on the link below.

If you have any questions concerning the research study, please contact the research team – Dr. Ruth Wylie at ruth.wylie@asu.edu or Jeremy Moore at jeremy.moore@colorado.edu or 303.492.4622.

Thank you for your consideration!

Jeremy Moore, Doctoral Student

Dr. Ruth Wylie, Assistant Research Professor

If you have any questions about your rights as a participant in this research, or if you feel you have been placed at risk, you can contact the Chair of Human Subjects Institutional Review Board through the ASU Office of Research Integrity and Assurance at (480) 965-6788.

Click Here To Complete Survey

Reminder Email to Participate



Greetings!

My name is Jeremy Moore and I am a doctoral student in the Mary Lou Fulton Teachers College (MLFTC) at Arizona State University (ASU) and I also serve as the Assistant Director of Off-Campus Housing & Neighborhood Relations here at CU Boulder.

As a first-year commuter student at CU Boulder, your participation is essential in helping to better inform the direction of our Commuting Buffs program as well as the future of research on first-year commuter student support at CU Boulder and beyond. Ultimately, I am working to better understand the barriers and opportunities for commuter students at CU Boulder and how we can continue to improve the experience for commuters such as yourself.

There are two ways to participate in my research. Even if you have not been actively involved this semester in the Commuting Buffs program or even if you are not sure what the Commuting Buffs program is, I'd love to hear from you! You can contribute to this research study in one or both of the following ways:

- A brief online survey I have created that I anticipate will take no more than 5 minutes to complete. You can complete the survey by clicking here.
- Participation in a focus group. Individuals participating in the 45-minute focus group
 will each receive a meal swipe to the on-campus dining halls as a thank you for
 their participation. I will be scheduling a series of these focus groups over winter
 break (after the holidays) and you can participate from the comfort of your home over
 webcam virtually over video conferencing. You can complete the focus group interest
 form by clicking here. I will follow up with individuals who have completed the form
 following a form submission.

If you have any questions concerning the research study, please feel free to contact me at jeremy.moore@colorado.edu or 303.492.4622.

Thank you sincerely for your consideration and for your time!

Jeremy Moore

Assistant Director

Off-Campus Housing & Neighborhood Relations

Click Here To Complete Survey

Click Here To Complete Focus Group Interest Form

Interview session reminder to study participants

Hi [Participant Name],

Thank you for completing the Commuting Buffs student focus group interest form recently and for your willingness to participate in my research efforts. I wanted to follow-up to confirm that I have you scheduled for an [interview/focus group] at [day/time] in [meeting room #/building] and will last roughly 45-50 minutes.

Just a few quick notes and reminders for our time together:

- I would love to audio/video record our interview for my data collection and analysis. You will have an opportunity at the start of our session to provide your written consent for this and ask any questions you might have. If you feel uncomfortable with this, please feel free to let me know and I can plan to not collect the audio and video from our time together.
- Please bring either a physical object or a picture (can be on your phone or other device or a physical picture) that you feel best represents your first semester at CU as a commuter student. We will start our time together by briefly discussing this object and it's symbolism for you and your connection to the campus.

I look forward to spending some time with you on [day/time] and if you have any other questions or concerns please do not hesitate to reach out to me via email or my office line, 303.492.4622.

Thank you again for your willingness to participate!

Jeremy

Jeremy Moore, M.S. Ed.

Assistant Director
Off-Campus Housing & Neighborhood Relations
University of Colorado Boulder
The 202 402 4622

T 303.492.4622 F 303.492.7054

W http://och.colorado.edu
Twitter @CUOffCampus





APPENDIX F

FOCUS GROUP/ONE-ON-ONE INTERVIEW SESSION CONSENT FORM

Dear Student,

My name is Jeremy Moore and I am a doctoral student in the Mary Lou Fulton Teachers College (MLFTC) at Arizona State University (ASU). I am working under the direction of Dr. Ruth Wylie, a faculty member in the Mary Lou Fulton Teachers College. We are conducting a research study on first-year commuter students to better understand how peer-to-peer experiences and opportunities are perceived and to describe and explore the concept of social capital/belonging within this population.

