

Retaining Out-of-State Freshmen at ASU

by

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## ABSTRACT

College completion has become a national priority in the United States. Before students can graduate from a college or university, however, they must survive their first year in higher education. The retention of out-of-state freshmen is a major piece of the larger college student retention puzzle due to recent national enrollment trends and the financial implications of out-of-state student enrollment. With public universities nationwide receiving less financial support from state governments, many of these institutions have used a strategy of aggressively recruiting and increasingly enrolling out-of-state students because the higher tuition these students pay can help offset the loss of state funding. Despite the importance of out-of-state students to the national higher education landscape, little research has been conducted on out-of-state student retention.

This study examined the relation between a resource website and the engagement, sense of belonging, homesickness, and retention of out-of-state freshmen at Arizona State University (ASU). Mixed methods of inquiry were utilized; data sources included a pre- and post-intervention student survey, student interviews, student essay artifacts, website utilization records, and university retention reports.

This study demonstrated that freshmen coming to ASU from another state experienced four main challenges related to being an out-of-state student. Those challenges were homesickness, adjusting to living in Arizona, managing finances, and making friends at ASU. Out-of-state students therefore needed extra support for their transition. The study found that an out-of-state student resource website had a positive association with co-curricular engagement and homesickness frequency reduction. Moreover, the site provided useful information on the challenges experienced by out-of-

state freshmen. Discussion includes possible explanations for the findings and implications for practice and research.

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## DEFINING TERMS

Freshmen: students who are attending a university for the first time in their lives and who are enrolled full-time, which is a minimum of 12 credit hours. The official term used by universities for this population is “first-time, full-time freshmen” (FTFTF).

Out-of-state students: students attending an institution who are classified by that institution as not being residents of that state for tuition purposes. It is also important to note that “out-of-state students” does not include international students, who are classified separately as such. “Out-of-state students” only refers to domestic students (students who are citizens of the United States) who are not residents of the state in which their institution is located.

Non-resident students: a synonym for “out-of-state students.” These terms are used interchangeably; the respective opposites of these terms are “resident students” and “in-state students.”

Retention: either the amount or percentage of freshmen who are retained by the university for their second semester or their second year.



## CHAPTER 1

### INTRODUCTION

College completion has become a national priority in the United States. Former President Obama set a national goal for the country to have the highest proportion of college graduates in the world by the year 2020 (White House, n.d.), and major education grant providers such as The Lumina Foundation and The Bill and Melinda Gates Foundation have also made college completion a focus of their efforts. College completion has become a national imperative because it benefits individuals and society. Individuals with college degrees tend to earn significantly more money than those who do not, with the gap becoming wider in recent years (Pew Research Center, 2014), and an increasing number of jobs in the future will require a four-year degree (White House, n.d.). Society benefits from having more college graduates because college graduates tend to pay more in taxes and be more civically engaged while being less likely to commit crime or rely on public assistance (Crow, 2014).

Before students can graduate from a college or university, however, they must survive their first year in higher education. First-year students at colleges and universities nationwide face a challenging transition to postsecondary education life (Tinto, 1987). They must adjust and adapt to a new living and learning environment, make new friends, and cope with the increased rigor of classes. Moreover, they often face new responsibilities and unprecedented independence. Because of these challenges and others, only 59% of first-time, full-time students who started college at a four-year institution in the United States in the fall of 2006 completed a bachelor's degree within six years at that institution (U.S. Department of Education, 2014). Many students transfer

to other institutions, and others take longer to complete their degrees, while others might drop out. With increased public scrutiny of higher education and demands for accountability, colleges and universities are facing pressure to improve their performance outcomes, often measured by the percentages of students they are able to retain and ultimately graduate (National Conference of State Legislatures, 2014).

The retention of out-of-state students is a major piece of the larger college student retention puzzle due to recent national enrollment trends and the financial implications of out-of-state student enrollment. Medwick (2010) cited data that the percentage of students attending college out-of-state jumped from seven percent in 1949 to 25% by 1994. Many universities are encouraging this shift in enrollment. With public universities nationwide receiving less financial support from state governments, many of these institutions have used a strategy of aggressively recruiting and increasingly enrolling out-of-state students because the higher tuition these students pay can help offset the loss of state funding (Hoover & Keller, 2011). At the University of Alabama, there are now more out-of-state students than in-state students (The University of Alabama, 2017).

An out-of-state student who leaves after one year represents a significant loss of income for an institution. At Arizona State University (ASU), losing three years of out-of-state tuition money for just one student from the Fall 2013 freshman class resulted in a loss of \$71,490. Multiply that number by the total number of out-of-state students from the Fall, 2013 freshmen class who were not retained (806), and one arrives at a total of \$57,620,940 in lost revenue for just one cohort.

Retention numbers also affect a university's public reputation and state allocations because retention is now being used by state legislatures to evaluate university quality (National Conference of State Legislatures, 2014). In recent years, there has been an increase in public scrutiny of higher education and demands for accountability, which has led to mounting pressure on colleges and universities to show how well they are performing. The sources of pressure include former President Obama, who proposed a rating system of postsecondary institutions that included retention as a measure (Shear, 2014).

Little research has been conducted on out-of-state student retention. There is a wealth of literature on general student retention and on some specific populations, however, there is little information on the topic of out-of-state freshmen. I actually contacted Toni Vakos, the Editor of the National Resource Center for The First-Year Experience and Students in Transition, based at the University of South Carolina, for referrals. Unfortunately, and surprisingly, given all the compelling reasons to study this topic, Toni's response was, "I don't have a lot of resources on this topic... I did a quick scan of our journal and past conference archives and couldn't find anything" (personal communication, October 1, 2014). Given the premium being placed on student retention and the increasingly important role of out-of-state students in the national enrollment context, the retention of out-of-state students is a topic worthy of study.

### **Local Context**

Retention of out-of-state students was a major problem prompting the development of this study. I am an Associate Director at the Arizona State University (ASU) First-Year Success Center, a department tasked with increasing student retention

by providing peer success coaching programs designed to help ASU freshmen have a smooth transition to the university and a successful first year. In this capacity, I heard numerous accounts of ASU out-of-state freshmen contemplating or deciding to leave ASU. The reasons they stated were often similar. For many, the non-resident cost of tuition was too burdensome. Out-of-state tuition at ASU for the 2015-2016 academic year was \$24,784 for full-time students, compared to only \$9,484 for full-time in-state students (ASU, 2015). Other students stated that being away from family was too difficult, and others had trouble with adapting to a new environment and making friends.

After hearing so many stories of ASU out-of-state freshmen struggling and therefore not being retained by the institution, I examined ASU's retention data. The information I found was striking. There was a significant disparity in retention percentages of in-state students and out-of-state students (ASU University Office of Institutional Analysis, 2014). Whereas 84.1% of in-state freshmen who started in Fall, 2012 returned for a second year at ASU, only 73.4% of out-of-state students not from California were retained, and only 78.9% of students from California were retained (in its reports, the university distinguishes between non-resident students from California and non-resident students from the other 48 states). The percentage-point difference in retention between in-state and all out-of-state students (combining California students with those from the other 48 states) was 8.5%. The retention rates of both in-state and out-of-state freshmen improved the next academic year; however, the gap between these groups grew even wider. Of in-state ASU freshmen who began in Fall, 2013, 86.1% came back a year later, compared to only 74.5% of out-of-state freshmen not from California and 78.3% of California students; the total retention rate of all out-of-state students that

year was 76.0%. Thus, the percentage-point gap between these in-state students and all out-of-state students increased from 8.5% for the 2012 freshmen to 10.1% for freshmen who matriculated in 2013. The numbers confirmed anecdotal evidence: that retention of out-of-state freshmen is a substantial problem at ASU.

To determine if the disparity in in-state and out-of-state student retention at ASU was common at other large public universities, I conducted research on ASU's self-designated peer institutions, or comparison groups. Each year, universities submit a list of comparison institutions to the U.S. Department of Education, and the institutions on this list often represent a university's aspirations (Fuller, 2012). ASU had selected 15 peer institutions for comparison purposes (Who does your college think its peers are?, 2012). I contacted officials from all 15 of these universities, and I was able to obtain retention data from 12. As shown in Table 1, out-of-state student retention was lower than in-state student retention at 10 of the 12 peer institutions; however, the differences were not nearly as large as the difference found at ASU.

It's worth noting that eight of the universities listed in Table 1 (66.7%) are located in the Midwest; out-of-state students at these institutions who come from other states within that region likely have an easier transition than out-of-state students at ASU because the distance from home for the Midwest students is probably much less than the distance from home for out-of-state students at ASU. Additionally, Midwest students leaving their state to attend another university within that region are likely to find environments that are very similar to their home states. Thus, ASU might have more work to do than other institutions in helping out-of-state students adjust. This work will be important for helping ASU achieve retention rates that compare favorably to its peers.

Table 1

*Fall 2014 to Fall 2015 Freshmen Retention at ASU Peer Institutions*

Institution	In-State Retention	Out-of-State Retention	Difference
Michigan State University	93.1%	86.5%	6.6%
University of Maryland – College Park	96.9%	91.7%	5.2%
Florida State University	93.0%	88.7%	4.3%
Penn State University	95.0%	91.1%	3.9%
University of Texas at Austin	95.8%	92.4%	3.4%
University of Minnesota – Twin Cities	93.6%	90.3%	3.3%
University of Washington – Seattle	92.0%	89.0%	3.0%
Indiana University – Bloomington	90.5%	88.0%	2.5%
University of Illinois at Urbana-Champaign	93.9%	92.3%	1.6%
Ohio State University	93.9%	93.2%	0.7%
University of Wisconsin – Madison	95.7%	96.0%	-0.3%
University of Iowa	84.8%	85.8%	-1.0%
Peer Institution Average	93.2%	90.4%	2.8%
ASU	86.0%	76.7%	9.3%

To learn more about why out-of-state students were not retained at ASU, I examined data from the Former ASU Freshman Survey administered by the University Office of Evaluation and Educational Effectiveness each fall to freshmen who left the university. Data from the Fall, 2011 and Fall, 2012 cohorts of freshmen in ASU’s W. P. Carey School of Business (WPC) revealed that these freshmen primarily left for financial

and personal reasons. The data are presented in Table 2. In both cohorts, the top five reasons former out-of-state business freshmen gave for leaving the university were:

- could not afford tuition
- wanted to be closer to family/friends
- transferred to a more affordable school
- social atmosphere
- and did not qualify or secure enough financial aid

Table 2

*Reasons Former Business Non-Resident and Resident Freshmen Gave for Leaving ASU*

Reason for Leaving ASU	Fall 2012 FTF		Fall 2011 FTF	
	Non-Res	Res	Non-Res	Res
Could not afford tuition	44%	31%	31%	32%
To be closer to family/friends	42%	21%	30%	14%
Transferred to a more affordable school	29%	21%	25%	25%
Social atmosphere	29%	21%	24%	14%
Did not qualify or secure enough financial aid	21%	25%	21%	25%
	n = 42	n = 26	n = 56	n = 42

To get more insight into the experiences and needs of out-of-state students at ASU, I conducted an anonymous online survey of WPC out-of-state students. The survey was distributed in spring 2016 to 799 freshmen and 685 sophomores and juniors. Of these, 108 freshmen (13.5%) and 80 sophomores or juniors (11.7%) participated. Among

the freshmen respondents, 14% graduated from high school in the Northeast region, 30% graduated in the Midwest, 12% graduated in the South, 19% graduated in a West state other than California, and 25% graduated from a high school in California. I also conducted follow-up one-on-one in-person interviews with five students. Data from these surveys and interviews provided additional evidence about the difficulties experienced by out-of-state students. As shown in Table 3, 25% of out-of-state freshmen survey respondents agreed or strongly agreed that they feel lonely being away from their family or friends at home while 10.2% disagreed or strongly disagreed that they have found it easy to make friends at ASU; fifteen percent indicated that they felt very homesick during their first semester at ASU, and 12% indicated they felt homesick often or very often during their first semester at ASU. When asked to identify their challenges they have faced as out-of-state freshmen, 61% indicated missing family and/or friends at home, 60% indicated adjusting to living in Arizona, 57% selected finances, and 48% selected making friends at ASU.



Table 3

*Spring 2016 W. P. Carey School of Business Out-of-State Freshmen*

Question	Response Frequency Percent					
	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree
I have found it easy to make friends at ASU.	34.2% (n = 37)	30.6% (n = 33)	17.6% (n = 19)	7.4% (n = 8)	7.4% (n = 8)	2.8% (n = 3)
I feel like I am part of the ASU community.	29.6% (n = 32)	35.2% (n = 38)	25.0% (n = 27)	5.6% (n = 6)	3.7% (n = 4)	0.9% (n = 1)
I feel lonely being away from my family or friends at home.	10.2% (n = 11)	14.8% (n = 16)	28.7% (n = 31)	15.7% (n = 17)	18.5% (n = 20)	12.0% (n = 13)
I have friends at ASU who I can turn to for emotional support if needed.	33.3% (n = 36)	32.4% (n = 35)	21.3% (n = 23)	4.6% (n = 5)	5.6% (n = 6)	2.8% (n = 3)

*Note:* N = 108

Comments from the open-ended survey questions and from the in-person interviews shed additional light into the unique experiences of out-of-state students during their transition to ASU. When asked to describe their first month at ASU, many out-of-state students used positive adjectives such as “exciting,” “easy,” “good,” and “smooth.” These students often mentioned the excitement of being in a new place, their ease in making friends, engagement with activities, or their independence. Many other out-of-state students used negative descriptors such as “bad,” “hard,” “tough,” “horrible,” and “terrible,” and several talked about crying frequently or for a long duration. Many

spoke about the difficulty being away from family and/or friends back home, with several commenting that they got increasingly homesick as the semester progressed. On the topic of adjusting to living in Arizona, many students cited the heat as a major challenge, with one student saying they had passed out. Others mentioned issues with local food and missing food from back home. With regard to making friends, a number of students described how difficult it was. Some students talked about having mixed experiences. For example, one student mentioned not being worried about making friends but instead being concerned about finances. Another commented, “It was great at first, but as the year went on it turned into hell.” Both the positive and negative student comments informed the development of the intervention.

ASU, like many postsecondary institutions throughout the country, has made student retention a top priority. “Enable student success” is one of eight design aspirations, defined as institutional objectives, of ASU’s New American University model (ASU, n.d.), and one of the first goals the university lists as part of its mission and goals for 2016 and beyond is to “improve freshmen persistence to 90%” (ASU Office of the President, n.d.). Approximately one-third of the incoming fall 2013 freshmen class at ASU was comprised of out-of-state students, and these students were only retained at 76% (ASU University Office of Institutional Analysis, 2014). Given the large percentage of out-of-state students at ASU and their low retention, the ability of the university to improve its retention of this large demographic will have a major impact on whether or not the university achieves its goal of 90% retention overall. Simply put, the university will not reach its retention goal unless it begins focusing on the needs of out-of-state students.

## **Personal Context**

My interest in this topic stemmed from my personal experience as an out-of-state undergraduate student at the University of Michigan in Ann Arbor. I came to Michigan from the east coast of the United States. I grew up in New York, New York and Ocala, Florida and decided to go to Michigan because it had a great reputation and offered everything that was important to me in a higher education institution. I was also excited to experience life in a new part of the country and to get away from home so that I could be independent and autonomous. Unfortunately, my excitement soon turned into struggle. I unexpectedly burst into tears the moment my family left me in Ann Arbor (we had driven together all the way from Florida). All of a sudden, I realized I was alone in an unfamiliar environment where I had no friends. I had also never been separated from family members for any extended period of time (I never went to a summer camp or any other similar activities as a child), and I was suddenly facing the harsh reality of not being able to see my family until the holidays.

My first year at Michigan was difficult. I missed my family and my mother's Puerto Rican cooking. Ann Arbor does not have a large percentage of Puerto Ricans, so there was nowhere for me to get the food that I had grown up eating. Moreover, I had to manage financial stress, caused by the high non-resident tuition that major public research universities charge. My parents could not afford to offer me much financial help, so I was responsible for covering my expenses. To do so, I took out a substantial amount of education loans, and I also worked part-time jobs. My struggles were only exacerbated when I encountered my first Midwestern winter. I soon developed depression-like symptoms, including an eating disorder, and my grades suffered.

I have shared my background because I think it is important to acknowledge and be transparent about my vested interest in studying out-of-state freshmen. I believe strongly that there is no neutrality in research, and therefore, researchers should openly state their positionality.

### **Purpose Statement and Research Questions**

Taken together, the larger, situational, and personal contexts suggested that a change is needed in the practices of supporting out-of-state freshmen. This study examined the relation between a resource website and the engagement, sense of belonging, homesickness, and retention of out-of-state freshmen at ASU. The specific research questions were:

RQ 1 How, and to what extent, was the resource website associated with:

- a. engagement at ASU for out-of-state freshmen?
- b. sense of belonging at ASU for out-of-state freshmen?
- c. feelings of homesickness for out-of-state freshmen at ASU?
- d. mid-year retention of out-of-state freshmen at ASU?

RQ 2 Did the resource website provide useful information on:

- a. adjusting to Arizona?
- b. making friends at ASU?
- c. managing finances?

## CHAPTER 2

### THEORETICAL PERSPECTIVES AND RELATED RESEARCH

#### **Retention: A Brief History**

The development of college student retention can be divided into nine historical eras (Berger, Blanco Ramirez, & Lyons, 2012): retention pre-history, which occurred from the 1600s until the mid-1800s, a time in which enrollment numbers were very low, and graduation rates were not a pressing concern. Later, it evolved toward retention, which occurred in the second half of the 19<sup>th</sup> century and entailed the expansion of higher education institutions, rapid enrollment growth, and the emergence of extracurricular campus activities. Early developments in the first half of the 20<sup>th</sup> century included institution diversification, the emergence of selectivity during the admissions process, efforts among institutions to distinguish themselves in an attempt to attract students, and some studies on “student mortality.” The next stage dealt with expansion in the 1950s, during which enrollment surged as a college degree was increasingly perceived as the path to upward mobility. The 1960s were characterized by preventing dropouts, increasing diversity of students at college campuses, growing civil unrest, and the growing number of types of studies on student departure. The next era was focused on building theory in the 1970s, initiated by William G. Spady (1971) and David Kamens (1971), expanded by Vincent Tinto (1975) and Alexander Astin (1977), and applied by Ernest Pascarella and Patrick Terenzini (1980). By comparison, the work of the 1980s was focused on managing enrollments during a decade marked by increasing professionalization and specialization of enrollment management as a practice, an explosion of theory-based studies, as well as those on specific interventions, and the rise

of a national conversation on retention being held at national conferences. During the 1990s, there were broadening horizons when scholars and practitioners increasingly considered issues such as finances and college affordability, academics and learning, unique experiences and challenges of students of color and those from disadvantaged backgrounds at predominantly white institutions, and the conceptualization of persistence of students. The most recent era of retention has been concerned with current and future trends of the early 21<sup>st</sup> century, which included the emergence of online learning, the recognition of various pathways to completion, increasing public scrutiny and accountability, and expanding attention on underrepresented populations.

Perusing articles published in the *Journal of College Student Retention: Research, Theory & Practice* since 2010, one would notice a highly nuanced approach to studying retention. In that journal, there have been slew of articles published this decade on retention of specific populations such as first-generation students (Sy, Fong, Carter, Boehme & Alpert, 2013; D'Allegro & Kerns, 2010), low-income students (Soria, Stebleton, & Huesman, 2013), and racial or ethnic minority students (Wood & Harris, 2015; Patterson, Ahuna, Tinnesz, & Vanzile-Tamsen, 2014; Thomas, Wolters, Horn, & Kennedy, 2014; Mosholder & Goslin, 2013; Villaseñor, Reyes, & Muñoz, 2013; Maramba & Museus, 2013). There have also been a number of studies examining the connection between retention and student psychology topics such as hope (Hansen, Trujillo, Boland, & MacKinnon, 2014), motivation (Friedman & Mandel, 2011), strengths awareness (Soria & Stubblefield, 2015), gratitude (Mofidi, El-Alayli, & Brown, 2014), and college expectations (Pleitz, MacDougall, Terry, Buckley, & Campbell, 2015). The current study continued the trend of a nuanced examination of retention. The

study was focused on a specific population (out-of-state students) and took into account student psychology topics such as sense of belonging and homesickness.

### **Theoretical Foundations: Student Engagement and Sense of Belonging**

There are multiple factors that can promote retention. Two related factors that are relevant to the current study are student engagement and sense of belonging.

**Student engagement.** The concept of student engagement evolved from the theory of student involvement (Wolf-Wendel, Ward, & Kinzie, 2009). Astin (1984) defined involvement as the amount of physical and psychological energy students invest in their collegiate experience. In his foundational theory, Astin (1984) asserted that involvement, which can be both academic and social, is positively related to learning. In later research, Astin (1993) found a positive association between the involvement categories of academic involvement, involvement with faculty, and student peer group involvement, and retention, learning, and academic performance. Astin's findings have been corroborated by numerous scholars. Pascarella and Terenzini (2005) concluded that "the evidence consistently indicates that student involvement – both generally and in an array of specific academic and social areas or activities – is related in some fashion to intended or actual persistence into the next academic year" (p. 426). Furthermore, Tinto (2012) proposed an actionable model of student retention and included academic and social involvement as one of four areas, along with student expectations, student support, and assessment and feedback, in which administrators could focus their efforts in order to support student retention.

Wolf-Wendel, Ward, and Kinzie (2009) noted that Kuh (2001) developed the concept of engagement while drawing from Astin's (1984) theory of involvement, as well

as quality of effort measures (Pace, 1980) and Chickering and Gamson's (1987) principles of good practice in undergraduate education. Kuh (2001) defined student engagement in two parts: the first was the amount of time and energy students put into their education and co-curricular experiences that complemented their learning. The second was the institution's investment in and promotion of intentional learning activities. The first part of that definition is clearly linked to Astin's (1984) definition of involvement, but the second part of Kuh's (2001) definition of engagement distinguishes it from mere involvement. As a concept, engagement combines both student involvement behaviors and effective institutional efforts (Wolf-Wendel et al., 2009).

In a series of interviews with retention experts, Wolf-Wendel et al. (2009) found that prominent retention scholars, including both Astin and Tinto, considered *involvement* and *engagement* to be synonymous terms and often used them interchangeably. Despite this reality, and acknowledging the overlap between these concepts, Wolf-Wendel et al. (2009) advised scholars to take note of their important distinctions. Whereas student involvement primarily focuses on student behaviors, engagement is intended to consider both student behavior and institutional action.

Kuh and associates (2005) found that student engagement was linked to a variety of positive outcomes, including retention. Moreover, Tinto (2012) suggested that engagement might be the most important condition for student success. The National Survey of Student Engagement, or NSSE, which is housed within the Indiana University School of Education, has been administered annually throughout the United States and Canada since 2000 (Center for Postsecondary Research, n.d.). The survey measures the extent and nature of student engagement. Using data from the NSSE, Kuh, Cruce,



Shoup, Kinzie, and Gonyea (2008) found a positive link between student engagement and retention, even after controlling for pre-college characteristics such as merit aid and parental education. Kuh (2009) also noted that scholars have found that engagement has a compensatory effect on circumstances that otherwise make students less likely to be retained.

The NSSE allows individual researchers to examine survey results based on the student characteristics of distance education status, first-generation status, academic major field category, race or ethnicity, and sex, but not state residency; an item from the survey was used, with permission, in the present study to capture an aspect of engagement among out-of-state freshmen at ASU (see Appendix H for permissions).

To increase student engagement and student retention, the Association of American Colleges & Universities (n.d.) recommends that institutions offer ten experiences they deem to be “high-impact educational practices” supported by research.

They are:

- first-year seminars and experiences
- common intellectual experiences such as common core courses
- learning communities
- writing-intensive courses
- collaborative assignments and projects
- undergraduate research
- diversity or global learning
- service learning or community-based learning

- internships
- capstone courses or projects

All ten of these practices already exist at ASU, and oversight of them is maintained in the upper administration, however, there are other ways in which general practitioners can increase student engagement.

Kuh (2011) advised student affairs professionals to “teach students how to make good use of institutional resources” (p. 259), and he declared that student affairs professionals are obligated to provide “intrusive, success-oriented advice and feedback to steer students toward activities that will enrich their college experiences and increase the odds that they will persist in and benefit in the desired ways from college” (p. 261). Kuh (2011) also cautioned that a student’s inability to obtain needed information or help can impede that student’s engagement and success. Webber, Krylow, and Zhang (2013) suggested that staff provide a streamlined way to help new students become involved, and they also suggested explaining the benefits of involvement so that students understand why they should get involved. Additionally, Heiberger and Harper (2008) found that college administrators can and should use technology to increase student involvement, with examples including connecting students to college social networks and promoting relevant events. The intervention was a tool for implementing these expert recommendations.

**Sense of belonging.** The human need for belonging was identified by Maslow (1943), who conceptualized a hierarchy of needs to identify the priority of certain human goals. A sense of belonging was an important component of this hierarchy, which was

above things like physical needs, which are basic, primary needs of all humans, but was still a key goal for people.

In higher education literature, sense of belonging has emerged as an alternative to Tinto's model of academic and social integration (1987), a model which Morrison and Silverman (2012) observed has been one of the cornerstones of the higher education literature on student retention. Tinto's (1987) model explained how the nature and extent of students' experiences in their university environment influenced their retention. According to Tinto's (1987) model, there was a positive relationship between academic and social integration and retention. Academic integration included a formal component, which was the extent to which students' academic skills matched the expectations placed upon them by the institution, and an informal component, which focused on student interactions with faculty and staff and the extent to which their values aligned. Social integration included a formal dimension comprised of extracurricular activities such as students' participation in student organizations. Social integration could also be conceptualized informally by looking at students' interactions with their peers, such as their friends or, for those living on campus, other students living in the residence halls. Thus, students' experiences at the institution combined with students' pre-collegiate attributes such as family background, academic ability, and academic preparation, as well as their goals, intentions, and commitments, determined students' decisions of whether or not to leave an institution.

Tinto's (1987) model has several limitations and has been highly criticized (Carter, 2006). It is worth noting that Tinto's (1987) model of academic and social integration was framed within a conceptualization of institutional departure. Thus,

although the widely cited model generally has been considered to be seminal in the field of retention literature, it was not a model for how students were retained by an institution. Rather, it was a descriptive model that explained why students left. In addition, Hurtado and Carter (1997) critiqued the theory for being too ambiguous and difficult to test empirically, and Wolf-Wendel et al. (2009) noted that several scholars have critiqued the theory for being inapplicable to students of color. Reflecting on the latter critique in an interview conducted by Wolf-Wendel et al. (2009), Tinto agreed with his critics. He said he no longer uses the term, *integration*, and he opined that the term is inappropriate and needs to be eliminated.

In the same interview with Wolf-Wendel et al. (2009), Tinto offered sense of belonging as an alternative concept for integration. More recently, Tinto (2015) refined his position on engagement to posit that engagement is primarily important as a contributor to one's sense of belonging, which is a student's perception and meaning of their engagement. Hurtado and Carter (1997) distinguished a sense of belonging as the psychological sense that one is an accepted member of one's community; they used Bollen and Hoyle's (1990) Sense of Belonging Scale to measure it, and they called for more research in this construct and its role in retention. Strayhorn (2012) defined sense of belonging as "students' perceived social support on campus, a feeling or sensation of connectedness, the experience of mattering or feeling cared about, accepted, respected, valued by, and important to the group (e.g., campus community) or others on campus (e.g., faculty, peers)" (p. 3). Hausmann, Schofield, and Woods (2007) found that students who have a sense of belonging are more likely to persist, and Strayhorn (2012) cited studies that found that the lack of sense of belonging can negatively influence

academic performance (Walton & Cohen, 2007) and intention to persist (Berger, 1997). Thus, belonging is an important aspect of retention to consider, and was evaluated among the out-of-state freshmen in this project.

To create a sense of belonging among college students, O’Keefe (2013) posited it is necessary to offer a caring, supportive, and welcoming environment, including an affirmation of diversity and difference. Strayhorn (2012) examined sense of belonging among specific student populations such as students of color, gay students, and low-income students. In his research, Strayhorn (2012) consistently found a positive correlation between student involvement and sense of belonging, and based on this finding, he presented numerous strategies administrators can take to increase sense of belonging. These strategies include presenting welcoming and encouraging words from senior administrators, facilitating connections with peers, encouraging participation in student clubs and organizations, teaching social skills, offering support, informing students about the realities of college life, and, for students who have concerns about finances, which can inhibit sense of belonging, offering information about financial aid and options for financing one’s education. Strayhorn (2012) also cautioned administrators about the need to educate students about time management, given his finding that excessive amounts of time in engagement activities such as studying or working can have deleterious effects on sense of belonging. These research-based strategies to foster sense of belonging were incorporated into the intervention.

### **Homesickness**

Thurber and Walton (2012) wrote that homesickness is common among many university students and can lead to withdrawal from college. They conducted a large

scale literature review on the latest research on homesickness in university freshmen. Based on their findings from the literature, they proposed empirically-based strategies to both prevent and treat homesickness for the college population, while noting that prevention strategies are most effective. The authors were very clear in reporting that previous studies have only understood homesickness in college students from the standpoint of protective and risk factors, but not with respect to intervention strategies. As a result, the authors called upon practitioners and fellow scholars to design and test some of the intervention strategies they recommended.

Based on their review of the literature on homesickness, Thurber and Walton (2012) recommended 13 prevention strategies and 11 treatment strategies for homesickness among college students. Their prevention strategies were:

- establish and encourage decision-making agency;
- provide orienting information about the school;
- shape attitudes about the school through web-based and in-person discussion of its positive aspects;
- encourage practice time away from home in the months prior to matriculation;
- address family stressors;
- plan for how and when to maintain connections with home;
- discourage parents from making “pick-up deals” or framing matriculation as a trial separation from home;
- initiate social contacts prior to the first day of school;
- cultivate host-country friends as well as homeland friends for international students;

- establish healthy lifestyle choices and coping skills;
- educate students about the peer and professional supports that are available on and around campus;
- normalize feelings of homesickness;
- encourage self-compassion.

Their treatment strategies were:

- provide a warm, fun, and relaxed orientation;
- normalize feelings of missing home;
- help students reframe their homesickness as a positive reflection of their loving attachment to home;
- reduce acculturation stress by providing relevant information about students' new environment, community connections, and opportunities to celebrate homeland traditions;
- educate students about exercising control over their mindset and circumstances;
- facilitate social activity and involvement in various aspects of school culture;
- encourage a connection with home that does not eclipse the formation of new friendships at the school;
- encourage connections with other students who come from the same place;
- promote a healthy and inclusive campus culture;
- remind students that treatment for homesickness is a gradual process and not an immediate fix;
- connect students with mental health support resources.

Strategies recommended by other researchers are consistent with those recommended by Thurber and Walton (2012). Stroebe, Schut, and Nauta (2016) proposed a dual process model for managing homesickness. Their model attempts to balance management of stressors related to home with those related to the new place, and they offered similar strategies to those offered by Thurber and Walton (2012). Researcher-recommended strategies offer direction for the development of an intervention to address homesickness for out-of-state freshmen. Given the importance of these strategies in decreasing homesickness, they were one of the primary foci of the intervention in this study.

### **Adjustment to a New Area**

Relocation to a new area requires adjustment, which can be challenging (Hechanova-Alampay, Beehr, Christiansen, & Van Horn, 2002). Black and Gregersen (1991) defined adjustment as “the degree of a person’s psychological comfort with various aspects of a new setting” (p. 498), and they found that a high novelty in one’s new environment in comparison with one’s home environment can lead to increased difficulty in adjustment. Given that Arizona’s climate and geography can be considered highly novel to residents from most other states, it is no surprise that adjustment to Arizona was rated by current out-of-state ASU students as one of their biggest challenges, as noted in Chapter 1. Factors that are positively correlated with adjustment include self-efficacy and social support (Hechanova-Alampay et al., 2002). The proposed intervention included content related to both of these factors.



## **Friends**

A common theme throughout this chapter is the importance of friends. As noted above, friends can have a positive effect on having a sense of belonging (Strayhorn, 2012), managing homesickness (Thurber & Walton, 2012), and adjusting to a new area (Hechanova-Alampay et al., 2002). In response to the question, *What ASU resources or support services have been helpful to you in overcoming your challenges as an out-of-state student at ASU?*, the most oft-selected option by previous WPC freshmen taking the initial survey was *other ASU students (friends)*; sixty-three percent of survey respondents selected this option. Mendelson and Aboud (1999) identified six core functions of friends:

*stimulating companionship* — doing enjoyable, amusing, or exciting things together; *help* — providing guidance, assistance, and other forms of aid; *intimacy* — being sensitive to the other's needs and states and being open to honest expressions of thoughts, feelings, and personal information; *reliable alliance* — remaining available and loyal; *self-validation* — reassuring, encouraging, and otherwise helping the other maintain a positive self-image; and *emotional security* — providing comfort and confidence in novel or threatening situations. (p. 130)

Given the well-documented value and benefits of friends, as well as the likelihood that out-of-state students have little or no friends at their university when they first arrive, offering tips and resources for how to make friends at ASU was an important component of the intervention.

## **Finances**

No analysis of student retention would be complete without a discussion of finances. A university student could be highly engaged at an institution and have a strong sense of belonging yet still be unable to be retained by that institution due to financial reasons. To state it bluntly: in higher education, “you can’t stay if you can’t pay.” At

ASU, students are not even allowed to enroll in classes if they have a past due account balance greater than \$2,000. This reality can be particularly daunting for out-of-state students, who pay more than twice as much in tuition as their in-state counterparts. During the 2015-2016 academic year, ASU non-resident tuition and fees for one academic year totaled \$25,458 (ASU, 2015a), meaning that an ASU degree for an out-of-state student currently costs over \$100,000, without even factoring in room and board. The financial burden became even greater in the 2016-2017 academic year; the Arizona Board of Regents approved a tuition and fee increase of \$1,012 for out-of-state students, raising their annual tuition and fees to \$26,470 (Ryman, 2016).

College affordability is a challenge for many students (Blumenstyk, 2015).

Tuition rates continue to rise throughout the country, and student loan debt is mounting. In just the ten-year span from 2004 to 2014, the average debt upon graduation for college students nationwide jumped from \$18,550 to \$28,950, an increase of 56% (Camera, 2015). Moreover, there is a sharp divide in educational attainment based on family income. Students who have high net costs of attending college are less likely to graduate (Blumenstyk, 2015), and students who score between 1,000 and 1,200 out of 1,600 on the SAT only have a one in six chance of completing a four-year degree if they come from families in the bottom quartile of income, whereas students from the top income quartile with that same range of SAT scores have a two in three chance of graduating (Tough, 2014). Durband and Britt (2012) cited research finding that financial stress is negatively correlated with academic performance, retention, and wellness (Palmer, Bliss, Goetz, and Moorman, 2010; Pinto, Parente, & Palmer, 2001).

One way administrators can assist students with their financial concerns is to provide education on financial literacy (Durband & Britt, 2012). This education can include financial counseling services, presentations and workshops, and websites with links to financial content (Durband & Britt, 2012). It can also include online modules (Grable, Law, & Kaus, 2012). The intervention in this study provided students with links to financial content, including links to existing learning modules already offered at ASU.

### **Out-of-State Students**

One population that has been largely ignored in the retention literature has been out-of-state students. This lack of attention was surprising, given the growth in both the absolute numbers and the percentages of out-of-state students enrolled at colleges and universities nationwide. These gains were a result of postsecondary institutions increasingly targeting out-of-state students during the recruitment process as a means to compensate for declining state funding (Hoover & Keller, 2011). Considering the increasing higher education institutions' reliance upon out-of-state tuition dollars, research on this growing and important population seemed to be warranted.

Although literature on out-of-state student retention overall is lacking, there have been a few key studies that are helpful for beginning to understand the out-of-state student population. Mattern, Wyatt, and Shaw (2013), attempted to understand how college distance from home influenced student retention and student transfer behavior. They conducted a large-scale study using national data to examine enrollment patterns of a cohort of over 800,000 students at four-year institutions in the U.S. The researchers used the distance from the student's home to the college to examine whether there were any differences in decisions to transfer to other institutions. Then, they analyzed students

who transferred to determine whether those students tended to transfer to an institution closer to home. The researchers found college distance from home was indeed strongly associated with decisions to transfer; those further away from home were much more likely to transfer than students going to universities closer to home. Moreover, when students transferred, the median distance from home to their second institution was nearly half the median distance from home to their originating institution. This finding suggests that out-of-state students who are not retained are more likely to transfer to an institution closer to home.

Stephens, Hamedani, and Destin (2014) conducted a study on first-generation college students that provided additional possibilities for interventions for out-of-state students. These researchers attempted to demonstrate how “difference-education,” which is an intervention that educates participants about differences with regard to social identity or backgrounds, can have a dramatic effect on student success outcomes. In their study, they explored 147 first-generation, first-year students at a single university in comparison with a control group of first-year students at the same institution. In this noteworthy study, the researchers asked upperclassmen to speak with the participant group of incoming freshmen about how their experience as first-generation college students had influenced their university experience. The control group also heard stories from upperclassmen, however, those versions of the stories did not include mention of social class background and why that mattered. This simple, but effective intervention had a strong influence on GPA and resource-seeking, and it statistically eliminated the social-class academic achievement gap between first-generation and continuing-generation students who participated in their study. As noted earlier in this chapter, an

affirmation of difference can cultivate a sense of belonging (O’Keefe, 2013), educating students about mindset and agency can help with managing homesickness (Thurber & Walton, 2012), and self-efficacy is linked with adjustment to a new area. In the current study, difference-education was used as part of the intervention to see if exposing out-of-state freshmen to stories of out-of-state upperclassmen could similarly lead to positive outcomes.

A unique challenge when considering any intervention at an institution as large as Arizona State University (ASU) is the issue of scale. Fortunately, researchers have demonstrated that social-psychological interventions in education can be effectively scaled (Paunesku et al., 2015), and Yeager and Walton (2011) provided suggestions for exactly how to do so. One way to scale an intervention is through the utilization of online resources such as a website. Earnest and Dwyer (2010) used such a resource to increase stress-coping skills among college freshmen, and they found that freshmen enjoyed using such a resource. In the current study, the intervention was delivered using a resource website to attempt to increase student engagement and sense of belonging, decrease feelings of homesickness, and provide relevant information on adjusting to the area, making friends, and managing finances for out-of-state freshmen in the ASU W. P. Carey School of Business.

## **Conclusions**

The reviewed literature provided directions for designing and implementing an effective intervention to reduce homesickness and promote the engagement, sense of belonging, and, ultimately, retention of out-of-state students. Drawing from successful previous interventions, the current study hoped to develop a web-based tool that would

have a measurable positive impact on the lives of out-of-state freshmen and ensure that they continue their education at ASU.