We are asking for your help, which will involve your participation in a focus group concerning your insight, perspective, and knowledge as a first-year commuter student currently engaged with the commuter student peer mentoring program ("Commuting Buffs") at the University of Colorado Boulder. We anticipate this interview or focus group to take 40-45 minutes total. I would like to video record this interview. The interview will not be recorded without your permission. These electronic recordings will be kept by the research on a password-protected computer and only the research team will have access to these recordings. The recordings will be destroyed following the completion of the research study.

Your participation in this study is voluntary. Participants of this study will be compensated for their time through a one-meal swipe provided to them to be utilized in the on-campus dining facilities at their convenience. If you choose not to participate or withdraw from the study at any time, there will be no penalty whatsoever. You must be 18 years of age or older to participate.

The benefit to participation is the opportunity for you to help inform the potential direction(s) of my research and to reflect on service and resource gaps or opportunities for continued improvement with our offerings on campus. Thus, there is potential to enhance the experiences of our students. There are no foreseeable risks or discomforts to your participation.

As focus groups involve multiple individuals, participants taking part in the focus group cannot be guaranteed complete confidentiality or anonymity because of others participating in the session. Keeping what is shared in the focus group in the focus group will be covered at the beginning of each session. The results of this study may be used in reports, presentations, or publications but your name will not be known/used and in cases where a name may need to be used for consistency, a pseudonym will be assigned to those respective participants. If applicable, results will only be shared in aggregate form.

If you have any questions concerning the research study, please contact the research team – Dr. Ruth Wylie at ruth.wylie@asu.edu or Jeremy Moore at jcmoor11@asu.edu or 303.492.4622.

Signing below means that you have read this form or have had it read to you and that you are willing to be in this study.

Signature of subject	
Subject's printed name	_
Signature of investigator	_
Date	
Thank you,	
Jeremy Moore, Doctoral Student Dr. Ruth Wylie, Assistant Research Professor	

If you have any questions about your rights as a participant in this research, or if you feel you have been placed at risk, you can contact the Chair of Human Subjects Institutional Review Board through the ASU Office of Research Integrity and Assurance at (480) 965-6788.

APPENDIX G COMMUTER PEER MENTOR CONSENT FORM

Dear (Commuter Peer Mentor),

My name is Jeremy Moore and I am a doctoral student in the Mary Lou Fulton Teachers College (MLFTC) at Arizona State University (ASU). I am working under the direction of Dr. Ruth Wylie, a faculty member in MLFTC. We are conducting a research study on first-year commuter students to better understand how peer-to-peer experiences and opportunities are perceived and to describe and explore the concept of social capital within this population.

We are asking for your help, which will involve your participation in collecting and sharing information such as your student encounter reflections, weekly Commuter Peer Mentor newsletters, and/or an interview concerning your insight, perspective, and knowledge as an Commuter Peer Mentor engaged with the commuter student peer mentoring program ("Commuting Buffs") at the University of Colorado Boulder. Sharing your student encounter reflections and weekly Commuter Peer Mentor newsletters will not require additional time from you beyond your role as a CPM. We anticipate the interview to take 40-45 minutes total. *I would like to video record this interview*. The interview will not be recorded without your permission. These electronic recordings will be kept by the research on a password-protected computer and only the research team will have access to these recordings. The recordings will be destroyed following the completion of the research study.

In addition to an individual interview, I am also requesting usage of your journaling and notes collected from your interactions with your assigned first-year commuter student cluster. These notes may include details about your conversations with first-year commuter students one on one or in group settings, the types of interactions you have had (i.e. during attendance at a program, via email, text, etc.). Student names, including your own, contained within these data sources will not be utilized as part of my research. If a name is necessary in order to provide consistency in sharing the results of my data collection efforts, I will employ pseudonyms. Data will be aggregated, whenever possible.

Your participation in this study is voluntary. If you choose not to participate or withdraw from the study at any time, there will be no penalty whatsoever. You must be 18 years of age or older to participate.

The benefit to participation is the opportunity for you to help inform the potential direction(s) of my research and to reflect on service and resource gaps or opportunities for continued improvement with our offerings on campus. Thus, there is potential to enhance the experiences of our students. There are no foreseeable risks or discomforts to your participation.