## CHAPTER 3

### METHOD

#### **Setting and Participants**

This study took place at Arizona State University's Tempe campus. Arizona State University (ASU) is a large public university located in the southwestern part of the United States in the Phoenix metropolitan area. The Tempe campus had 50,246 students enrolled in the fall 2014 semester (ASU, 2015b); 60% were state residents and 40% were non-residents. The university, which has undergone rapid growth and change since 2002, is hailed as a New American University that values excellence, access, and impact and has a culture of innovation and entrepreneurship (ASU, n.d.). Its charter states:

ASU is a comprehensive public research university, measured not by whom we exclude, but rather by whom we include and how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural and overall health of the communities it serves (ASU Office of the President, n.d.).

The participants in this study were out-of-state students on the ASU Tempe campus. To narrow the focus and reduce the influence of confounding factors, a purposive sample of only out-of-state students at the Tempe campus who were first-time, full-time freshmen were recruited from the W. P. Carey School of Business (WPC), the university's second largest college. I chose this college because I've been a department liaison to the college and therefore already have established relationships within the college and a solid understanding of how the college operates. The college's retention rates also closely mirror those of the university, so it can serve as a sample of the larger ASU population. In fall 2013, the undergraduate student population within WPC was comprised of 60.7% male and 39.3% female (Arizona State University Office of

Institutional Analysis, n.d.). The racial composition, in order from largest to smallest, was 57.1% Caucasian, 16.0% Hispanic, 6.3% Asian American or Pacific Islander, 3.1% two or more races, 2.9% African American, 0.7% American Indian, and 0.5% unknown. Another 13.3% were international students.

The initial cycle of research was completed in spring 2016. During this cycle, 108 freshmen and 80 sophomores or juniors participated in a needs, experiences, and interests survey, so that I could gain a better understanding of the population and to gauge interest and gather content ideas for the resource website before it was created and tested. Among the 84 freshmen that year who shared demographic information, 29.8% graduated from high school in the Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, or Wisconsin; 25.0% graduated from California; 19.1% graduated from high school in the West outside of California: Alaska, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, or Wyoming; 14.3% graduated from the Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, or Vermont; and 11.9% graduated from the South: Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, Washington, D.C., or West Virginia. These regions were based on those demarked by the United States Census Bureau (U.S. Census Bureau, n.d.). Of the freshmen, 53.6% were female, 45.2% were male, and 1.2% were another gender identity.

In the 2016-2017 academic year, after the release of the intervention, there were 951 out-of-state first-time full-time freshmen on the Tempe campus in the business



school in the spring. All such students were invited to participate in the study; 199 students, or 20.9% of the cohort, participated. Among the 171 participants who disclosed the state in which they graduated from high school, 32.8% graduated from the Midwest, 28.7% graduated from California, 17.0% graduated from the West outside of California, 13.5% graduated from the South, and 8.2% graduated from the Northeast. Among the 170 participants who shared information about their gender identity and their racial or ethnic identification, 58.8% were female and 41.2% were male; 69.4% identified as White, 8.8% Asian, 8.2% Hispanic or Latino, 7.1% two or more races, 4.1% Black or African American, 1.8% American Indian or Alaska Native; and 0.6% as another racial or ethnic identity.

In the interest of being upfront, it's worth noting that there are issues with the participant selection and small sample size that might have influenced the results of this study. This study did not use a randomized control group. It might be possible that students who accessed the out-of-state website were students who naturally exhibited behaviors that promoted their own success, such as checking their email and seeking resources. Such students were probably more likely to be retained because they received important information and sought support. Moreover, only a small percentage of the overall WPC out-of-state population participated in the study. To mitigate these concerns, I collected a variety of data. Nevertheless, the quantitative results of this study need to be evaluated with the study's limitations in mind. These issues are explored further in Chapter 5.

## **Research Design and Procedures**

This was an action research study. Ivankova (2015) noted there are multiple definitions of action research, yet listed several common distinguishing features: “its practical focus, community-based orientation, participatory and collaborative nature, emphasis on empowerment, and value of reflection” (p. 27). An action researcher understands that knowledge is contextualized and therefore focuses on a local problem of practice in order to make meaning of that problem in local terms and then design an intervention to address that problem.

This study was conducted using mixed methods. Quantitative data and qualitative data were collected and analyzed so that the data could be compared for evidence of convergence, contradiction, or complementarity, as recommended by Flick (2014). This mixed method approach is beneficial because it allows a thorough examination of the problem, which informs the intervention and then rigorously evaluates the results of that intervention (Ivankova, 2015). Quantitative data included responses to numerical and Likert-type survey items, resource website utilization counts, and retention rates of the target population from fall semester to spring. Qualitative data included participant comments obtained in interviews and shared in online surveys and artifacts of essay papers from out-of-state business freshmen who reviewed the site and wrote an optional one-page reflection on it for extra credit in their WPC 101 course.

### **Innovation**

The innovation implemented was a resource website specifically for out-of-state freshmen at ASU. This website was hosted on the ASU First-Year Success Center website, and the content was developed based on input from out-of-state students.

Drawing from the literature, the website was intentionally designed to provide valuable information addressing the retention constructs of engagement and sense of belonging. The website promoted engagement by teaching students how to use institutional resources and providing them success-oriented advice to steer them in the right direction (Kuh, 2011). Given that engagement encompasses involvement (Kuh, 2001), the website also provided streamlined information in one convenient place to help out-of-state freshmen get involved, and it educated students about the benefits of involvement, as advocated by Webber et al. (2013). Moreover, the website was a way of using technology to increase student involvement, and it did so by connecting students to college social networks and by promoting relevant events on campus, as suggested by Heiberger and Harper (2008).

To promote sense of belonging, the first email to out-of-state students introducing the website included a welcome message from the First-Year Success Center. The welcome commended the students on their ambition and bravery, articulated understanding of their experience, and conveyed support. Such a strategy is consistent with O’Keefe’s (2013) recommendation to offer a caring, supportive, and welcoming environment along with an affirmation of diversity and difference. The website also facilitated connections with peers, encouraged participation in student clubs and organizations, taught social skills, offered resources for student support, informed students about the realities of college life, offered information about financial aid and options for financing one’s education, and educated students about time management.

The innovation also addressed four key issues of concern, particularly relevant for out-of-state students: homesickness, adjusting to a new location, the need to make

friends, and finances. To assist with preventing and managing homesickness, the website provided a selection of Thurber and Walton's (2012) tips for doing so, as well as information on ASU's student counseling center. Information on adjusting to a new location included fun facts about ASU and the Phoenix metropolitan area, including local attractions and information on the ASU Culture Pass, which enables ASU students to enjoy many of these local attractions for free. It also contained information such as where students can find different cultural or ethnic food, and, based on research done by Hechanova-Alampay et al. (2002), it included messages fostering self-efficacy and social support. To address the need to make friends, beyond facilitating connections with peers, the website contained a list of conversation starters and topics that students could use when trying to establish new friendships. These components were consistent with the strategies offered by Strayhorn (2012). It also featured the ASU Outdoors Club, a large student group that organizes regular outings such as hikes and road trips to beautiful places in the area. This club could be helpful for both making friends and adjusting to the area. Finances were addressed by providing information on student employment, financial aid, and links to financial literacy modules, in accordance with the practices cited by Durband and Britt (2012) and Grable et al. (2012).

Another major feature that addressed all four out-of-state student issues together along with sense of belonging, was a brief video of out-of-state juniors and seniors talking about why they love ASU and how they were able to thrive at ASU as an out-of-state student. Importantly, the students in the video also talked about the challenges of being an out-of-state student and how they were able to overcome those challenges. This sort of difference-education, in which students explicitly acknowledge their identities and

how those identities affect their experience can have powerful effects on others in the same situation (Stephens et al., 2014).

This intervention addressed the needs of out-of-state freshmen while being appropriate for the context of the institution and the college. ASU and WPC do not lack resources or support services for students, especially for freshmen. There are hundreds of student organizations at the university, including over 40 that are related to business, and club fairs in which students can meet representatives of these groups. All ASU freshmen have access to a first-year success coach, who is a junior, senior, or graduate student who provides comprehensive personalized support for transitioning to the university and having a successful first year. Freshmen are required to take a one-credit university 101 course, which orients students to the campus and teaches them tools to be successful. WPC students living on campus, as the vast majority of out-of-state freshmen do, receive peer support from Community Assistants and Residential Engagement Leaders, who also organize fun activities in the residence halls to facilitate student connections. Before the school year even begins, all freshmen in WPC are invited to attend Camp Carey, a three-day retreat in the cool pines of Northern Arizona. WPC also offers its own career center – in addition to the university career center – and WPC recently created a mentoring program that targets out-of-state students. In this program, out-of-state freshmen are matched based on similar interests with an experienced student, who helps the freshmen broaden their social and professional network by going with the freshmen to mentorship events and community service activities. Students also have access to standard campus services or experiences such as new student orientation, tutoring, and counseling. Thus, the challenge at ASU and WPC is not a lack of resources, but rather making sure students

are aware of them, especially those who need them most. The out-of-state student website informed out-of-state freshmen about key resources that could benefit them, and it provided them with tips for being successful as an out-of-state student. The website did not duplicate any existing services. Instead, it met a context-specific need.

There was also much interest in this intervention among previous out-of-state students. In the initial survey conducted of WPC out-of-state students, students were asked how likely they would be to use a resource website for out-of-state students. Half of the freshmen respondents indicated they would be very likely or likely to use it, and another 32% indicated they would be somewhat likely to use it. When asked about features that would be appeal to them, 68% indicated tips and resources on how to adjust to life in Arizona, 65% indicated tips and resources on how to manage finances, 63% selected tips and resources on how to make friends at ASU, 59% selected tips and resources on how to manage feelings of homesickness, and 46% indicated a video of out-of-state students talking about how they overcame challenges and offering advice. These data added further evidence that the intervention would be well-suited to the local context.

Equally important to fitting in with the local context, the intervention aligned with the relevant theoretical frameworks. By helping students make local connections and adjusting to the area, the website was designed to facilitate engagement and sense of belonging. Additionally, by showing students a video of other students who share the experience of coming to ASU from another state, the website could normalize and validate their feelings as a way of reducing homesickness (as recommended by Thurber and Walton, 2012), while providing relatable role models and inspiration.

Another important aspect of the website that made it attractive as an intervention was its practicality. For any intervention to be successful at an institution as large as ASU and a college the size of WPC, the intervention must be able to be implemented on a large scale. A website fit this criterion. The website URL was easily disseminated via email, and every student in the target population could utilize it. Unlike a program or event that has limitations on timing, the website was highly accessible and could be utilized multiple times at a student's convenience. The cost was minimal, and unlike printed materials, the content could be dynamic. Further, websites allowed for easy data collection, given that it was possible to know what pages got accessed and how much time was spent on each page.

The innovation was developed in three steps. The first step occurred in spring 2016, when the online survey was disseminated and individual interviews were conducted to assess WPC out-of-state student interests and needs, including gathering input on what content should be included in the site. During this phase, consultation was done with, and buy-in generated from, the WPC associate deans and student retention team. Such stakeholder investment is an important component of action research (Herr & Anderson, 2015). In the summer of 2016, the content for the website was developed, including the video, and submitted to the First-Year Success Center's website administrators for design and production. This phase of the project also included showing the website to other ASU staff to gather their feedback and make any recommended changes. The resource was then launched and ready for the fall 2016 freshmen. The link to the website was sent to the target population during the first week of classes, and the WPC 101 Coordinator agreed to promote the website to out-of-state

freshmen taking the WPC 101 course, by offering extra credit to out-of-state students who reviewed the site and wrote a one-page reflection about it, and by sending a mid-semester email to the target population to remind them about the site and the extra credit opportunity. In addition to these reflections being included in this study as data artifacts, they prompted students to access the site at multiple points throughout the semester. Additionally, first-year success coaches were encouraged to share the site with their out-of-state freshmen as they met with them for coaching appointments. There were no data collected on how often the site was discussed or how many out-of-state business freshmen were referred to the site during these appointments, however, 514 out-of-state business freshmen met with a first-year success coach during the fall 2016 semester and thus could have received information about the site from their first-year success coach.

### **Instruments and Data Collection Procedures**

Instruments and data collection procedures were aligned with the research questions. Specifically, instruments were used to examine levels of engagement, sense of belonging, and homesickness. Students were also directly asked if the website provided them with useful information on adjusting to Arizona, making friends, and managing finances. Mixed methods of inquiry were utilized.

Quantitative data was collected through an online survey administered before and after the development of the resource website (spring 2016 and spring 2017). To address the research question about engagement, the survey contained an item that asked students how much time they spend in a typical week engaged in a variety of activities. This item was used with permission from *The College Student Report*, National Survey of Student Engagement (see Appendix H). The research question about sense of belonging was



measured through responses to a Likert scale item that asked respondents to rate their level of agreement with the statement, “I feel like I am part of the ASU community.” This statement was consistent with the three items used in Bollen and Hoyle’s (1990) Sense of Belonging Scale. To inform the research question about homesickness, the survey asked participants to rate both the severity and the frequency of their feelings of homesickness. To answer the research question about retention, an analysis was conducted of overall business out-of-state freshman retention during the year in which the resource website was released, in comparison to retention of business out-of-state freshmen in the year prior to the intervention. Finally, website utilization was tracked, including what pages got accessed, and how much time was spent on each page.

Qualitative data included open-ended questions in the online survey. Participants were asked to provide direct feedback on the resource website, including what impact, if any, it had on them. Data also included transcripts from follow-up interviews with seven participants, including those who used the site and those who did not. The interview participants who used the site were asked additional questions about their perceptions of the site and its usefulness; those who did not use the site were asked why they did not.

A third source of qualitative data was the collection of 15 essays that out-of-state business freshmen opted to write for extra credit for their WPC 101 course in fall 2016. For this optional extra credit assignment, students were asked to review the site and then write a one-to-two-page essay reflection summarizing the information they reviewed, stating which parts of the site they found the most interesting and why, explaining how they might use the information to enhance their experience at ASU, and sharing tips or advice, based on the website content they reviewed, that they would give to out-of-state

freshmen who are struggling with their transition to ASU. These essays were used as existing artifacts, without any identifying student information.

A timeline of the study is provided in Table 4.

Table 4

*Timeline of the Study*

Sequence	Actions	Methods
Spring 2016	<ul style="list-style-type: none"> <li>Gathered input from out-of-state students on website, and collected data on student needs, experiences, and levels of engagement, sense of belonging and homesickness</li> <li>Consulted with and generated buy-in from WPC</li> </ul>	<ul style="list-style-type: none"> <li>Online survey and individual interviews conducted</li> <li>Met with WPC associate deans and student retention team, and presented my research</li> </ul>
Summer 2016	<ul style="list-style-type: none"> <li>Website developed</li> </ul>	<ul style="list-style-type: none"> <li>Submitted content to design team</li> <li>Collected feedback from ASU staff and made desired changes</li> </ul>
Fall 2016	<ul style="list-style-type: none"> <li>Shared website with new cohort of out-of-state freshmen</li> <li>Monitored website usage</li> </ul>	<ul style="list-style-type: none"> <li>Sent email about the website to out-of-state freshmen; further promotion of site through WPC 101 course and from first-year success coaches</li> <li>Identified patterns of usage</li> </ul>
Spring 2017	<ul style="list-style-type: none"> <li>Examined fall-to-spring retention trends</li> <li>Gathered student feedback on website, and collected data on levels of engagement, sense of belonging and homesickness</li> </ul>	<ul style="list-style-type: none"> <li>Analyzed retention data</li> <li>Conducted online survey and interviews, and reviewed extra-credit student essay artifacts from WPC 101 course</li> </ul>

**Data Analysis**

The research questions were:

RQ 1 How, and to what extent, was the resource website associated with:

- a. engagement at ASU for out-of-state freshmen?
- b. sense of belonging at ASU for out-of-state freshmen?
- c. feelings of homesickness for out-of-state freshmen at ASU?
- d. mid-year retention of out-of-state freshmen at ASU?

RQ 2 Did the resource website provide useful information on:

- e. adjusting to Arizona?
- f. making friends at ASU?
- g. managing finances?

To analyze the quantitative data, Kruskal-Wallis and Chi-Square tests were conducted to compare aggregate responses between three groups of business freshmen: those in the 2016-2017 academic year who indicated they had used the out-of-state resource website, those in that same year who indicated they had not used the resource website, and freshmen from the previous academic year, before the site had been created. The research question about engagement was answered based on comparative responses to the National Survey on Student Engagement item; the sense of belonging question was connected to the Likert scale ratings participants used to rate their belonging; the homesickness question was answered by looking at participant responses to the questions about the severity and the frequency of their feelings of homesickness. Descriptive statistics were used to answer the question of whether or not the website provided useful information on adjusting to Arizona, making friends at ASU, and managing finances. Given that the pre-intervention survey also included specific items about friends, Kruskal-Wallis tests were also used to compare responses between pre-intervention students and post-intervention students regarding those items.

To answer the question about retention, an examination was conducted of overall WPC out-of-state freshmen fall-to-spring retention in the academic year in which the resource website was introduced in comparison with the previous year. Qualitative data for all of the questions were analyzed using Strauss and Corbin's (1998) grounded theory approach. Responses were coded using a descriptive coding technique, as explained by Saldaña (2013). Initial codes were categorized and then organized into themes. These themes were then compared to the quantitative data for evidence of convergence, contradiction, or complementarity, as recommended by Flick (2014).

## CHAPTER 4

### RESULTS

This study examined the relation between a resource website and the engagement, sense of belonging, homesickness, and retention of out-of-state freshmen at ASU. Mixed methods of inquiry were utilized; data sources included student surveys, student interviews, student essay artifacts, website utilization records, and university retention reports. This chapter contains the results of the analysis of the variety of data collected to answer each research question. The specific research questions were:

RQ 1 How, and to what extent, was the resource website associated with:

- a. engagement at ASU for out-of-state freshmen?
- b. sense of belonging at ASU for out-of-state freshmen?
- c. feelings of homesickness for out-of-state freshmen at ASU?
- d. mid-year retention of out-of-state freshmen at ASU?

RQ 2 Did the resource website provide useful information on:

- a. adjusting to Arizona?
- b. making friends at ASU?
- c. managing finances?

## **Overall Website Utilization and Quality**

Before addressing the research questions, it is important to understand the context of how much the site got utilized and overall student impressions of quality. This section therefore focuses on data from website utilization records along with student survey and interview data.

**Utilization.** The primary challenge for the resource website was a relatively low number of unique users. Less than 19% ( $n = 33/175$ ) of survey participants had utilized the site. Despite the website being promoted to over 1,000 business freshmen, and the presence of over 3,500 out-of-state freshmen at ASU overall who could have accessed the site, the site did not generate a correspondingly high level of traffic.

Through January 8, 2017, the welcome video on the home page of the website only had 428 total views. Similarly, Table 5 shows that the main content pages each had 443 unique page views or less.

Table 5

*Out-of-State Website Utilization, August 1, 2016 – January 8, 2017*

Page	Total Page Views	Unique Page Views	Average Time on Page (seconds)	Bounce Rate
Landing page	2,032	1,339	203.2	37.6%
Adjusting to Arizona	642	443	224.1	26.8%
Making friends at ASU	482	358	144.7	36.8%
Preventing & managing homesickness	458	348	203.1	54.6%
Getting involved at ASU	391	288	146.6	21.1%
Managing finances	295	240	141.6	0.0%
Total	4,300	3,016	190.4	-

Evidently, the site was not sufficiently promoted to the target population, and/or students did not believe it would be useful and therefore did not bother to visit it. In interviews with five out-of-state students who did not utilize the site, four (80.0%) said their reason for not accessing the site was they were not aware of it. When told about the site’s contents, all of these students expressed interest in using it. One even exclaimed, “What the heck!” as if to suggest he could have benefitted from learning about the site much sooner.