Your responses will be anonymous as well as any identifying student information contained within student encounter reflections or Commuter Peer Mentor newsletters.

Results from this study may be used in reports, presentations, or publications but your name will not be used.

If you have any questions concerning the research study, please contact the research team – Dr. Ruth Wylie at ruth.wylie@asu.edu or Jeremy Moore at jcmoor11@asu.edu or 303.492.4622.

Signing below means that you have read this form or have had it read to you and that you are willing to be in this study.

Signature of subject	
Subject's printed name	-
Signature of investigator	
Date	
Thank you,	
Jeremy Moore, Doctoral Student Dr. Ruth Wylie, Assistant Research Professor	

6788.

If you have any questions about your rights as a participant in this research, or if you feel you have been placed at risk, you can contact the Chair of Human Subjects Institutional Review Board through the ASU Office of Research Integrity and Assurance at (480) 965-

APPENDIX H

FIRST-YEAR COMMUTING BUFFS SURVEY 2019

Q1 Welcome to the research study!

We are interested in better understand how peer-to-peer experiences and opportunities are perceived and to describe and explore the concept of social capital within this population. You will be presented with information relevant to first-year commuter students and asked to answer some questions about it. Please be assured that your responses will be kept completely anonymous.

The study should take you around ten minutes to complete. Your participation in this research is voluntary. You have the right to withdraw at any point during the study, for any reason, and without any prejudice.

While your responses will be kept anonymous, the results of this study may be used in reports, presentations, or publications but your name will not be known/used and in cases where a name may need to be used for consistency, a pseudonym will be assigned to those respective participants. If applicable, results will only be shared in aggregate form. If you have any questions concerning the research study, please contact the research team – Dr. Ruth Wylie at ruth.wylie@asu.edu or Jeremy Moore at jcmoorl1@asu.edu or 303.492.4622. Thank you, Jeremy Moore, Doctoral Student Dr. Ruth Wylie, Assistant Research Professor By clicking the button below, you acknowledge that your participation in the study is voluntary, you are 18 years of age, and that you are aware that you may choose to terminate your participation in the study at any time and for any reason. If you do not wish to participate, please close your browser window to exit the survey.

Please note that this survey will be best displayed on a laptop or desktop computer. Some features may be less compatible for use on a mobile device. If you have any questions about your rights as a participant in this research, or if you feel you have been placed at risk, you can contact the Chair of Human Subjects Institutional Review Board through the ASU Office of Research Integrity and Assurance at (480) 965-6788.

Board through the ASU Office of Research Integrity and Assurance at (480) 965-6/88.
○ I consent, begin the study
Skip To: Q2 If Welcome to the research study! We are interested in better understand how peer-to-peer exp = I consent, begin the study
Q2 Where are you currently living?
O With parents or other relatives
O Private home, apartment, etc. (alone, with partner or friends)

O Residence Hall (including Williams Village, Central Campus, etc.)						
O Ot	Other (please specify)					
	do you get to campus each day? Please check all that apply if you use multiple transportation to get to campus.					
	Walk or ride a bicycle					
	RTD Bus					
	Drive personal vehicle					
	Carpool with another student					
	Carpool with a staff or faculty member					
	Someone drops me off					
	Ride share services (e.g. Uber, Lyft, etc.)					
	Other (please specify)					
Q4 How 1 classes?	much time each week do you spend on campus when you are not attending					
	lot: I frequently spend extra time on campus outside of my classes. (EX: 5-10+ onal hours on campus outside of classes)					

	O Some: I occasionally will spend time on campus when I am not attending a class. This may include attending activities on campus, eating in the dining halls, or spending time with friends. (EX: 3-5 additional hours on campus outside of classes)					
	Very little: I most often leave campus as soon as my classes are done. I may take a					
	meal or attend an activity on campus infrequently. (EX: 1-3 additional hours on campus outside of classes)					
	O None at all: I only come to campus for my classes and do not stay on campus after or before.					
-		re the locations on campus you would say you spend your most time when you ending classes? (Select all that apply)				
		University Memorial Center				
		One of the libraries on campus				
		The Rec				
		Dining Hall(s)				
		Center for Community				
		Academic Building(s)				
		Residence Hall(s)				
		Other (please specify)				