There was also evidence that some students were aware of the site, but did not find it appealing or necessary. When the fifth interview participant who did not utilize the site was asked to explain why she did not, she said, “I just didn’t need to...I’m adjusting pretty well...Colorado and Arizona culture are pretty similar, so it wasn’t a

huge adjustment.” One of the survey participants who accessed the site wrote, “I was told to go there for an assignment and write an essay on it, (*sic*) that is the only reason I visited the site.” Additionally, one of the interview participants who utilized the site described her surprise at how beneficial it was when she was introduced to it by her first-year success coach. She said, “It wasn’t what I was expecting. It was a lot better than I expected.”

Although the number of unique users was lower than desired, utilization levels among those who accessed the site appeared to be high, as reflected in Table 5. On average, users spent three minutes and ten seconds on each page. For reference, Haile (2014) found that the typical reader spends less than 15 seconds on a web page, and Nielsen (2011) suggested that two minutes or more spent on a web page is considered “an eternity on the Web.” Moreover, nearly all of the pages’ bounce rates, which are the percentages of sessions in which a user only viewed a single page before exiting the site, were under 40%; Peyton (2014) considered bounce rates under 40% excellent. These data indicate that the individuals who utilized the site were likely to access more than one page and to spend substantial time reading the content on the pages they accessed.

Website utilization records also provided insights on the time of the semester in which the site was accessed. As shown in Figure 1, the website generated the highest amounts of traffic at the beginning of the school year in August when the site was first announced, with a second spike after Labor Day, and a third spike at the end of the fall semester during the last week of classes, which was the deadline for business students taking WPC 101 to submit their extra credit essay papers reflecting on the site.



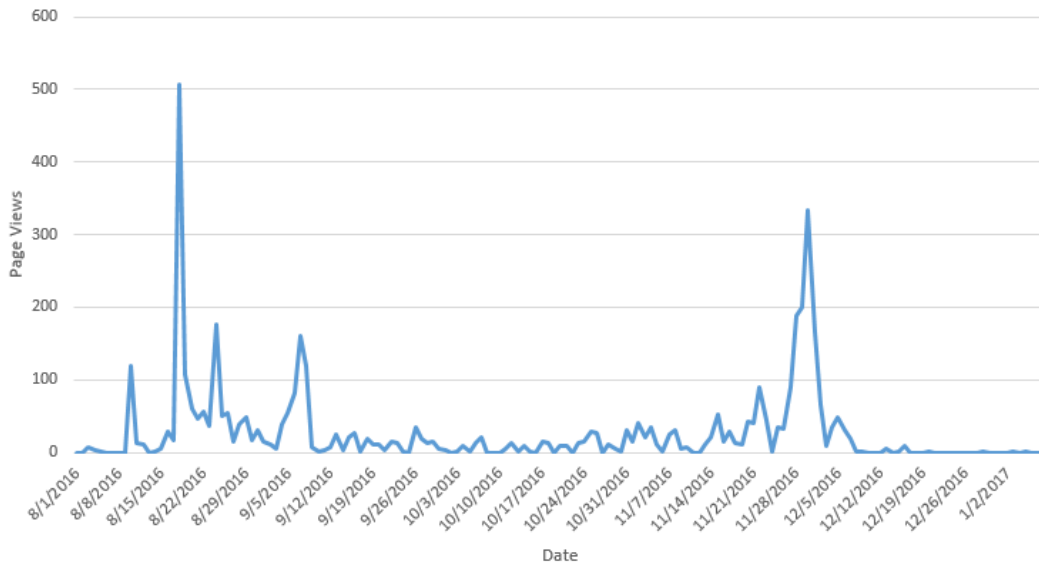


Figure 1. Timing of out-of-state website utilization, August 1, 2016 – January 8, 2017.

Overall, 45.1% (n = 1,940/4,300) of the website’s page views during the fall, 2016 semester occurred between August 1 and September 8. The extent and timing of website utilization, along with the relatively low number of unique users, are important factors to keep in mind when evaluating the quantitative results of the study.

**Quality.** Overall, it seems the website was a beneficial resource for out-of-state business freshmen at ASU. The most prevalent theme among the qualitative data sources was students reporting the website provided them with helpful information. These findings were mirrored in student ratings of the usefulness of the site, presented in Table 6.

Table 6

*Topics for Which Survey Respondents Reported the Site Provided Useful Information*

Topic	Yes
Adjusting to living in Arizona	96.8% (n = 30/31)
Getting involved at ASU	96.7% (n = 29/30)
Making friends at ASU	86.2% (n = 25/29)
Preventing & managing homesickness	83.3% (n = 25/30)
Managing finances	82.8% (n = 24/29)

As seen in Table 6, each page on the site was considered useful by 82.8% or more of out-of-state students who used the site. In open-ended comments, interviews, and essays, students also commented on how well-organized the site was and how easy the site was for them to navigate. Open-ended survey comments included: “Awesome website, lots of help and info,” “Great work. Very easy to navigate,” and “Very well organized and helpful.” They also explained how the site helped them with the challenges they experienced during their first year at ASU as out-of-state students. Even students who were having an overall positive experience at ASU indicated the site provided comfort to them by knowing it was available to them at any time if they encountered difficulty in the future. As one of the student essayists wrote,

Luckily, my transition from Chicago to Tempe has been pretty smooth so far...It is comforting to know that if I ever do have issues related to being from out of state, there are many resources that are available to me including ASU’s out-of-state student website.

Overall, the evidence indicated the site was a high quality valuable resource.

## **Research Question #1a Results: How, and to What Extent, Was the Resource Website Associated with Engagement at ASU for Out-of-State Freshmen?**

This research question was examined through utilization of both quantitative and qualitative measures. The quantitative measures addressed the *extent*, and the qualitative measures focused on the *how*.

**Extent.** To gauge the extent to which the resource website was associated with engagement, the results from an online survey distributed to out-of-state business freshmen were examined over two consecutive years. Three items in the survey pertained to engagement. The first item, from the National Survey of Student Engagement, was *About how many hours do you spend in a typical 7-day week doing the following?* (Item used with permission—see Appendix H— from *The College Student Report*, National Survey of Student Engagement, Copyright 2001-16 The Trustees of Indiana University). Participants were then presented with a matrix of sub-items, which included activities such as preparing for class, working for pay on and off campus, doing community service or volunteer work, relaxing and socializing, providing care for dependents, and commuting to campus; participants then used a scale to indicate the quantity of hours they spent in a typical week engaged in each of those activities. For the purposes of this study, I focused on the sub-item, *Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)*. These sorts of activities were encouraged in the out-of-state web resource; therefore, this sub-item was the most relevant.

To analyze participant responses to the item on how much time they spent in a typical week participating in co-curricular activities, Kruskal-Wallis tests were performed

to compare aggregate responses from three groups of out-of-state freshmen: those who indicated they had used the out-of-state resource website, those who indicated they had not used the resource website, and freshmen from the previous academic year, before the site had been created. Table 7 contains the frequency distributions for this item, and Tables 8 and 9 contain results from the Kruskal-Wallis tests.

Table 7

*Engagement in Co-Curricular Activities*

	Used Site	Did Not Use Site	Previous Year	Total
Zero Hours	3.2% (n = 1)	14.1% (n = 20)	18.9% (n = 20)	14.7% (n = 41)
1-5 Hours	35.5% (n = 11)	47.2% (n = 67)	40.6% (n = 43)	43.4% (n = 121)
6-10 Hours	29.0% (n = 9)	20.4% (n = 29)	23.6% (n = 25)	22.6% (n = 63)
11-15 Hours	16.1% (n = 5)	13.4% (n = 19)	11.3% (n = 12)	12.9% (n = 36)
16-20 Hours	9.7% (n = 3)	4.2% (n = 6)	4.7% (n = 5)	5.0% (n = 14)
21-25 Hours	6.5% (n = 2)	0.0%	0.0%	0.7% (n = 2)
More than 30 Hours	0.0%	0.7% (n = 1)	0.9% (n = 1)	0.7% (n = 2)
Total	100.0% (n = 31)	100.0% (n = 142)	100.0% (n = 106)	100.0% (n = 279)

Note:  $X^2(2, N = 279) = 7.90, p = 0.02$

Table 8

*Co-Curricular Engagement Kruskal-Wallis Test*

	Used Site	Did Nott Use Site	Previous Year	Total
Mean Rank	176.29	136.59	133.95	
N	31	142	106	279

*Note:*  $X^2(2, N = 279) = 7.90, p = 0.02$

Table 9

*Co-Curricular Engagement Kruskal-Wallis Post Hoc Comparisons*

	Used Site and Did Not Use Site	Used Site and Previous Year	Did Not Use Site and Previous Year
Mean Rank	107.47 and 82.53	84.82 and 64.37	125.56 and 123.08
Chi-Square	7.06	6.94	0.08
Degrees of Freedom	1	1	1
<i>p</i> -Value	0.01	0.01	0.78

As shown in Table 7, there were much larger frequencies of out-of-state freshmen who used the resource website in the higher engagement levels compared to out-of-state freshmen who did not use the site and the out-of-state freshmen from the previous academic year. Whereas 61.3% of out-of-state freshmen who used the site engaged in six or more hours of co-curricular activities in a typical week, only 38.7% of the out-of-state freshmen who did not use the site and 40.6% of the previous year's out-of-state freshmen engaged at that level. The differences are also captured in the results of the Kruskal-

Wallis tests provided in Table 8 and 9. The mean rank co-curricular engagement score for those who used the site was 176.29, compared to 136.59 for those who did not use the site and 133.95 for the previous cohort of out-of-state freshmen. These results are significant at the  $p \leq 0.05$  level, meaning there is greater than 95% certainty that utilization of the out-of-state resource website was connected with higher levels of co-curricular engagement. The results are statistically significant when comparing those who used the site with those who did not use the site, and when comparing those who used the site with the previous cohort of out-of-state freshmen.

The second survey item pertaining to engagement was *I have joined (or plan to join) an ASU student club or activity* and was a straightforward yes-no question. As with the first item pertaining to engagement, responses among the three groups of out-of-state freshmen were compared. For this item, a chi-square test was run. The results are presented in Table 10.

Table 10

*ASU Student Club or Activity Membership*

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	Used Site	Did Not Use Site	Previous Year	Total
Yes	100.0% (n = 31)	95.1% (n = 135)	92.6% (n = 100)	94.7% (n = 266)
No	0.0%	4.9% (n = 7)	7.4% (n = 8)	5.3% (n = 15)
Total	100.0% (n = 31)	100.0% (n = 142)	100.0% (n = 108)	100.0% (n = 281)

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Note:  $X^2(2, N = 281) = 2.71, p = 0.26$

As shown in Table 10, there was no statistically significant difference between the groups. Thus, it appears that usage of the resource website was not associated with ASU student club or activity membership.

The third survey item pertaining to engagement was *I currently hold or plan to hold a leadership position within an ASU student club or activity*. This item was dichotomous yes-no item, like the previous one on membership. Results of the chi-square test comparing the three groups of students are available in Table 11.

Table 11

*ASU Student Club or Activity Leadership*

	Used Site	Did Not Use Site	Previous Year	Total
Yes	64.5% (n = 20)	57.7% (n = 82)	43.5% (n = 47)	53.0% (n = 149)
No	35.5% (n = 11)	42.3% (n = 60)	56.5% (n = 61)	47.0% (n = 132)
Total	100.0% (n = 31)	100.0% (n = 142)	100.0% (n = 108)	100.0% (n = 281)

Note:  $\chi^2(2, N = 281) = 6.83, p = 0.03$

Table 12

*ASU Student Club or Activity Leadership Chi-Square Post Hoc Comparisons*

	Used Site and Did Not Use Site	Used Site and Previous Year	Did Not Use Site and Previous Year
Pearson Chi-Square Value	0.48	4.25	4.97
Degrees of Freedom	1	1	1
<i>p</i> -Value	0.49	0.04	0.03

There was a statistically significant difference in club leadership experience or aspirations; however, the difference was related to the academic year rather than to website usage. As shown in Table 12, there was not a large difference in leadership experience or aspirations between this year’s groups of freshmen; the significant differences were between this year’s groups of freshmen and the previous cohort of freshmen.

**How.** To understand how the resource website was associated with engagement, and possibly explain the significant finding that students who utilized the site had much higher levels of time spent in co-curricular activities, three sources of qualitative data were analyzed: responses to the open-ended survey item, *If Yes (you accessed the out-of-state student resource website), please provide feedback on this website and its value to you as a student who came to ASU from another state*, student interview transcripts, and artifacts of out-of-state freshmen extra-credit essay papers in which out-of-state students reflected on the website. As noted in Chapter 3, qualitative data were analyzed using Strauss and Corbin’s (1998) grounded theory approach. Responses were coded using a



descriptive coding technique, as explained by Saldaña (2013). Initial codes were categorized and then organized into themes. These themes were then compared to the quantitative data for evidence of convergence, contradiction, or complementarity, as recommended by Flick (2014).

Little information on how the resource website was associated with engagement could be gleaned from the open-ended question in the survey or from interviews with students who had utilized the resource. These data sources mostly yielded information on the other research questions. The only reference among these two sources of data for how the site was related to engagement was a survey comment in which a student wrote, “Helped me get involved.” The student essay artifacts provided much more useful insights for this particular research question.

Among the student essay artifacts, website utility for engagement emerged as a major theme. Students wrote extensively about how the website fostered their engagement. Based on their reflections, the primary way the website fostered engagement was by providing useful information on how to get involved. As one student wrote, “The ASU out-of-state website provides many ways you can get involved. From clubs to organizations, there is something for everybody...The website is great at directing you to things that may interest you.” Another student wrote, “The website lists a variety of different organizations which one can get involved with which is a huge plus for me because the options are unlimited and I found over five clubs that interested me.” A third student wrote,

Personally, I found the tab “Get Involved” to be the most interesting because it held information on ways how (*sic*) to make new friends and get involve (*sic*) in

the community. I can use the information I found to enhance my experience at ASU by attending some club meetings and potentially joining them...

These quotes demonstrate that out-of-state freshmen utilized the resource website to find engagement opportunities of interest.

Another way in which the resource website was associated with engagement was getting students excited about the plethora of engagement opportunities available to them at such a large university. This finding is reflected in the following passage:

I was always extremely involved in high school, so the “Getting Involved” tab was my favorite to browse through. The number of clubs, organizations, and Sun Devil Football game day events are remarkable. It seems like no matter what your interests or background there is something you can do to get involved...Reading about the Sports Business Association and Sports Business Scholars was very interesting and exciting.

Another student wrote, “...I am still excited to get even more involved with different organizations and clubs that interest me.” A third student wrote,

One of the most important things to me is sports, so I was very interested in what this website had to say about athletics...Luckily, as this website shows to me, there are many ways to be a part of the university and community through athletics. With all of the ASU sport teams, the fitness complex, Sparky’s Den, professional sports teams in the area, and finally the thousand student organizations I have many opportunities to stay active and be around athletics at all times.

These comments illustrate how, in addition to providing useful information on engagement opportunities, the resource website also got students excited about being engaged.

Along with receiving useful and exciting information about *how* to get engaged in campus life, it is clear that out-of-state freshmen who utilized the resource website also gained an appreciation for *why* they should get involved. One of the essay prompts asked *Based on the website content you reviewed, what tips or advice would you give to out-of-*

*state freshmen who are struggling with their transition to ASU?* While responding to this prompt, many out-of-state students articulated the benefits of involvement. One student wrote,

I would suggest one thing to any out of state students struggling with adjusting to ASU life: Get involved! ASU offers so many things to do, which can spark your interest in a new activity, take your mind off being homesick, help you meet new people, and maybe even help you feel more at home.

Another wrote,

I think the best way to help the transition is to join an organization or club of your liking. Although it may involve going out of your comfort zone, the clubs and organizations are usually people who have similar hobbies and interests as you, making bonding a lot smoother.

A third student wrote, “Getting involved opens up many opportunities in the future like internships and leadership positions.” Another wrote, “You should also join organizations, intramurals and fraternities to make new friends and memories that will last you a lifetime.” These students clearly understood the value of campus life engagement after utilizing the resource website.

### **Research Question #1b Results: How, and to What Extent, Was the Resource Website Associated with Sense of Belonging at ASU for Out-of-State Freshmen?**

As with the question on engagement, the research question about belonging was examined through a combination of quantitative and qualitative techniques. The quantitative measures illuminated the extent while the qualitative analysis explained the how.

**Extent.** The survey that out-of-state freshmen completed was used to measure the extent to which the resource website was associated with sense of belonging. The survey contained a Likert scale item that asked respondents to rate their level of agreement with

the statement, *I feel like I am part of the ASU community*. This statement was consistent with the three items used in Bollen and Hoyle's (1990) Sense of Belonging Scale.

Responses from the three groups of out-of-state freshmen were compared: those who indicated they had used the out-of-state student resource website, those who indicated they had not used the site, and freshmen from the previous academic year, before the resource website had been created. Table 13 contains the frequency distributions for this item, and Tables 14 and 15 contain results from the Kruskal-Wallis tests.

Table 13

*Belonging*

	Used Site	Did Not Use Site	Previous Year	Total
Strongly Agree	38.7% (n = 12)	30.3% (n = 43)	29.6% (n = 32)	31.0% (n = 87)
Agree	41.9% (n = 13)	36.6% (n = 52)	35.2% (n = 38)	36.7% (n = 103)
Slightly Agree	12.9% (n = 4)	26.1% (n = 37)	25.0% (n = 27)	24.2% (n = 68)
Slightly Disagree	6.5% (n = 2)	5.6% (n = 8)	5.6% (n = 6)	5.7% (n = 16)
Disagree	0.0%	1.4% (n = 2)	3.7% (n = 4)	2.1% (n = 6)
Strongly Disagree	0.0%	0.0%	0.9% (n = 1)	0.4% (n = 1)
Total	100.0% (n = 31)	100.0% (n = 142)	100.0% (n = 108)	100.0% (n = 281)

Note:  $X^2(2, N = 281) = 2.39, p = 0.30$

Table 14

*Belonging Kruskal-Wallis Test*

	Used Site	Did Not Use Site	Previous Year	Total
Mean Rank	160.52	140.36	136.25	
N	31	142	108	279

Note:  $X^2(2, N = 281) = 2.39, p = 0.30$

Table 15

*Belonging Kruskal-Wallis Post Hoc Comparisons*

	Used Site and Did Not Use Site	Used Site and Previous Year	Did Not Use Site and Previous Year
Mean Rank	97.32 and 84.75	79.19 and 67.36	127.11 and 123.38
Chi-Square	1.78	2.29	0.18
Degrees of Freedom	1	1	1
p-Value	0.18	0.13	0.67

There were no statistically significant differences in the sense of belonging among the three groups of students. While 80.7% of out-of-state students who utilized the site either agreed or strongly agreed that they felt a part of the ASU community, there were similarly 66.9% of those in their academic year cohort who did not use the resource and 64.8% from the previous year's cohort.

**How.** To examine how the website was associated with sense of belonging among out-of-state freshmen, the three sources of qualitative data in the study were examined: responses to the open-ended survey item, *If Yes (you accessed the out-of-state student resource website), please provide feedback on this website and its value to you as a student who came to ASU from another state*, student interview transcripts, and artifacts of out-of-state freshmen extra-credit essay papers in which out-of-state students reflected on the site.

To identify examples of students' sense of belonging in the qualitative data, the sources were examined for phrases or passages that matched Strayhorn's (2012) definition of belonging, which expanded the conceptualization of belonging beyond feeling a part of one's community to include

students' perceived social support on campus, a feeling or sensation of connectedness, and the experience of mattering or feeling cared about, accepted, respected, valued by, and important to the group (e.g., campus community) or others on campus (e.g., faculty, peers). (p. 3)

With this definition as a framework, several noteworthy examples of how the resource website was associated with students' sense of belonging were found.

As with the construct of engagement, there was little evidence of how the site was associated with sense of belonging in the open-ended survey responses or in the interview transcripts. There was just one explanation, found in the open-ended survey responses. One of the survey respondents wrote, "It provides helpful information and helps you relate to other out-of-state students in your same situation." This comment suggested that the site helped the student develop a sense of connectedness with other out-of-state students, which would be considered by Strayhorn (2012) as part of a sense of belonging.

The best evidence for how the resource website was associated with sense of belonging was contained in the student essay papers. Three belonging themes emerged from these artifacts. The first belonging theme that emerged from the data was that the resource website conveyed to out-of-state students that the university cared about them.

As one student wrote,

Coming to a brand new state and not knowing anyone is insanely hard for anyone, especially if you're more on the shy side. The out of state website gave really good tips on how to engage in activities/clubs, meet people, and just how to spark up a conversation. I found this really interesting because I would assume not too many schools take the time to care about how well their out of state students are adjusting socially."

Another student wrote, "Arizona State is a very cool community that supports out of state students very well. They offer many resources to make you feel right at home..." A third student wrote, "ASU has tons of resources that make me feel more at home than I would've without them." Another student wrote, "Through the website, I learned you have many helpful resources around you such as teachers, and career coaches that are more than willing to help you out." These passages highlighted that the mere existence of the website, along with the assortment of resources it highlighted that were available at the university, made students feel that the university cared about them.

The second belonging theme that emerged from the data is that the resource website presented out-of-state students with a variety of opportunities and activities that could help them feel they belong. One student wrote,

I was also interested in the wide array of things to do around Tempe. If I was ever bored at home, I knew I wouldn't be here. Although, I did notice a lot of the activities to do in and around Tempe are also things I enjoyed doing in Illinois, which makes me feel more comfortable and "at home."

Another student, reflecting on how her freshman year began wrote,

I started feeling really lonely. I started getting worried that I may not belong at ASU. A few days later I got more comfortable thanks to all the ways I could get involved at ASU... Whenever you are feeling lonely, the ASU out-of-state website is the place to go.

For these students, the information on activities and opportunities available at ASU and in the surrounding area helped them to develop a sense of belonging.

The third belonging theme found in the student essays was that the resource website increased their feelings of connectedness with other students, particularly those in their same situation. One student wrote,

...there is also a video which I thought was the most helpful...that had multiple students talking about their experience with being new and away from home...I learned that I was not alone, that ½ of all students that go to ASU are either from out of state or from another country. This made me feel a little bit more comfortable knowing that ½ of the student body can relate to what I am going through.

Another student wrote, “I had very similar experiences as most of the students on the video that was displayed on the web page.” A third student wrote, “After reviewing the out-of-state website, I would give the advice to other out-of-state students who are struggling with the transition to ASU that they are not alone and that there are people at ASU who want to help.” These passages converge with the open-ended survey response noted above. For these students, one of their biggest takeaways from utilizing the resource website which contributed to their sense of belonging was the realization that there are many other students at ASU to whom they can relate.



**Research Question #1c Results: How, and to What Extent, Was the Resource Website Associated with Feelings of Homesickness for Out-of-State Freshmen at ASU?**

As with the previous two research questions, the approach to answering the research question on homesickness encompassed both quantitative and qualitative measures. The quantitative data informed the extent, and the qualitative data connected to the how.

**Extent.** The extent to which the resource website was associated with feelings of homesickness was examined via a comparison of responses to three items on the online survey: one that inquired about feelings of loneliness being away from home, one that asked about severity of homesickness, and another that asked about frequency of homesickness. The first item was *I feel lonely being away from my family or friends at home*. Participants were presented with a Likert scale to rate their level of agreement with the item. Aggregate responses from the three groups of out-of-state freshmen were compared: those who indicated they had used the out-of-state student resource website, those who indicated they had not used the site, and freshmen scores from the previous academic year, before the site had been created. The data are presented in Tables 16 and 17. As shown in these tables, there was no difference between the three groups on students' feelings of loneliness.

Table 16

*Feeling Lonely Being Away from Home*

	Used Site	Did Not Use Site	Previous Year	Total
Strongly Agree	0.0%	2.8%	10.2%	5.4%
		(n = 4)	(n = 11)	(n = 15)
Agree	19.4%	10.6%	14.8%	13.2%
	(n = 6)	(n = 15)	(n = 16)	(n = 37)
Slightly Agree	29.0%	36.9%	28.7%	32.9%
	(n = 9)	(n = 52)	(n = 31)	(n = 92)
Slightly Disagree	22.6%	18.4%	15.7%	17.9%
	(n = 7)	(n = 26)	(n = 17)	(n = 50)
Disagree	16.1%	24.1%	18.5%	21.1%
	(n = 5)	(n = 34)	(n = 20)	(n = 59)
Strongly Disagree	12.9%	7.1%	12.0%	9.6%
	(n = 4)	(n = 10)	(n = 13)	(n = 27)
Total	100.0%	100.0%	100.0%	100.0%
	(n = 31)	(n = 141)	(n = 108)	(n = 280)

Note:  $X^2(2, N = 280) = 1.05, p = 0.59$

Table 17

*Feeling Lonely Being Away from Home Kruskal-Wallis Test*

	Used Site	Did Not Use Site	Previous Year	Total
Mean Rank	136.97	136.62	146.57	
N	31	141	108	280

Note:  $X^2(2, N = 280) = 1.05, p = 0.59$

The second survey item pertaining to homesickness gauged homesickness severity. The item was *Please select the highest level of homesickness you felt during*

*your first semester at ASU. Responses ranged from very to none. The results are presented in Tables 18 and 19. There were no significant differences between groups on the severity of homesickness.*

Table 18

*Homesickness Severity Distribution*

	Used Site	Did Not Use Site	Previous Year	Total
Very	9.7% (n = 3)	12.0% (n = 17)	14.8% (n = 16)	12.8% (n = 36)
Moderate	29.0% (n = 9)	30.3% (n = 43)	20.4% (n = 22)	26.3% (n = 74)
Somewhat	25.8% (n = 8)	40.1% (n = 57)	46.3% (n = 50)	40.9% (n = 115)
None	35.5% (n = 11)	17.6% (n = 25)	18.5% (n = 20)	19.9% (n = 56)
Total	100.0% (n = 31)	100.0% (n = 142)	100.0% (n = 108)	100.0% (n = 281)

*Note:  $X^2(2, N = 281) = 1.75, p = 0.42$*

Table 19

*Homesickness Severity Kruskal-Wallis Test*

	Used Site	Did Not Use Site	Previous Year	Total
Mean Rank	125.56	145.46	139.56	
N	31	142	108	281

*Note:  $X^2(2, N = 281) = 1.75, p = 0.42$*

The third survey item that covered homesickness asked participants about homesickness frequency. Specifically, the item was *How often did you feel homesick during your first semester at ASU?* Responses ranged from *Very Often* to *Never*. Findings are reported in Tables 20, 21, and 22.

Table 20

*Homesickness Frequency Distribution*

	Used Site	Did Not Use Site	Previous Year	Total
Very Often	0.0%	2.1% (n = 3)	3.7% (n = 4)	2.5% (n = 7)
Often	9.7% (n = 3)	12.0% (n = 17)	8.3% (n = 9)	10.3% (n = 29)
Sometimes	32.3% (n = 10)	44.4% (n = 63)	36.1% (n = 39)	39.9% (n = 112)
Rarely	29.0% (n = 9)	32.4% (n = 46)	40.7% (n = 44)	35.2% (n = 99)
Never	29.0% (n = 9)	9.2% (n = 13)	11.1% (n = 12)	12.1% (n = 34)
Total	100.0% (n = 31)	100.0% (n = 142)	100.0% (n = 108)	100.0% (n = 281)

Note:  $X^2(2, N = 281) = 5.63, p = 0.06$

Table 21

*Homesickness Frequency Kruskal-Wallis Test*

	Used Site	Did Not Use Site	Previous Year	Total
Mean Rank	115.76	149.89	136.56	
N	31	142	108	281

Note:  $X^2(2, N = 281) = 5.63, p = 0.06$

Table 22

*Homesickness Frequency Kruskal-Wallis Post Hoc Comparisons*

	Used Site and Did Not Use Site	Used Site and Previous Year	Did Not Use Site and Previous Year
Mean Rank	70.16 and 90.68	61.60 and 72.41	130.71 and 118.65
Chi-Square	4.80	1.94	1.93
Degrees of Freedom	1	1	1
<i>p</i> -Value	0.03	0.16	0.16

As shown in Table 22, there was a statistically significant difference in homesickness frequency between students who used the resource website and those who did not. In particular, there was a noticeably large difference in absence of homesickness among these two student groups. Whereas only 9.2% of students who did not use the resource indicated they never felt homesick, a staggering 29.0% of students who utilized the resource indicated never feeling homesick. These results are significant at the  $p \leq 0.05$  level ( $p = 0.03$ ). There were no significant differences in homesickness frequency between students who did or did not use the site this year, and students last year.

**How.** In the open-ended survey responses, homesickness was mentioned three times. One student commented that the site helped provide strategies for preventing homesickness from occurring. The student wrote, “It made the transition easier and I enjoyed how it gave me ways to make sure I wasn’t homesick.” Another student indicated the site helped by normalizing the experience of feeling homesick: “Made me

realize feeling homesick is normal.” A third student described how the site helped with strategies for managing homesickness and normalizing it: “. . .it had loads of information about dealing with your homesickness and reminding me that it was normal to have happen to first year students.”

During the student interviews, one of the students who used the site spoke briefly about the helpfulness of the site’s homesickness content. The student said, “They show a couple of homesick things that I really liked.” The student did not elaborate any further, however, this statement suggested the site provided the student with information she found useful.

Homesickness was also a common topic in the student essay artifacts. Based on these documents, the primary way in which the resource website was associated with feelings of homesickness was by providing useful strategies for combatting it. Many students commented on the helpfulness of these strategies. One student wrote,

...it provides some great advice on how to manage being homesick in a healthy manner. Heading off to college, I knew that I would be homesick but didn’t know how to manage it without breaking down or becoming despondent. The tab’s information could enhance my experience at ASU by rather than eating my feelings out, I can go to the Sun Devil Fitness Complex to work off my anxiety and freshman fifteen.

Another student wrote, “Possibly my favorite tab on the entire website is the Preventing and Managing Homesickness tab. There is a lot of good information that actually helped me when I was homesick for the first month or so that I was here at ASU.” A third student wrote,

I found the homesick page the most interesting and useful. For instance, one of the tips was to focus on the good things you have going on here at ASU and to also focus on why you chose Arizona State in the first place. Lately, I have been having homesickness, and that really helped me.

Another student wrote, “I also liked the tips on preventing homesickness. They were actually relevant and I feel like they would help me if I ever missed home.” Yet another wrote,

Preventing & Managing Home Sickness breaks everything down into 8 steps, to help you over these issues and it also provides who to talk to if you need assistance. I am definitely using this information already and plan to talk with a First Year Success Coach to help me get through everything I am working on.

Clearly, these students found beneficial strategies that they could implement for handling homesickness.

The other way in which the resource website was useful for battling homesickness was by normalizing those feelings. One student wrote the website helped with “...recognizing that these feeling (*sic*) are normal for everyone.” That student added,

I think that this is one of the most important tabs on this page because everyone that I know of that is not from Arizona has gone through a phase of being homesick and this page is specifically designed to help with it.

It seems that, for this student, just the knowledge that homesickness was normal provided help for alleviating those feelings.

There was convergence among the three sources of qualitative data on homesickness. In all three sources, there was evidence that the resource website provided useful information on homesickness. It was helpful by giving students useful strategies for preventing or managing homesickness and by normalizing their feelings.

### **Research Question #1d Results: How, and to What Extent, Was the Resource Website Associated with Mid-Year Retention of Out-of-State Freshmen at ASU?**

To examine this question, both quantitative and qualitative data were examined.

**Extent.** Due to website privacy restrictions which prohibited data access, identifying information for students who used the resource website were unavailable.

These data would have provided the strongest evidence of the extent to which the site was associated with mid-year retention rates. Without these data, this question was examined through an analysis of overall business out-of-state freshman retention during the year in which the website was released, in comparison to retention of business out-of-state freshmen in the year prior to the intervention. These data are presented in Table 23.

Table 23

*Fall-to-Spring Retention Rates for Business First-Time Full-Time Freshmen as of the Fourth Monday in January Each Year*

Population	Enrolled Fall 2016	Returned Spring 2017	Percent Returned in Spring	Enrolled Fall 2015	Returned Spring 2016	Percent Returned in Spring
In-State	1,484	1,419	95.6%	1,383	1,323	95.7%
Out-of-State	1,086	999	92.0%	1,115	1,013	90.9%
International	360	347	96.4%	487	467	95.9%
Total	2,930	2,765	94.4%	2,985	2,803	93.9%

As shown in Table 23, the percentage of out-of-state business freshmen who returned for spring increased from 90.9% for the fall 2015 cohort to 92.0% for the fall 2016 cohort, an increase of 1.1%. In contrast, international business student retention increased by 0.5%, and in-state business student retention actually *decreased* by 0.1%. An independent samples *t*-test was run to compare the retention rates in the year before the intervention to those after the implementation of the website. The difference in rates of retention for all groups, however, were not significant.



**How.** Although it was difficult to ascertain the extent to which the resource website was associated with mid-year retention, there was some evidence on how the resource was related to retention for those students who used it. The most direct example is from a comment from one of the survey respondents:

During first semester I was very homesick and thought about transferring multiple times, my WPC 101 instructor told me about this website, so I logged on and it had loads of information about dealing with your homesickness and reminding me that it was normal to have happen to first year students.

As this comment illustrates, the resource website helped the university retain this particular out-of-state student by giving the student critical guidance and information for addressing the student's concern.

Another emergent data theme, which may explain how the website might relate to retention, is that students reported feeling an increased sense of pride in ASU after accessing the website. In an essay, one of the students wrote, "I enjoyed all the fun facts, they just reinforced that I made the right decision to attend ASU. Like the link to all of the organizations and the fact that ASU was above Stanford in innovation." Another student wrote, "Reading all the fun facts and rankings and awards that ASU has received is definitely a great reminder as a student body that we are a great institution." A third student wrote, "I like to learn random facts, especially about Arizona, and I found it very pleasing to see what incredible facts there were. Such facts give people pride and joy to live in Arizona, a very unique state in comparison to others." Another student wrote,

All the accolades impressed me and got me excited to be able to get an education from here... I would be able to use all this information to enhance my experience here by being involved and attentive during class. Knowing all these incredible facts about the education here makes me motivated to do the best I can and help making these accolades better. I will make the most out of what ASU has to offer and that will enhance my experience I have here.

One of the interview participants shared that he even used the site as a recruiting tool to try to persuade one of his friends back in his home state, who was a high school senior, to attend ASU in the fall. For these out-of-state students, the website affirmed their decision to attend ASU, and it increased their pride and excitement in being at the university. It is reasonable to posit that such an impact could be positively associated with retention.

Another data theme that might connect to how the website was associated with retention is the finding that website usage was related to out-of-state students' mindset with regards to their experiences at the university. In their essays, several students wrote about the need to branch out of their comfort zone, while others mentioned the importance of being patient with their transition. One wrote, "If an ASU out of state freshman was struggling to settle in, I would tell them to just give it some time. Change is never easy, but it is extremely important to have hope and not give up." There was also a sentiment among those who used the site that out-of-state students need to take responsibility for their own experience. One of the interview participants articulated this belief well:

The school can only give you so much. I think Arizona State does a great job... but at the end of the day, it's me who needs to go out there. It's all of us who need to go out and interact... The school shoves everything at us that we could take. It's just a matter of actually taking it.

One of the class essays expressed the sentiment more succinctly: "Overall if you are an out of state student like I am, do your best to make Arizona State University the best experience possible!" As students take more ownership for their university experience, be patient with their transition, and recognize the need to challenge themselves by branching out of their comfort zones, they will likely enjoy their university experience more and have a more successful first year, which is likely to increase their retention.

## **Research Question #2a Results: Did the Resource Website Provide Useful Information on Adjusting to Arizona?**

Consistent with the other research questions, analysis of whether or not the website provided useful information on adjusting to Arizona incorporated quantitative as well as qualitative measures. The survey item related to this question asked, *If Yes (you accessed the out-of-state student resource website), did this resource provide useful information to you on adjusting to living in Arizona?* Of those who used the website, 96.8% (n = 30/31) of respondents selected *Yes*. This finding provides strong evidence that the website provided useful information to out-of-state freshmen on adjusting to living in Arizona.

Passages from the student essays revealed numerous examples of how beneficial the website was for helping them adjust to living in Arizona. One of the major themes was that the website provided helpful information on the local area. One student wrote, “As an avid hiker and nature advocate, I was pleased to know there are a lot of parks and hiking opportunities near me.” Another wrote, “I will most definitely use the links on this website to find things to do in the area.” A third student wrote, “Being new to the area, I was unfamiliar with the popular restaurants and hang-out spots but the website has given me ideas for places to check out during the weekends.” Another wrote,

The part that, I, personally found the most interesting and helpful is the “Adjusting to Arizona” tab, because coming from out-of-state, I don’t really know much of what there is to do around the Tempe area and on campus. This resource could help me enhance my experience at ASU by giving me some things to do in my down time, because I have a lot of it. I didn’t know about most of these things that they listed to do, and I will most likely try some. It’s a very good resource to have if you don’t know where to even look for things to do, like myself.

Another student wrote, “Finding more things to do I think will definitely make Arizona feel more like a second home for me.” Yet another wrote,

The most interesting part of the website to me was the exciting things that are all around ASU...I find this very exciting because I like exploring and trying new things. I think this website is extremely helpful in expanding my horizons and adjusting to living away from home for the first time in my life.

Clearly, the information on the local area was well-received by the out-of-state freshmen.

The other way in which students reported the website helped them adjust to living in Arizona was by giving them tips for managing the heat. The website’s content on managing the heat was especially appreciated by one of the interview participants, who shared,

It was ways to also adjust to Arizona. Drink this amount of water, avoid the sun at this time, get used to it. I thought that was really cool because it’s things that I think when people...move out of state, they don’t think about all that kind of stuff. They are like, “Warm weather, great.” It’s like, you got to be careful because it is really hot. Going on hikes and stuff, you just got to watch out. I thought it was really cool that they actually put all that in there.

Students commented on this beneficial information in their essays, too. One wrote, “My personal favorite part from this section is tips on how to adjust to the Arizona heat since it is something that I have been struggling with for the past couple of weeks.”

Another wrote, “Luckily, I also came across tips about how to deal with the summer weather and year-round heat at ASU which was extremely helpful!” The vast majority of students who come to ASU from out of state are not accustomed to such high temperatures; thus, the website’s information on how to manage the heat proved to be useful for them.

**Research Question #2b Results: Did the Resource Website Provide Useful Information on Making Friends at ASU?**

Analysis of this question entailed quantitative and qualitative measures. The survey question asking about ASU friendships was *If Yes (you accessed the out-of-state student resource website), did this resource provide useful information to you on making friends at ASU?* A total of 86.2% (n = 25/29) of respondents selected *Yes*, suggesting the site did indeed provide useful information on making friends.

Additional items on this topic were, *I have found it easy to make friends at ASU* and *I have friends at ASU who I can turn to for emotional support if needed*. Responses were compared between students who utilized the website, those who did not, and last year's freshmen. The results are presented in Tables 24, 25, 26, 27, and 28. There were no statistically significant differences in any of the groups on either of those two friendship items.