•	at CU Boulder? (Select all that apply)
I seminars	Educational activities outside of class (i.e.: lectures, campus speakers, , etc.)
	Student organizations or clubs
	Campus recreation related activities such as intramurals or camping trips, etc.
showings	Social and cultural arts-related activities such as plays, performances, gallery s, etc.
	am not currently involved in any engagement activities at CU Boulder
	Other (please specify)
Q7 Do you k	know about the Commuter Peer Mentor program?
O Yes	
○ No	
Skip To: Q8	If Do you know about the Commuter Peer Mentor program? = Yes
	give a brief explanation of how you might describe the Commuter Peer ram to a friend or family member?
Q9 Do you k	know who your Commuter Peer Mentor is this year?
O Yes	

O No	
Skip To: Ç	210 If Do you know who your Commuter Peer Mentor is this year? = Yes
-	e type the name of your Commuter Peer Mentor below. If you cannot their exact name, please type your best guess.
Q11 Have so, what ty	you had any direct contact with your Commuter Peer Mentor this semester? If pe?
	Email
	Phone call
	Text message
	In-person
	Commuting Buffs Microsoft Teams group
	I have not had any contact with my Commuter Peer Mentor this year
	Other
	ou feel your commuter peer mentor or the commuter student liaison have a with any of the following topics so far this year?
	Academic concerns or opportunities

	Campus engagement activities (outside of the classroom)				
	Being knowledgeable of things going on or around campus				
	Getting connected with other commuter students				
campu	Assistance with finding the best routes or methods to get to s/classes/etc.				
	Other (please specify)				
If Do	nis Question: you know who your Commuter Peer Mentor is this year? = No have not had any contact with your Commuter Peer Mentor, is there a				
-	reason why? Please check all that apply.				
	Don't know who my CPM is				
	Too hard to get a hold of				
	Not sure what I would ask; no needs presently				
	Other				
-	re something additional you would like to see your Commuter Peer Mentor semester or in the future? (Such as programming ideas, additional discussion				

Q14 Please rate how you feel about each of the following statements using the agreement scale below.

Feel free to elaborate or share any additional information in the text boxes next to each statement if you would like to further explain any of your ratings.

statement if you wot	Strongly Agree	Slightly Agree	Agree	Disagree Disagree	Slightly Disagree	Strongly Disagree
I feel my Commuter Peer Mentor is concerned for my social well-being	0	0	0	0	0	0
I feel my Commuter Peer Mentor is concerned for my academic well- being	0		0			
I feel a connection as a student to the CU Boulder community	0		0	0		
I feel a connection as a first-year commuter student to my fellow first- year students			0			

	of the following do you most strongly resonate when thinking of your with the campus community?
O I str	ongly feel like a member of the campus community
O I son	mewhat feel like a member of the campus community
O I am	indifferent on whether or not I feel like a member of the campus community
O I son	mewhat do not feel like a member of the campus community
O I str	ongly do not feel like a member of the campus community
	ere any particular individuals or groups that have made you feel the way that asly indicated in the preceding question? If so, please select the relevant low:
	Faculty Member
	Staff Member (academic support such as an academic advisor, etc.)
	Staff Member (student support/student affairs role such as the Center for Involvement, etc.)
	Peer (another student at CU Boulder)
	Community Member (someone not directly affiliated with CU Boulder)
	Family member (parent, grandparents, cousin, sibling, etc.)
	Other (Please elaborate in the text box)

APPENDIX I

FOCUS GROUP/ONE-ON-ONE INTERVIEW QUESTIONS

Semi-structured participant questions are included below (possible answers are provided in bullet list below as shorthand for researcher notes):