Table 24

*Found it Easy to Make Friends at ASU*

	Used Site	Did Not Use Site	Previous Year	Total
Strongly Agree	38.7% (n = 12)	32.4% (n = 46)	34.3% (n = 37)	33.8% (n = 95)
Agree	45.2% (n = 14)	37.3% (n = 53)	30.6% (n = 33)	35.6% (n = 100)
Slightly Agree	12.9% (n = 4)	23.9% (n = 34)	17.6% (n = 19)	20.3% (n = 57)
Slightly Disagree	0.0%	2.8% (n = 4)	7.4% (n = 8)	4.3% (n = 12)
Disagree	3.2% (n = 1)	2.8% (n = 4)	7.4% (n = 8)	4.6% (n = 13)
Strongly Disagree	0.0%	0.7% (n = 1)	2.8% (n = 3)	1.4% (n = 4)
Total	100.0% (n = 31)	100.0% (n = 142)	100.0% (n = 108)	100.0% (n = 281)

Note:  $X^2(2, N = 281) = 2.60, p = 0.27$

Table 25

*Found it Easy to Make Friends at ASU Kruskal-Wallis Test*

	Used Site	Did Not Use Site	Previous Year	Total
Mean Rank	160.06	141.63	134.70	
N	31	142	108	281

Note:  $X^2(2, N = 281) = 2.60, p = 0.27$

Table 26

*Have Friends at ASU to Turn to for Emotional Support if Needed*

	Used Site	Did Not Use Site	Previous Year	Total
Strongly Agree	38.7% (n = 12)	34.0% (n = 48)	33.3% (n = 36)	34.3% (n = 96)
Agree	51.6% (n = 16)	48.9% (n = 69)	32.4% (n = 35)	42.9% (n = 120)
Slightly Agree	3.2% (n = 1)	12.1% (n = 17)	21.3% (n = 23)	14.6% (n = 41)
Slightly Disagree	3.2% (n = 1)	2.8% (n = 4)	4.6% (n = 5)	3.6% (n = 10)
Disagree	3.2% (n = 1)	1.4% (n = 2)	5.6% (n = 6)	3.2% (n = 9)
Strongly Disagree	0.0%	0.7% (n = 1)	2.8% (n = 3)	1.4% (n = 4)
Total	100.0% (n = 31)	100.0% (n = 141)	100.0% (n = 108)	100.0% (n = 280)

Note:  $X^2(2, N = 280) = 4.78 p = 0.09$

Table 27

*Have Friends at ASU to Turn to for Emotional Support if Needed Kruskal-Wallis Test*

	Used Site	Did Not Use Site	Previous Year	Total
Mean Rank	156.56	146.05	128.64	
N	31	141	108	280

Note:  $X^2(2, N = 280) = 4.78, p = 0.09$

Table 28

*Have Friends at ASU to Turn to for Emotional Support if Needed Kruskal-Wallis Post Hoc Comparisons*

	Used Site and Did Not Use Site	Used Site and Previous Year	Did Not Use Site and Previous Year
Mean Rank	92.21 and 85.24	80.35 and 67.03	131.80 and 116.12
Chi-Square	0.60	2.92	3.28
Degrees of Freedom	1	1	1
<i>p</i> -Value	0.44	0.09	0.07

Qualitative data provided additional evidence that the website provided useful information on making friends at ASU. One of the survey participants wrote, simply, “I liked this website because it helped show me ways I can make new friends here at ASU.” One of the class essays suggested, “The website also includes a helpful section about how to get involved and make friends on campus.” Another student wrote,

I think another great way to aid in the transition is to get to know people on your dorms (*sic*) floor. A lot of them will end up being out-of-state students too, who are just as eager as you to make friends.

These students identified strategies they could use to make friends.

**Research Question #2c Results: Did the Resource Website Provide Useful**

**Information on Managing Finances?**

To analyze this question, quantitative and qualitative measures were employed. The quantitative assessment was based on responses to the survey question, *If Yes (you accessed the out-of-state student resource website), did this resource provide useful*



*information to you on managing finances?* Eighty-two and eight tenths percent (n = 24/29) of respondents selected *Yes*, suggesting the site did indeed provide useful information on managing finances.

Finances were not a common theme in the qualitative data, however, a couple of students did mention the website provided useful information on this topic in their essays.

One wrote,

Another very important tab on the website is the finances tab... There are links that lead you to job opportunities on campus and financial aid and scholarship opportunities that you may apply for. These are all important because anything to help with student loans is always a good idea.

Another student wrote,

Finally, the website provides information on how to manage your finances as an out of state student. While looking through the website, this section stood out to me the most... There are many more resources to help me succeed financially than I thought. I am excited to take advantage of these opportunities for the rest of my semesters at ASU.

It seems the website provided useful content for out-of-state students seeking information on managing finances.

## **Summary**

While there was a low level of use of the site by the out-of-state freshmen to which it was promoted, those who used the website discussed its utility. Out-of-state freshmen who utilized the out-of-state website had higher levels of co-curricular engagement than their counterparts who did not use the site and the previous academic year's freshmen. Out-of-state students who utilized the site also experienced feeling homesick less frequently during their first semester at ASU than out-of-state students who did not use the site. Utilization of the site was not associated with statistically significant outcomes in sense of belonging, fall-to-spring retention, adjustment to

Arizona, making friends at ASU, or managing finances; however, out-of-state freshmen did report finding the site to be important and useful on these critical topics.

## CHAPTER 5

### DISCUSSION

This study examined the relation between a resource website and the engagement, sense of belonging, homesickness, and retention of out-of-state freshmen at ASU. The study was prompted by the discovery of a local problem of practice: the university was admitting increasingly large numbers and percentages of out-of-state freshmen, but retaining them at much lower rates than in-state students. As an action research study, the goal was to understand the problem in its situated context and then to design and test an intervention appropriate for that context. The variety of data collected, including student surveys, student interviews, student essay artifacts, website utilization records, and university retention reports, yielded numerous insights. These insights can inform ways of supporting and retaining out-of-state freshmen at ASU in the future.

Overall, the evidence indicated that the out-of-state website was a beneficial resource for out-of-state freshmen at ASU. The specific research questions were:

RQ 1 How, and to what extent, was the resource website associated with:

- a. engagement at ASU for out-of-state freshmen?
- b. sense of belonging at ASU for out-of-state freshmen?
- c. feelings of homesickness for out-of-state freshmen at ASU?
- d. mid-year retention of out-of-state freshmen at ASU?

RQ 2 Did the resource website provide useful information on:

- a. adjusting to Arizona?
- b. making friends at ASU?
- c. managing finances?

This chapter contains a discussion of the study's results. It also includes lessons learned, implications for practice and research, study limitations, study validity, and concluding thoughts.

### **Discussion of Results**

Out-of-state freshmen who utilized the out-of-state website had higher levels of co-curricular engagement than their counterparts who did not use the site and the previous academic year's freshmen. Out-of-state students who utilized the site also experienced feeling homesick less frequently during their first semester at ASU than out-of-state students who did not use the site. Utilization of the site was not associated with statistically significant outcomes in sense of belonging, retention, adjustment to Arizona, making friends at ASU, or managing finances; however, out-of-state freshmen did report finding the site to be important and useful on these critical topics. This section will start with a discussion of the statistically significant association the site had with engagement and homesickness, followed by discussion of the other examined constructs.

**Engagement.** The out-of-state website had a positive association with co-curricular engagement for the out-of-state students who utilized it. Analysis of student essay artifacts yielded three explanations for precisely how the site was related with student engagement: the site provided useful information on how to get involved, the site got students excited about the plethora of engagement opportunities available to them at ASU, and the site explained the benefits of campus involvement.

These findings are consistent with the expert recommendations for promoting engagement referenced in Chapter 2. Kuh (2011) advised teaching students how to utilize institutional resources and encouraging them to participate in enriching campus

activities, and Webber et al. (2013) wrote about the importance of giving students a streamlined way for new students to get involved, along with instruction on why they should get involved. The designation of a resource website to implement these recommendations followed the advice of Heiberger and Harper (2008). Thus, the findings that the site was associated with out-of-state student engagement by utilizing technology to provide useful information on how to get involved and why they should do so were expected.

**Homesickness.** To measure the out-of-state resource website's relation with homesickness, student reports were analyzed on feelings of loneliness being away from family or friends at home, homesickness severity, and homesickness frequency. There were no statistically significant findings on feelings of loneliness or on homesickness severity; the only statistically significant findings were on homesickness frequency. Out-of-state students who utilized the site experienced feeling homesick less frequently during their first semester at ASU than out-of-state students who did not use the site. Whereas only 9.2% of students who did not use the resource and 11.1% of the previous year's freshmen indicated they never felt homesick, a staggering 29.0% of students who utilized the resource indicated never feeling homesick.

Qualitative analysis revealed that the site helped out-of-state students combat homesickness by providing useful strategies for preventing and managing it and by normalizing feelings of homesickness. This is exactly what the site was intended to do. Much of the site's content was based on Thurber and Walton's (2012) recommendations for preventing and treating homesickness among college students. It provided orienting information about the university and the surrounding area, it presented the university in a

positive light, it facilitated social activity and involvement, it contained messaging that homesickness is normal, and it provided a list of tips for managing and preventing homesickness derived from Thurber and Walton's (2012) recommendations.

Even the finding that the only statistically significant homesickness association was with frequency of homesickness is consistent with Thurber and Walton's (2012) review of the research literature, especially in light of this study's finding that 45.1% (n = 1,940/4,300) of the website's page views during the fall, 2016 semester occurred between August 1 and September 8. As noted in Chapter 2, Thurber and Walton found that homesickness prevention strategies were more effective than treatment strategies. Apparently, the experience of homesickness tends to be similarly difficult no matter the circumstance. The key is to prevent homesickness from ever occurring, and the out-of-state resource website seemed to be helpful in doing so.

**Belonging.** Although the site was not associated with out-of-state students' feelings of belonging, students often wrote about how the website helped them feel a sense of belonging at ASU. Three belonging themes emerged from the qualitative data: the resource website conveyed to out-of-state students that the university cared about them, students who utilized the site identified opportunities that could help them feel they belonged, and the website increased out-of-state students' feelings of connectedness with other students in their same situation.

Strayhorn (2012) consistently found a positive correlation between student involvement and sense of belonging. Given the statistically significant association the site had with co-curricular engagement as well as the ways in which students wrote about how the site helped them feel they belong at ASU, it is therefore surprising the site did

not also have a correspondingly significant association with sense of belonging. It is likely the lack of an observed statistically significant association was caused by the relatively small sample size of students who had utilized the site. The reported sense of belonging was highest among out-of-state freshmen who utilized the site, just not significantly so. While 80.7% of out-of-state students who utilized the resource website either agreed or strongly agreed that they felt a part of the ASU community, there were similarly 66.9% of those in their academic year cohort who did not use the resource and 64.8% from the previous year's cohort. Thus, significant results might have been achieved with a larger sample size of students who had utilized the site.

**Retention.** Unfortunately, a comparison of fall-to-spring retention rates of out-of-state students who utilized the site and those who did not use the site was not possible, due to website privacy restrictions which prohibited data access. Without these data, an analysis was conducted of overall business out-of-state freshman retention during the year in which the resource website was released, in comparison to retention of business out-of-state freshmen in the year prior to the intervention. Retention of out-of-state business freshmen increased by 1.1% after the introduction of the website, and, compared to in-state and international students, the biggest difference in retention between the fall 2015 and fall 2016 cohorts was among the out-of-state students. These findings, however, were not statistically significant.

Although there was not a statistically significant association with overall fall-to-spring retention rates of out-of-state students, there was one out-of-state student who explicitly indicated the site had a positive effect on that individual's retention. The student, who was one of the survey respondents, wrote the following comment in

response to the open-ended survey item, *If Yes (you accessed the out-of-state student resource website), please provide feedback on this website and its value to you as a student who came to ASU from out of state:*

During first semester I was very homesick and thought about transferring multiple times, my WPC 101 instructor told me about this website, so I logged on and it had loads of information about dealing with your homesickness and reminding me that it was normal to have happen to first year students.

One retained student does not have a statistically significant impact on overall university retention rates, yet each student is important, and the site had a meaningful impact on this student's desire to stay at ASU.

As noted in Chapter 2, numerous scholars have found a positive link between student engagement and retention (Kuh, 2009; Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008; Pascarella & Terenzini, 2005; Astin, 1993). This study's finding that the resource website had a positive association with co-curricular engagement for the out-of-state students who utilized it suggests that the site might also have a positive association with retention. Furthermore, Thurber and Walton (2012) found that homesickness can lead to withdrawal from college; as noted in Chapter 1, one of the top reasons former ASU out-of-state business freshmen gave for leaving ASU was to be closer to family/friends. This study's finding that out-of-state students who utilized the site experienced feeling homesick less frequently during their first semester at ASU than out-of-state students who did not use the site suggests the reduction in homesickness frequency might also have a positive association with retention.

In the essay artifacts and in student interviews, two themes emerged that might offer additional explanation of how the website might relate to retention. The first is that students reported feeling an increased sense of pride in ASU after accessing the website.



Reading the list of ASU distinctions listed on the site affirmed their decision to attend ASU, and it increased their pride and excitement in being at the university. One student even used the site as a recruiting tool to try to persuade one of his friends back in his home state, who was a high school senior, to attend ASU in the fall. The second theme that emerged is website was related to out-of-state students' mindset with regards to their experiences at the university. Students expressed the importance of taking ownership for their university experience, being patient with their transition, and challenging themselves by branching out of their comfort zones. It is plausible that these outcomes would connect to retention.

Retention scholars such as Tinto (1987) have noted that a variety of factors influence whether or not a student is retained. Therefore, it is worth reporting there were several confounding factors in this study. During the year in which the out-of-state website was created, two other major resources were promoted to all ASU freshmen: an online student connection platform and a financial literacy website. Additionally, conversations with a retention colleague suggested that the university changed its recruitment strategies that year to refrain from aggressively pursuing admitted out-of-state students to enroll at the university if they did not have sufficient means to finance their education. Furthermore, the W. P. Carey School of Business hosted a special lecture in the fall of 2016 to support its out-of-state freshmen. Titled *Making ASU Your 2<sup>nd</sup> Home: Thriving as An Out-of-State Student*, I delivered this lecture in November, 2016.

**Adjusting to Arizona.** Of survey respondents who used the out-of-state website, 96.8% (n = 30/31) reported the website provided useful information to them on adjusting

to living in Arizona. Students indicated the site helped them adjust by providing useful information on the local area, including a variety of fun things to do locally, and by giving them tips for managing the heat. These findings suggest the site helped out-of-state students achieve psychological comfort with various aspects of their new setting, thereby meeting Black and Gregersen's (1991) definition of adjustment.

**Making friends at ASU.** Among survey respondents, 86.2% (n = 25/29) reported the out-of-state resource website provided useful information to them on making friends at ASU. Qualitative data corroborated students' perception that the site had beneficial information on this topic. Despite these indicators that the site had useful information for making friends at ASU, there was no evidence of statistically significant differences in out-of-state freshmen actually finding it easy to make friends at ASU or in having friends at ASU who they can turn to for emotional support if needed. As with the data on belonging, the lack of a statistically significant difference on making friends at ASU may be attributed to the small sample size of surveyed students who utilized the site. The percentage of out-of-state freshmen who either agreed or strongly agreed it was easy for them to make friends at ASU was noticeably higher among those who utilized the site (83.9%) compared to those who did not use the site (69.7%) or the previous year's freshmen (64.8%), albeit not significantly higher.

**Managing finances.** The website seemed to provide useful information on managing finances. Among survey respondents, 82.8% (n = 24/29) affirmed the website provided useful information to them on this topic, and two students wrote about this benefit in their essay papers. These findings are consistent with the research literature evidence that administrators can assist students with their financial concerns by providing

them with education on financial literacy and websites with links to financial content (Durband & Britt, 2012) and by online modules (Grable, Law, & Kaus, 2012).

### **Lessons Learned**

In this section, key lessons learned are highlighted. The lessons pertained to the challenges experienced by out-of-state freshmen at ASU, the overall utility of the website intervention, and the key flaw in the intervention delivery. Together, these lessons constitute the study's primary contributions to the local context and the literature.

**Out-of-state freshmen challenges at ASU.** As noted in Chapter 1, there was little information on the topic of out-of-state student retention in the research literature at the time this study was conducted. This study provided insights on why ASU had disparities in retention between its out-of-state and in-state populations. The study uncovered four core challenges experienced by ASU out-of-state freshmen: homesickness, adjusting to living in Arizona, managing finances, and making friends at the university. Understanding of these challenges was crucial for developing an intervention that would be appropriate to the local context.

**Overall website utility.** Multiple data sources, including student surveys, student interviews, and student essay artifacts, indicated the out-of-state website was a beneficial and valuable resource for out-of-state business freshmen at ASU. Usage of the site had a statistically significant association with increasing co-curricular engagement and decreasing homesickness frequency. Moreover, students articulated numerous benefits from accessing the site, including one student who directly indicated the site positively influenced their retention. In open-ended comments, interviews, and essays, students also commented on how well-organized the site was and how easy the site was for them

to navigate. They also explained how the site helped them with the challenges they experienced during their first year at ASU as out-of-state students. These findings were consistent with previous research demonstrating that social-psychological interventions in education can effectively be scaled (Paunesku, Walton, Romero, Smith, Yeager, & Dweck, 2015).

**Implementation flaw.** The primary challenge for the site was levels of utilization. As noted in Chapter 4, only 18.9% ( $n = 33/175$ ) of survey participants had utilized the site. Despite the website being promoted to over 1,000 business freshmen, and the presence of over 3,500 out-of-state freshmen at ASU overall who could have accessed the site, the site did not generate a correspondingly high level of traffic.

Through January 8, 2017, the welcome video on the home page of the website only had 428 total views, and the main content pages each generated 443 unique page views or less.

As noted in Chapter 4, there was evidence that some students did not utilize the site because they were unaware of it, while others were aware of the site but did not find it necessary or appealing. The finding that 80.0% ( $n = 4/5$ ) of interview participants who had not used the site indicated their reason was they were not aware of it matches the study's first cycle of research, conducted in the year prior to the creation of the website, in which half of the surveyed out-of-state freshmen that year indicated they would be very likely or likely to use the site, and another 32% indicated they would be somewhat likely to use it. Thus, the problem with the site for these students was not content or appeal; the intervention flaw was its insufficient promotion. It is clear that mass emails, word-of-mouth promotion by first-year success coaches, and the opportunity to review

the site and write a one-page essay reflection for extra credit in the WPC 101 course were not enough to raise awareness of the site in the target population. More promotion was needed. For those students who were aware of the site but did not find it necessary or appealing, perhaps more could have been done to articulate the value of the site.

### **Implications for Practice**

Kurt Lewin, the German psychologist credited with being the first person to introduce the term, *action research* (Ivankova, 2015; Marrow, 1969), defined the term as “a comparative research on the conditions and effects of various forms of social action, and research leading to social action” (Lewin, 1946, pp. 202-203). Thus, Lewin believed that research and action should be inextricably linked. He added, “Research that produces nothing but books will not suffice” (p. 203). More poetically, Marrow (1969) quoted Lewin advocating for “no action without research; no research without action” (p. 193). It is therefore important to consider implications for practice from any action research study. In addition to the key lessons and contributions to the local context and research literature, this action research study has several implications for practice, including how the intervention could be improved.