- 1. What is your anonymous ID that you had previously selected?
- 2. Where are you currently living?
- 3. Are you a first-generation college student?
- 4. If not, do you have any siblings that are also attending CU Boulder?
- 5. How do you get to campus each day (if you do not live on campus)?
- 6. Did you attend the Commuter Student Orientation/Welcome at the beginning of the Fall semester?
- 7. Are you familiar with the Commuting Buffs newsletter?
- 8. If yes, have you been reading it? What do you think about it?
- 9. Do you know about the Commuter Peer Mentor program?
 - a. Yes
 - b. No
 - c. Don't Know
- 10. (If yes) Do you know who your CPM is this year?
 - a. Yes
 - b. No
 - c. Don't Know
- 11. Have you had any direct contact with your CPM this year? If so, what type?
 - a. Email
 - b. Phone call
 - c. Text message
 - d. In-person
 - e. Microsoft Teams Commuting Buffs group
- 12. If you have not utilized your CPM for any questions or resources this semester, is there a particular reason why?
 - a. Don't know who my CPM is
 - b. Too hard to get ahold of
 - c. Not sure what I would ask; no needs presently
- 13. Is there something additional you would like to have seen your CPM doing this semester or in the future?

- 14. How do you most often communicate with your peers?
 - a. Email
 - b. Phone call
 - c. Text message
 - d. In-person
 - e. Facebook
 - f. Twitter
 - g. Instagram
 - h. TikTok
 - i. Other social media channel
- 15. Do you feel your CPM is concerned for your well-being (social or academic) as a student?
- 16. Are there other individuals on campus you feel care about you and your success on campus?
- 17. What factors do you feel might lead to you being successful on campus?
- 18. Are there any factors you feel may be impending/hindering your being successful on campus currently?
- 19. Do you feel you matter to your faculty?
- 20. Staff members on campus?
- 21. The campus community in general?
- 22. Why do you feel this way (or not feel this way)?
- 23. Do you feel like your experience has differed from that of your peers living in the residence halls? If so, in what ways?
- 24. Are you planning to commute next year?
- 25. Are there additional things you'd like to see the University doing to support your experience on campus?

APPENDIX J

COMMUTER PEER MENTOR INTERVIEW QUESTIONS

- 1. Have you had any direct contact with your commuter cluster members this semester? If so, what type?
 - a. Email
 - b. Phone call
 - c. Text message
 - d. In-person
 - e. Microsoft Teams Commuting Buffs group
- 2. What are some of the ways you feel you have connected the most with your assigned commuter cluster this semester?
- 3. If you haven't had a lot of contact points for questions or resources this semester, is there a particular reason why?
- 4. How do you most often communicate with your peers?
 - a. Email
 - b. Phone call
 - c. Text message
 - d. In-person
 - e. Facebook
 - f. Twitter
 - g. Instagram
 - h. TikTok
 - i. Other social media channel
 - j. Meet in person
- 5. Do you feel your students may feel that you are concerned for their well-being (social or academic) as a student?
- 6. Are there other individuals on campus you feel care about you and your success on campus?
- 7. What factors do you feel might lead your students towards being successful on campus?
- 8. Are there any factors you feel may be impending/hindering their being successful on campus currently?
- 9. Do you feel like your student's experiences have differed from that of your peers living in the residence halls? If so, in what ways?

- 10. Are there additional things you'd like to see the University doing to support commuter student experiences on campus?
- 11. What are some differences between mentoring one mentee versus mentoring many at once? One on one you can have more of that connection;
- 12. When you think of first-year commuter students, what are some of the primary characteristics that come to mind?
- 13. What do you think are some of the most important needs of the first-year commuter student population at the University of Colorado Boulder?
- 14. What goals can I help you achieve this semester as a CPM?
- 15. What motivated you to become a CPM?
- 16. What do you see as the greatest benefit of being a CPM?
- 17. Are you currently interested in returning to the CPM role next semester/next year?

APPENDIX K

EXAMPLE JOURNALING/REFLECTION PROMPTS FOR COMMUTER PEER MENTORS

What are some of the ways you feel you have connected the most with your assigned commuter cluster this semester?

What are some of the ways you feel you have struggled the most to connect with your assigned commuter cluster this semester?

Are there things you will change between your interactions this semester for next semester in terms of your interactions with your assigned mentees?

Was there anything that surprised you this semester from your interactions with your students?

Were there any assumptions or narratives you had going into the semester? Do you feel these are still accurate now? Why or why not?

Tell me a little more about any patterns or trends you may have tracked this semester. Was there anything you did differently in response to those patterns or trends?

APPENDIX L

TIMELINE AND PROCEDURES OF THE PILOT STUDY FROM FALL 2018

Time Frame	Actions	Procedures	
Spring- Summer 2018	Development of CPM position and recruitment of CPMs	 Creation of the CPM position description Identification of program funding for CPM/BuffBites meal plans and student retreat Broad recruitment drive to commuter students to solicit interest in CPM student leader opportunity Selection of CPMs following brief interviews conducted by professional staff members and strategic campus stakeholders 	
August 2018	Schedule CPM retreat and invite all CPMs	6	
September 2018	Contact with institutional research offices	 Contact the Office of Institutional Research and Division of Student Affairs Office of Assessment to see what already administered surveys had been retained Begin preliminary review of these raw quantitative data sets 	
September- December 2018 Facilitation of one-to- one conversations and interactions with student clusters		 CPMs facilitate one-to-one interactions based on their facilitation guide with their individual clusters Interactions are tracked in an ongoing fashion with the use of a cloud-based app 	
End of September 2018	Schedule Commuter and Transfer Student Retreat	 Set a date and confirm venue and tentative outline for the retreat Provide a follow-up retreat survey to all attendees, which will be evaluated following distribution 	
November 2018	Solicit student participants for one-to-one interview sessions	Conduct one-to-one semi-structured interviews with student program participants	

December 2018 Distribute end of semester evaluation	 Send out an end of semester peer mentor satisfaction survey to each student program participant Analyze all data collected
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APPENDIX M

COMMUTER PEER MENTOR POSITION DESCRIPTION

Commuter Peer Mentor Position Description

Role of the Commuter Peer Mentor

Commuter Peer Mentors (CPMs) serve as student leaders, assisting first-year commuter students with their transition to the University of Colorado Boulder. CPMs provide a network of support for incoming students by serving as a mentor, connecting them to campus resources, planning programs that will aid in their transition to college, and working with Off-Campus Housing & Neighborhood Relations and other campus offices to plan, promote, and implement initiatives specifically focused on first-year commuter students.

Responsibilities of the Commuter Peer Mentor

- Be available to attend twice a month team huddles, coordinate programming, and devote approximately 5 hours per week to the Commuter Peer Mentor program.
- Serve as a role model, advocate, and mentor for commuter student interests, needs, and rights of first-year students.
- Help first-year commuter students make connections to campus resources, academic resources, and student organizations on campus.
- Assists with programs and/or resource materials for your assigned group of students to help them transition to the university and integrate them into campus life.
- Maintain contact with your assigned commuter cluster of students (via face-to-face, email, phone, etc.).
- Actively participate in welcome programming including the Commuter Student Welcome Event and on-going programs.
- Have ability to manage time effectively and work independently.
- The CPM will employ a variety of tools to complete and curate their work with their assigned commuter clusters and the overall CPM team including phone, email, newsletters, and Microsoft Teams. Additional training will be provided, as needed, for these tools.
- Attend and participate, as available, in CPM semesterly retreats (may be overnight off-campus and/or multi-day

Eligibility Requirements:

- Maintain good academic standing with your College and be a full-time registered sophomore, junior, senior, or graduate student at the start of the Fall 2019 semester. Preference for commuting experience at CU Boulder.
- Willingness and ability to model personal behavior consistent with the CU Colorado Creed, goal-setting and mentoring for first-year commuter students.
- Good disciplinary standing at the time of application and throughout the duration of your appointment.
- Cumulative GPA of 2.75 or higher at the time of application and throughout the duration of employment.

- Must demonstrate exceptional oral and written communication skills.
- Must demonstrate the ability to serve as a role model by modeling professionalism, integrity, and inclusivity.

Time Commitment

CPM positions are for one academic year beginning in August 2019 through May 2020. There may be possibility for CPMs to be retained into future academic years if there is availability, interest, and satisfactory performance.

Estimated up to 5 hours per week; additional hours may be needed for special events

Compensation

- 80 block meal plan per semester (Valued at \$612)
- Some meals during special student events and commuter programs
- Valuable peer leadership, networking, and programming experience
- Professional development and campus resource training