**A student resource website can be highly effective and beneficial, but must be promoted heavily.** As noted in Chapter 3, ASU had an abundance of resources available for students; the challenge was making students aware of them. The creation of the out-of-state student resource website was an attempt to address this context-specific challenge by providing an easily accessible and organized inventory of information and resources that could benefit out-of-state students. With the launch of the intervention, the challenge then became making students aware of the resource that contained beneficial

information! This challenge harkened back to Kuh's (2011) position, that student affairs professionals need to provide "intrusive, success-oriented advice and feedback to steer students toward activities that will enrich their college experiences and increase the odds that they will persist in and benefit in the desired ways from college" (p. 261). Students at a large university such as ASU are often inundated with information, especially during their first semester. Thus, it is easy for information to be missed. Promotion of the website may have needed to be more intrusive.

Promotion of the site could be improved in several ways. First, mass emails promoting the site to freshmen could be augmented with mass emails to parents of those freshmen. Parents might be more likely to open their emails than students, and if so, parents could share the information about the site with their children. The university's admissions services department has a list of email addresses of incoming freshmen; this list has proven to be effective at communicating information related to New Student Orientation, Move-In, and university resources such as the First-Year Success Center. The list could easily be used to promote the out-of-state website, too. Additionally, postcards promoting the site could be delivered to students' campus or local address. It might be easy for students to miss emails; it would be more difficult to miss a postcard delivered to one's residence. Because over 90% of ASU's out-of-state freshmen live on campus, another effective method of promotion might be to work with the university's residence life department to ensure the site is promoted at the mandatory floor meetings that are held at the beginning of each academic year. To try to entice those students who might automatically assume such a site would not be beneficial, promotional materials could include some of the comments from out-of-state students praising the site and

explaining its value. Finally, schools and colleges at ASU might consider more fully integrating the site in their 101 classes that all first-time full-time freshmen are required to take. Instead of making site review an extra credit option that might easily be missed, these courses could include the site review assignment as a requirement.

**Students might benefit from learning about the out-of-state website earlier.**

In addition to increased promotion of the site once students arrive on campus, the intervention could also be improved by earlier promotion of the site, before the school year even begins. Several students mentioned they wished they had known about the site earlier than they did, and one of the survey participants wrote about the site, “It was very helpful to me and something I think should be sent to all out-of-state students prior to coming on campus to be of assistance.” As Thurber and Walton (2012) found, and as this study confirmed, strategies to prevent homesickness are more effective than strategies to treat it. Therefore, making sure out-of-state students are aware of the site before they matriculate and even have the chance to feel homesick would be a sound practice. To inform students about the site earlier, an email about the site could be sent to incoming freshmen as soon as they enroll in classes, which they typically do during the summer. Information about the site could also be included in the New Student Orientation sessions.

**To produce a statistically significant association with sense of belonging, the out-of-state website might benefit from a welcome message from a senior university administrator.** The website contained nearly all of Strayhorn’s (2012) strategies for increasing sense of belonging, including facilitating connections with peers, encouraging participation in student clubs and organizations, teaching social skills, offering support,

informing students about the realities of college life, and offering information about financial aid and options for financing one's education. The only component that was missing was a presentation of welcoming and encouraging words from a senior administrator. An attempt was made to secure such a message prior to the launch of the intervention but was unsuccessful. Even without such a message, out-of-state freshmen who utilized the site commented on how the mere existence of the site, showcasing the assortment of resources available at the university, conveyed to them that the university cares about them. A welcome message posted on the site from a senior university administrator might make the site even stronger, which could potentially yield a statistically significant association with sense of belonging.

**Beyond a resource website, there are other interventions that could benefit out-of-state students.** The out-of-state resource website was a mechanism to promote engagement and sense of belonging along with addressing the four core out-of-state student challenges identified in the first cycle of research, ultimately for the purpose of increasing retention. The resource seemed to be the most appropriate intervention, given the university's scale, resources, and services already in place, and my practitioner role within the university. This study did, however, reveal two other ways in which out-of-state students would like to be supported at ASU. Survey respondents and interview participants were asked in both cycles of the study to share additional ideas for what the university could do to better support them. By far, the prevailing theme was that out-of-state students were looking for more opportunities to meet one another, particularly other students from their same state. There was much expressed interest in social events and activities organized specifically for out-of-state students throughout the semester. A



second theme was that out-of-state students would like more financial aid or lower tuition.

**Student engagement opportunities need to be considered exciting by the target population.** One of the findings from this study was that the out-of-state website was associated with engagement by getting students excited about the plethora of engagement opportunities available to them at ASU. It follows, then, that the site would not have been effective in this capacity if the university did not have a menu of engagement opportunities that students perceived to be exciting. Practitioners should regularly be working with and/or conducting inquiry with students to ensure that the university is providing engagement opportunities that appeal to the university's student population. This study revealed a strong student interest among out-of-state students in more social events where they can get connected. That might be one place to start.

### **Implications for Research**

In addition to having several implications for practice, this study also had considerable implications for research. Before these implications are presented, it is worth noting that the goal of action research is not generalizability of the study results, and any generalizations made from action research must be contextual (Ivankova, 2015). Moreover, consumers of action research studies must determine for themselves if an action research study's findings are transferable to their own setting, based on how similar their setting is to the one in which the action research study was conducted (Lincoln & Guba, 1985). As Lincoln and Guba (1985) asserted, "If Context A and Context B are 'sufficiently' congruent, then working hypotheses from the sending originating context *may* be applicable in the receiving context" (p. 124).

**Out-of-state student retention in other contexts.** As noted previously, there was little existing research on retention of out-of-state students in higher education at the time this study was conducted. This study provided insights into challenges experienced by out-of-state students at ASU and a context-appropriate intervention designed to support and retain those students. More research focusing on out-of-state students in other contexts would be helpful to see how their experiences might be similar or different and what interventions might be useful in those contexts.

**Fall-to-fall retention.** Due to timing constraints associated with my doctoral program, this study only examined fall-to-spring retention. Given that the largest disparity in retention between out-of-state and in-state students at ASU is in fall-to-fall retention, along with the university's overall goal of increasing fall-to-fall retention rates, further study is warranted to determine the out-of-state resource website's association with fall-to-fall retention. A statistically significant association with fall-to-spring retention was difficult to obtain because high percentages of both in-state and out-of-state freshmen are retained for spring each year. It is plausible that a statistically significant association with fall-to-fall retention would be more likely.

**Homesickness prevention.** Thurber and Walton (2012) found that previous studies have only understood homesickness in college students from the perspective of protective and risk factors, but not with respect to intervention strategies. They called upon practitioners and fellow scholars to design and test some of the research-based intervention strategies they recommended. This study answered that call and provided evidence that an out-of-state student resource website could be leveraged to successfully implement their strategies to reduce homesickness frequency among out-of-state

freshmen. More scholars and practitioners should answer Thurber and Walton's (2012) call. Would a similar resource website work in other contexts, with other populations? Are there other ways in which their strategies could successfully be implemented?

**Student journals.** In this study, mixed methods of inquiry were utilized; data sources included student surveys, student interviews, student essay artifacts, website utilization records, and university retention reports. One method that might have enhanced the study would have been the collection of journals of out-of-state freshmen writing about their transition to the university. Porter (2011) recommended journals as an effective way to track student activity, and journals could also be used to measure progress over time. Future studies of out-of-state students could include student journals as a data collection method.

**The importance of student mindset.** Dweck (2006) defined a growth mindset as one that is "based on the belief that your basic qualities are things you can cultivate through your efforts, your strategies, and help from others" (p. 7), and she found that students with a growth mindset, as opposed to those with a fixed mindset who believe that their basic qualities are static, are more likely to embrace challenging situations, take charge of their learning process, be persistent, adjust well during major life transitions, and achieve success. One of the emerging themes from this study's qualitative data was that students who utilized the website expressed attitudes that would be consistent with a growth mindset; they took ownership for their university experience, learned to be patient with their transition, and recognized the value of challenging themselves by branching out of their comfort zones. The benefits of having such a mindset were espoused by ASU and USA Olympic Head Swim Coach, Bob Bowman, in a lecture on long-term goal

attainment delivered to ASU students (personal communication, January 30, 2017).

Coach Bowman explained that a person's attitude can determine whether one perceives a difficult situation as an ordeal or an adventure. He also advocated for focusing on one's process along with the outcome, and he encouraged students to develop their comfort with being uncomfortable. More empirical research should be done on these aspects of growth mindset among out-of-state freshmen and their impact on retention.

### **Limitations**

There were four main limitations in this study. The first limitation was the possibility of extraneous variables, especially when examining the variable of retention. As Tinto (2012) noted, there are various external factors beyond an institution's control that can influence retention. These factors include family dynamics, finances, and academic preparation. An out-of-state student might have been highly engaged at the university and had a strong sense of belonging but still needed to transfer to a school closer to home, for example, to care for ill family members. Or, students might have decided that out-of-state tuition was too burdensome even after accessing information on financial literacy. This threat was mitigated by focusing not just on retention, which is susceptible to external forces, but also on the constructs of engagement and belonging and other factors such as feelings of homesickness when assessing the success of the innovation.

As mentioned in Chapter 3, a second limitation was selection. This study did not use a randomized control group. It might be possible that students who accessed the out-of-state website were students who naturally exhibited behaviors that promoted their own success, such as checking their email and seeking resources. Such students were

probably more likely to be retained because they received important information and sought support. The qualitative data sources in the study were the best tools to reduce the influence of this threat. In these items, participants were asked and were able to explain how the out-of-state website influenced them.

The third limitation in this study was the small sample size. The 201 students who took the survey only accounted for 20.1% of the business out-of-state freshmen enrolled in spring 2017 at the ASU Tempe campus. Moreover, only 18.9% of the survey participants had used the out-of-state website. The statistical tests employed to gauge site impact were based on a small population of only 31 students who had utilized the site. As with the limitation on selection, this threat to validity was mitigated by the variety of data collected.

The fourth limitation in this study was the challenge of college student surveys for providing valid results. In a scathing critique of college student surveys, including the National Survey of Student Engagement from which one of the survey items was used with permission, Porter (2011) presented many problems with college student surveys. Porter's biggest concern was researchers' assumption that students are able to recall and report the frequency of past events with accuracy. This threat to validity was mitigated by the triangulation of data, but still suggests that there could have been significant problems with recall that could have impacted the results from this sample.

### **Study Validity**

Herr and Anderson (2015, p. 67) listed five goals of action research: the generation of new knowledge, the achievement of action-oriented outcomes, the education of both researcher and participants, results that are relevant to the local setting,

and a sound and appropriate research methodology. They then linked those goals to five corresponding quality and validity criteria. This section contains an analysis of each of those criteria.

**Process validity.** As its name implies, process validity is the extent to which a research study followed a sound process. Herr and Anderson (2015) offered triangulation, which they explained can refer to using a variety of methods or data sources, as a strategy for achieving process validity. As noted previously, this study utilized mixed methods of inquiry. Data sources included student surveys, student interviews, student essay artifacts, website utilization records, and university retention reports. Thus, the study achieved process validity, which is the criterion for generating new knowledge and a sound and appropriate research methodology.

**Outcome validity.** In order to attain the goal of achieving action-oriented outcomes, an action research study must yield actions to address the problem of practice identified in the research (Herr & Anderson, 2015). This study met that criterion test. As a result of the first research cycle of the study, the out-of-state student resource website was created and shared with the target population. Additionally, ASU's W. P. Carey School of Business increased their support of out-of-state students after I presented the findings from the first cycle of research to the school's associate deans and retention team. Specifically, the school hosted a special lecture, which I delivered, titled *Making ASU Your 2<sup>nd</sup> Home: Thriving as An Out-of-State Student*. The lecture was presented in November, 2016.

**Catalytic validity.** Herr and Anderson (2015) asserted that action research should achieve the goal of educating both the researcher and participants by deepening

their understanding of the issue being studied and by either inspiring them to action or reaffirming their support for the issue. As noted previously, this study contributed to out-of-state students' understanding of their situations by normalizing their experiences. The intervention also had a statistically significant positive association with student co-curricular engagement. For me, the study deepened my knowledge of the out-of-state student experience beyond my own first-hand lived experience as an out-of-state student and beyond mere anecdotes. The study also reaffirmed my commitment to serving and advocating for this vulnerable population's needs.

**Democratic validity.** Herr and Anderson (2015) described two versions of democratic validity which are necessary to achieve the goal of producing results that are relevant to the local setting. The first is the extent to which the research is done in collaboration with all stakeholders. Before initiating this study and when designing the intervention, I consulted with and received approval from the primary professional staff stakeholders: the director of the First-Year Success Center through which the site was provided, and one of the associate deans and the retention team in the business school. Other than producing the out-of-state student video, I did not work collaboratively with students on developing the intervention; however, the study did meet the other version of democratic validity, which is providing a solution that is appropriate for the local context in which the study is being conducted. This study met that criterion by identifying the primary out-of-state student challenges and measuring student interest in the proposed intervention during the first cycle of research. In addition to asking students how likely they would be to use an out-of-state website, I gauged student interest in the proposed

content pages. Doing so helped to ensure the intervention was relevant to the local context.

**Dialogic validity.** As explained by Herr and Anderson (2015), dialogic validity refers to peer review and can be achieved by engaging in critical and reflective dialogue with other action researchers. This study achieved dialogic validity through the university's structure of the doctoral program through which the study was conducted. At the end of each semester I was enrolled in the program, the university's Mary Lou Fulton Teachers College hosted a doctoral research forum in which the program's students presented their research and received critical feedback from both peers and faculty. Additionally, the program places its students into small faculty-led leader-scholar cohorts that meet regularly for the purposes of ongoing support and dialogue. Thus, the dialogic validity criterion was met for contributing to the goal of generating new knowledge.

## **Conclusion**

In response to declining levels of financial support received from their state governments, public universities such as ASU aggressively recruited out-of-state students to attend their institutions. The higher tuition these students paid helped to offset the decreased state contributions to the university's budget. Consequently, out-of-state enrollment grew substantially, both in terms of absolute numbers and in proportion to the overall student body. Little research had been done on the experiences or needs of the out-of-state students the university was increasingly relying on for revenue; not surprisingly, many of these students struggled, and the university retained them at much lower rates than their in-state counterparts.



This study demonstrated that freshmen coming to ASU from another state experienced four main challenges related to being an out-of-state student. Those challenges were homesickness, adjusting to living in Arizona, managing finances, and making friends at ASU. Out-of-state students therefore needed extra support for their transition. The study found that an out-of-state student resource website had a significant and positive association with co-curricular engagement and homesickness frequency reduction. Moreover, the site provided useful information on the challenges experienced by out-of-state freshmen.

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APPENDIX A  
PRE-INNOVATION QUESTIONNAIRE  
OUT-OF-STATE WPC FRESHMEN

1. Why did you choose to attend ASU? Please select all that apply:
  - a. Academic reputation
  - b. Location/setting of the university
  - c. Unique academic program or major
  - d. Resources and opportunities
  - e. Student life
  - f. Received financial aid
  - g. Other \_\_\_\_\_
  
2. Please indicate your level of agreement with the following statements\*:  
(Strongly Agree – Agree – Slightly Agree – Slightly Disagree – Disagree – Strongly Disagree)
  - a. I have found it easy to make friends at ASU.
  - b. I feel like I am part of the ASU community.
  - c. I feel lonely being away from my family or friends at home.
  - d. I have friends at ASU who I can turn to for emotional support if needed.
  
3. I have joined (or plan to join) an ASU student club or activity. Yes    No
  
4. I currently hold or plan to hold a leadership position within an ASU student club or activity. Yes    No
  
5. Please select the highest level of homesickness you felt during your first semester at ASU:
  - 1 = Did not experience homesickness at all
  - 2 = Somewhat homesick
  - 3 = Moderately homesick
  - 4 = Very homesick
  
6. How often did you feel homesick during your first semester at ASU?  
(Never – Rarely – Sometimes – Often – Very Often)

7. About how many hours do you spend in a typical 7-day week doing the following?\*\*\*  
(0, 1-5, 6-10, 11-15, 16-20, 21-25, 26-30, More than 30)
- Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)
  - Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)
  - Working for pay **on campus**
  - Working for pay **off campus**
  - Doing community service or volunteer work
  - Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)
  - Providing care for dependents (children, parents, etc.)
  - Commuting to campus (driving, walking, etc.)
8. What, if anything, do you like most about ASU?
9. What, if anything, do you dislike most about ASU?
10. What are the challenges you have faced as an out-of-state freshman at ASU?  
Please select all that apply.
- Adjusting to living in Arizona
  - Making friends at ASU
  - Missing family and/or friends at home
  - Finances
  - Other \_\_\_\_\_
11. What ASU resources or support services have been helpful to you in overcoming your challenges as an out-of-state ASU student?
- Residence Hall Staff (Community Assistants, Peer Programmers, or professional staff)
  - First-Year Success Coach
  - Academic Advisor
  - Tutoring
  - ASU Counseling Services Counselor
  - WPC or ASU/College 101 Instructor
  - Camp Carey Facilitator
  - WPC Connector Mentor
  - Financial Aid and Scholarship Services
  - ASU student organization

- k. Other ASU students (friends)
  - l. Other \_\_\_\_\_
12. If a resource webpage existed for out-of-state students at ASU, how likely would you be to use it?  
(Very Likely – Likely – Somewhat Likely – Somewhat Unlikely – Unlikely – Very Unlikely)
13. If a resource webpage existed for out-of-state students at ASU, which features would appeal to you? Please select all that apply.
- a. Video of out-of-state students talking about how they overcame challenges and offering advice
  - b. Tips and resources on how to adjust to life in Arizona
  - c. Tips and resources on how to make friends at ASU
  - d. Tips and resources on how to manage feelings of homesickness
  - e. Tips and resources on how to manage finances
  - f. Other \_\_\_\_\_
  - g. A webpage for out-of-state students would not appeal to me at all
14. What else could ASU do to make your transition to the university better as an out-of-state student?
15. Please describe your first month at ASU as an out-of-state student. How was your transition from home to ASU?
16. How likely are you to come back to ASU for your sophomore year?  
(Very Likely – Likely – Somewhat Likely – Somewhat Unlikely – Unlikely – Very Unlikely)
17. Please explain.
18. In which region of the country did you graduate from high school?
- a. Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, or Vermont
  - b. Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, or Wisconsin
  - c. South: Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, Washington D.C., or West Virginia
  - d. West, **\*Not\* California**: Alaska, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, or Wyoming
  - e. California

19. What is your gender identity?

- a. Man
- b. Woman
- c. Another gender identity
- d. I prefer not to respond

20. What is your racial or ethnic identification?

- a. American Indian or Alaska Native
- b. Asian
- c. Black or African American
- d. Hispanic or Latino
- e. Native Hawaiian or Pacific Islander
- f. White
- g. Two or more races
- h. Other
- i. I prefer not to respond

21. Would you be interested in participating in a 30-minute individual interview to talk about your experiences as an out-of-state student in more depth? If yes, please enter your email address so that we can contact you. Your email will not be linked to your survey responses.

\*Items 2A-C adapted from the ASU Connections Survey

\*\*Items 7A-H used with permission from *The College Student Report*, National Survey of Student Engagement, Copyright 2001-16 The Trustees of Indiana University (see Appendix H for permissions)

APPENDIX B  
PRE-INNOVATION QUESTIONNAIRE  
OUT-OF-STATE WPC SOPHOMORES AND JUNIORS



1. Why did you choose to attend ASU? Please select all that apply:
  - a. Academic reputation
  - b. Location/setting of the university
  - c. Unique academic program or major
  - d. Resources and opportunities
  - e. Student life
  - f. Received financial aid
  - g. Other \_\_\_\_\_
  
2. Please indicate your level of agreement with the following statements\*:  
(Strongly Agree – Agree – Slightly Agree – Slightly Disagree – Disagree – Strongly Disagree)
  - a. I have found it easy to make friends at ASU.
  - b. I feel like I am part of the ASU community.
  - c. I feel lonely being away from my family or friends at home.
  - d. I have friends at ASU who I can turn to for emotional support if needed.
  
3. I have joined (or plan to join) an ASU student club or activity. Yes No
  
4. I currently hold, plan to hold, or previously have held a leadership position within an ASU student club or activity. Yes No
  
5. Please select the highest level of homesickness you felt during your first semester as a freshman at ASU:
  - 1 = Did not experience homesickness at all
  - 2 = Somewhat homesick
  - 3 = Moderately homesick
  - 4 = Very homesick
  
6. How often did you feel homesick during your first semester as a freshman at ASU?  
(Never – Rarely – Sometimes – Often – Very Often)
  
7. About how many hours do you spend in a typical 7-day week doing the following?\*\*  
(0, 1-5, 6-10, 11-15, 16-20, 21-25, 26-30, More than 30)
  - a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)
  - b. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)

- c. Working for pay **on campus**
  - d. Working for pay **off campus**
  - e. Doing community service or volunteer work
  - f. Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)
  - g. Providing care for dependents (children, parents, etc.)
  - h. Commuting to campus (driving, walking, etc.)
8. What, if anything, do you like most about ASU?
9. What, if anything, do you dislike most about ASU?
10. What are the challenges you faced when you were an out-of-state freshman at ASU? Please select all that apply.
- a. Adjusting to living in Arizona
  - b. Making friends at ASU
  - c. Missing family and/or friends at home
  - d. Finances
  - e. Other \_\_\_\_\_
11. What ASU resources or support services have been helpful to you in overcoming your challenges as an out-of-state ASU student?
- a. Residence Hall Staff (Community Assistants, Peer Programmers, or professional staff)
  - b. First-Year Success Coach
  - c. Academic Advisor
  - d. Tutoring
  - e. Counseling Services Counselor
  - f. WPC or ASU/College 101 Instructor
  - g. Camp Carey Facilitator
  - h. WPC Connector Mentor
  - i. Financial Aid and Scholarship Services
  - j. ASU student organization
  - k. Other ASU students (friends)
  - l. Other \_\_\_\_\_
12. Why did you choose to return to ASU after your freshman year? Please select all that apply:
- a. Academic reputation
  - b. Location/setting of the university
  - c. Unique academic program or major
  - d. Resources and opportunities

- e. Student life
- f. Received financial aid
- g. Other \_\_\_\_\_

13. If a resource webpage existed for out-of-state students at ASU when you were a freshman, how likely would you have been to use it when you were a freshman? (Very Likely – Likely – Somewhat Likely – Somewhat Unlikely – Unlikely – Very Unlikely)

14. If a resource webpage existed for out-of-state students at ASU when you were a freshman, which features would have appealed to you as a freshman? Please select all that apply.

- a. Video of out-of-state students talking about how they overcame challenges
- b. Tips and resources on how to adjust to life in Arizona
- c. Tips and resources on how to make friends at ASU
- d. Tips and resources on how to manage feelings of homesickness
- e. Tips and resources on how to manage finances
- f. Other \_\_\_\_\_
- g. A webpage for out-of-state students would not have appealed to me at all.

15. What else could ASU have done to make your transition to the university better as an out-of-state student?

16. Please describe your first month at ASU as an out-of-state freshman. How was your transition from home to ASU?

17. In which region of the country did you graduate from high school?

- a. Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, or Vermont
- b. Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, or Wisconsin
- c. South: Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, Washington D.C., or West Virginia
- d. West, **\*Not\* California**: Alaska, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, or Wyoming
- e. California

18. What is your gender identity?

- a. Man
- b. Woman

- c. Another gender identity
- d. I prefer not to respond

19. What is your racial or ethnic identification?

- a. American Indian or Alaska Native
- b. Asian
- c. Black or African American
- d. Hispanic or Latino
- e. Native Hawaiian or Pacific Islander
- f. White
- g. Two or more races
- h. Other
- i. I prefer not to respond

20. Would you be interested in participating in a 30-minute individual interview to talk about your experiences as an out-of-state student in more depth? If so, please enter your email address so that we can contact you. Your email will not be linked to your survey responses.

\*Items 2A-C adapted from the ASU Connections Survey

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APPENDIX C

PRE-INNOVATION OUT-OF-STATE WPC STUDENT INTERVIEW QUESTIONS

1. Please describe your first month at ASU as an out-of-state student. How was your transition from home to ASU?
2. What did you do to try to make friends here at ASU?
3. What did you do to get involved at ASU?
4. Was homesickness an issue for you? If so, how did you manage that?
5. What did your family think of your decision to come to ASU? Did they factor at all into your decision-making?
6. In the survey you completed, you were asked about a potential web resource for out-of-state students. Such a resource could include a video of out-of-state students talking about how they overcame challenges, tips and resources on how to adjust to life in Arizona, tips and resources on how to make friends at ASU, tips and resources on how to manage feelings of homesickness, and tips and resources on how to manage finances. What do you think about this idea?
7. Are there any other features you would like to see in such a web resource?
8. Is there anything else you would like to share from your perspective as an out-of-state student that you think would be helpful for university staff and administrators to know?

APPENDIX D  
POST-INNOVATION QUESTIONNAIRE  
OUT-OF-STATE WPC FRESHMEN

1. Why did you choose to attend ASU? Please select all that apply:
  - a. Academic reputation
  - b. Location/setting of the university
  - c. Unique academic program or major
  - d. Resources and opportunities
  - e. Student life
  - f. Received financial aid
  - g. Other \_\_\_\_\_
  
2. Please indicate your level of agreement with the following statements\*:  
(Strongly Agree – Agree – Slightly Agree – Slightly Disagree – Disagree – Strongly Disagree)
  - a. I have found it easy to make friends at ASU.
  - b. I feel like I am part of the ASU community.
  - c. I feel lonely being away from my family or friends at home.
  - d. I have friends at ASU who I can turn to for emotional support if needed.
  
3. I have joined (or plan to join) an ASU student club or activity. Yes No
  
4. I currently hold or plan to hold a leadership position within an ASU student club or activity. Yes No
  
5. Please select the highest level of homesickness you felt during your first semester at ASU:
  - 1 = Did not experience homesickness at all
  - 2 = Somewhat homesick
  - 3 = Moderately homesick
  - 4 = Very homesick
  
6. How often did you feel homesick during your first semester at ASU?  
(Never – Rarely – Sometimes – Often – Very Often)
  
7. About how many hours do you spend in a typical 7-day week doing the following?\*\*\*  
(0, 1-5, 6-10, 11-15, 16-20, 21-25, 26-30, More than 30)
  - a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)
  - b. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)
  - c. Working for pay **on campus**



- d. Working for pay **off campus**
  - e. Doing community service or volunteer work
  - f. Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)
  - g. Providing care for dependents (children, parents, etc.)
  - h. Commuting to campus (driving, walking, etc.)
8. What, if anything, do you like most about ASU?
9. What, if anything, do you dislike most about ASU?
10. What are the challenges you have faced as an out-of-state freshman at ASU?  
Please select all that apply.
- a. Adjusting to living in Arizona
  - b. Making friends at ASU
  - c. Missing family and/or friends at home
  - d. Finances
  - e. Other \_\_\_\_\_
11. What ASU resources or support services have been helpful to you in overcoming your challenges as an out-of-state ASU student?
- a. Residence Hall Staff (Community Assistants, Peer Programmers, or professional staff)
  - b. First-Year Success Coach
  - c. First-Year Success Center's Out-of-State Student Resource Website
  - d. Academic Advisor
  - e. Tutoring
  - f. ASU Counseling Services Counselor
  - g. WPC or ASU/College 101 Instructor
  - h. Camp Carey Facilitator
  - i. WPC Connector Mentor
  - j. Financial Aid and Scholarship Services
  - k. ASU student organization
  - l. Other ASU students (friends)
  - m. Other \_\_\_\_\_
12. Did you access the First-Year Success Center's out of-state student resource website – [students.asu.edu/fys/out-of-state](http://students.asu.edu/fys/out-of-state) – last semester?  
(Yes-No)
- a. If Yes, please enter your ASURITE ID: \_\_\_\_\_.  
Your ASURITE ID will not be shared with others.
  - b. If Yes, did this resource website provide useful information to you on:
    - i. Adjusting to Arizona (Yes-No)

- ii. Managing Homesickness (Yes-No)
  - iii. Making friends at ASU (Yes-No)
  - iv. Managing finances (Yes-No)
  - v. Getting involved at ASU (Yes-No)
  - c. If Yes, please provide feedback on this website and its value to you as a student who came to ASU from another state.
- 

13. What else could ASU do to make your transition to the university better as an out-of-state student?

14. Please describe your first month at ASU as an out-of-state student. How was your transition from home to ASU?

15. How likely are you to come back to ASU for your sophomore year?  
(Very Likely – Likely – Somewhat Likely – Somewhat Unlikely – Unlikely – Very Unlikely)

16. Please explain.

17. In which region of the country did you graduate from high school?

- a. Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, or Vermont
- b. Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, or Wisconsin
- c. South: Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, Washington D.C., or West Virginia
- d. West, **\*Not\* California**: Alaska, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, or Wyoming
- e. California

18. What is your gender identity?

- a. Man
- b. Woman
- c. Another gender identity
- d. I prefer not to respond

19. What is your racial or ethnic identification?

- a. American Indian or Alaska Native
- b. Asian
- c. Black or African American

- d. Hispanic or Latino
- e. Native Hawaiian or Pacific Islander
- f. White
- g. Two or more races
- h. Other
- i. I prefer not to respond

20. Would you like to be entered into a drawing for a \$50 gift card to the ASU book store? If yes, please enter your email address here. Your email will not be linked to your survey responses.

21. Would you be interested in participating in a 30-minute individual interview to talk about your experiences as an out-of-state student in more depth? If yes, please enter your email address so that we can contact you. Your email will not be linked to your survey responses.

\*Items 2A-C adapted from the ASU Connections Survey

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APPENDIX E

POST-INNOVATION OUT-OF-STATE WPC STUDENT INTERVIEW QUESTIONS

1. Please describe your first month at ASU as an out-of-state student. How was your transition from home to ASU?
2. What did you do to try to make friends here at ASU?
3. What did you do to get involved at ASU?
4. Was homesickness an issue for you? If so, how did you manage that?
5. What did your family think of your decision to come to ASU? Did they factor at all into your decision-making?
6. In the survey you completed, you indicated that you accessed the First-Year Success Center's out-of-state student website. What do you remember about this site?
7. The site included a video of out-of-state students talking about their experiences and offering encouragement and advice; it also had tips and resources on how to adjust to life in Arizona, tips and resources on how to make friends at ASU, tips and resources on how to manage feelings of homesickness, information on getting involved, and tips and resources on how to manage finances.
  - a. What did you think about this content?
  - b. Was it useful to you, and if so, how, and which parts?
8. Are there any other features you would have liked to see in this site?
9. Is there anything else you would like to share from your perspective as an out-of-state student that you think would be helpful for university staff and administrators to know?

APPENDIX F

FALL 2016 WPC 101 EXTRA CREDIT OPPORTUNITIES

## Extra Credit



## Extra Credit Opportunities

In WPC 101 you may choose up to 4 different options of Extra Credit. Each Extra Credit option is worth up to 25 points. Earn up to a maximum of 100 points of Extra Credit this semester.

- ❖ Attend any of the events on page 2 and write a 1-2 page essay about what you gained from the experience.
  - A Signature Form is required for all options
- ❖ Complete the final two GetSet modules and write a 1-2 page essay about your experience using GetSet. (see detailed instructions in the Extra Credit folder)
  - Remaining modules: Taking Ownership & Expanding your Perspective
    - You must complete at least 2 of the prompts for each module
- ❖ Attend the Majors Exploration Fair (and complete worksheet)
- ❖ Attend a Cover Letter Workshop with the Business Career Center and submit a 1 page cover letter.
- ❖ Create a Wellness Profile and complete an assessment (see detailed instructions in the Extra Credit folder) and take a screenshot of your completed assessment.
- ❖ Create your LinkedIn Profile and submit it to your facilitator by “connecting” with them. You **MUST** add a profile picture to receive any points for this option. (See detailed instructions in the Extra Credit folder.)
- ❖ WPC 360 Option (see detailed instructions in the Extra Credit folder). Take a screenshot(s) to show that you have completed specific activities and take a quick survey about your feedback.
- ❖ Review Out-of-State Website and provide feedback (see detailed instructions in the Extra Credit folder).

### Essential content & formatting requirements for Extra Credit essays

- List the date and time you attended the event or appointment (if applicable)
- Format your response in essay format (multiple paragraphs, with a narrative-type flow).
- Use a 12 point, professional font (Times New Roman, Calibri, Garamond, etc.) with 1” margins all around.
- Make sure to include a heading with your full name, class section, and facilitator.
- Your response should be between 1 and 2 double-spaced pages in length.
- Don’t forget to staple the signature form to your essay (if required)!

APPENDIX G

FALL 2016 WPC 101 OUT-OF-STATE WEBSITE OPTIONAL EXTRA CREDIT

ESSAY ASSIGNMENT



### *Extra Credit*

## **Out of State Website Review + Essay**



For this extra credit opportunity, you will need to review the Out-of-State website and provide feedback.

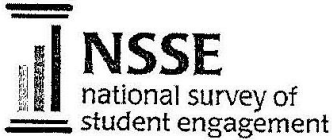
### **Directions:**

1. Take some time to browse the out-of-state student website.
  - <https://students.asu.edu/fys/out-of-state>
2. After browsing the site, please write a 1-2 page essay reflection responding to the following prompts:
  - Please summarize the information you reviewed on the website.
  - Which part(s) of the website did you find the most interesting, and why? How might you use this information to enhance your experience at ASU?
  - Based on the website content you reviewed, what tips or advice would you give to out-of-state freshmen who are struggling with their transition to ASU?

### **Essential content & formatting requirements for Extra Credit essays**

- Format your response in essay format (multiple paragraphs, with a narrative-type flow).
- Use a 12 point, professional font (Times New Roman, Calibri, Garamond, etc.) with 1" margins all around.
- Make sure to include a heading with your full name, class section, and facilitator.
- Your response should be between 1 and 2 double-spaced pages in length.

APPENDIX H  
APPROVAL TO USE SURVEY ITEMS



*The College Student Report*  
**Item Usage Agreement**

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In consideration of the mutual promises below, the parties hereby agree as follows:

- 1) The University hereby grants **Kevin Correa** ("Licensee") a nonexclusive, worldwide, irrevocable license to use, reproduce, distribute, publicly display and perform, and create derivatives from, in all media now known or hereafter developed, the item(s) listed in the proposal attached as Exhibit A, solely for the purpose of including such item(s) in the survey activity described in Exhibit A, which is incorporated by reference into this Agreement. This license does not include any right to sublicense others. This license only covers the survey instrument, time frame, population, and other terms described in Exhibit A. Any different or repeated use of the item(s) shall require an additional license.
- 2) "National Survey of Student Engagement", "NSSE", and the NSSE logo are registered with the U.S. Patent and Trademark Office. Except as provided in part 3c below, these elements may not be incorporated without permission in materials developed under this agreement, including but not limited to surveys, Web sites, reports, and promotional materials.
- 3) In exchange for the license granted in section 1, Licensee agrees:
  - a) there will be no licensing fee to use NSSE items for the purposes described in Exhibit A;
  - b) to provide to NSSE frequency distributions and means on the licensed item(s);
  - c) on the survey form itself, and in all publications or presentations of data obtained through the licensed item(s), to include the following citation: "Items xx and xx used with permission from *The College Student Report*, National Survey of Student Engagement, Copyright 2001-16 The Trustees of Indiana University";
  - d) to provide to NSSE a copy of any derivatives of, or alterations to, the item(s) that Licensee makes for the purpose of Licensee's survey ("modified items"), for NSSE's own nonprofit, educational purposes, which shall include the use of the modified items in *The College Student Report* or any other survey instruments, reports, or other educational or professional materials that NSSE may develop or use in the future. Licensee hereby grants the University a nonexclusive, worldwide, irrevocable, royalty-free license to use,

Indiana University Center for Postsecondary Research  
1900 East Tenth Street • Eigenmann Hall, Suite 419 • Bloomington, IN 47406  
Phone: (812) 856-5824 • Fax: (812) 856-5150 • E-mail: nsse@indiana.edu • Web Address: www.nsse.iub.edu




reproduce, distribute, create derivatives from, and publicly display and perform the modified items, in any media now known or hereafter developed; and

- e) to provide to NSSE, for its own nonprofit, educational purposes, a copy of all reports, presentations, analyses, or other materials in which the item(s) licensed under this Agreement, or modified items, and any responses to licensed or modified items, are presented, discussed, or analyzed. NSSE shall not make public any data it obtains under this subsection in a manner that identifies specific institutions or individuals, except with the consent of the Licensee.

4) This Agreement expires on March 1, 2017.


The undersigned hereby consent to the terms of this Agreement and confirm that they have all necessary authority to enter into this Agreement.

For The Trustees of Indiana University:

  
\_\_\_\_\_  
Alexander C. McCormick  
Director  
National Survey of Student Engagement

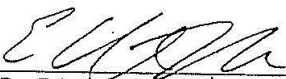
3/29/2016  
Date

For Licensee:

  
\_\_\_\_\_  
Kevin Correa  
Doctoral Student  
Arizona State University

3/23/16  
Date

For Advisor:

  
\_\_\_\_\_  
Dr. Erin Rotheram-Fuller  
Associate Professor  
Arizona State University

3/23/16  
Date

Indiana University Center for Postsecondary Research  
1900 East Tenth Street • Eigenmann Hall, Suite 419 • Bloomington, IN 47406  
Phone: (812) 856-5824 • Fax: (812) 856-5150 • E-mail: nsse@indiana.edu • Web Address: www.nsse.iub.edu

APPENDIX I  
INSTITUTIONAL REVIEW BOARD APPROVAL

APPROVAL: CONTINUATION

Erin Rotheram-Fuller  
 Division of Educational Leadership and Innovation - Tempe  
 -  
 Erin.Rotheram-Fuller@asu.edu

Dear Erin Rotheram-Fuller:

On 9/8/2016 the ASU IRB reviewed the following protocol:

Type of Review:	Continuing Review
Title:	Retention of Out-of-State Freshmen at ASU
Investigator:	Erin Rotheram-Fuller
IRB ID:	STUDY00003624
Category of review:	(7)(b) Social science methods, (7)(a) Behavioral research
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	<ul style="list-style-type: none"> <li>• Email Intro - Spring 17.pdf, Category: Recruitment Materials;</li> <li>• Second Email Reminder, Category: Recruitment Materials;</li> <li>• Consent for Survey, Category: Consent Form;</li> <li>• Email Solicitation, Category: Recruitment Materials;</li> <li>• Second Email Reminder - Spring 17.pdf, Category: Recruitment Materials;</li> <li>• First Email Reminder, Category: Recruitment Materials;</li> <li>• First Email Reminder - Spring 17.pdf, Category: Recruitment Materials;</li> <li>• Consent Letter for Survey and Interview - Spring 2017 Edited.pdf, Category: Consent Form;</li> </ul>

The IRB approved the protocol from 9/8/2016 to 9/4/2017 inclusive. Three weeks before 9/4/2017 you are to submit a completed Continuing Review application and required attachments to request continuing approval or closure.

If continuing review approval is not granted before the expiration date of 9/4/2017 approval of this protocol expires on that date. 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: Kevin Correa  
Kevin Correa