

Blueprints for Student Success: High School Students' Questions about the Transition to College

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This article describes the questions and concerns students from rural communities in a frontier state have about transitioning to college. Findings from the study have resulted in several interactive virtual tools and face-to-face programs to support students' development of college knowledge. The authors advance the need for greater partnerships between college and high school staff in the college readiness domain and suggest admissions, orientation, and transition staff are well-suited to lead such research-to-practice partnerships.

The majority of American high school students aspire to higher education. Currently, 95% of high school seniors expect to attend college of some kind, which has increased from 79% in 1981 (Goldrick-Rab & Cook, 2011). The increased percentage of students aspiring to higher education has manifested in a college-going student population that is more racially, ethnically, and economically diverse (Renn & Reason, 2013; Davis, 2010). Despite an increasingly diverse student body, more students aspire to attend college than actually enroll. The degree to which students do not realize their educational expectations varies by gender, race, and socioeconomic status (Seifert, Wells, Saunders, & Gopaul, 2013). Students in rural areas also experience unrealized educational expectations. Past research has found that students in rural areas express a reluctance to leave their community and concerns about the cost of living elsewhere, internalize family expectations to maintain the family farm or business, experience conflicting values in relation to continuing education, and/or feel lost in the academic jargon of the application and admissions process (Ardoin, 2013; Byun, Irvin, & Meece, 2012; Irvin, Byun, Meece, Farmer, & Hutchins, 2012; Elder, King, & Conger, 1996; Irvin, Meece, Byun, Farmer, & Hutchins, 2011; McDonough, Gildersleeve, & McClafferty-Jarsky, 2010). Together these factors present a significant barrier for rural students' college application, enrollment, and completion (Byun, Irvin, & Meece, 2012).

The challenge for high school counselors and college orientation, transition, and retention advisors in assisting students from rural areas to realize their educational expectations is compounded in a state such as Montana where this

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research was conducted. Located in the Northwest corner of the United States, Montana is the 4th largest state and the 3rd most sparsely populated with an average of 7 people per square mile (Montana Association of Counties, 2015; U.S. Department of Commerce, 2016). Its dynamic geography and extreme wind and weather conditions create natural barriers between communities and accentuate the remote, isolated nature of Montana's cities and towns. In fact, these features lead to a more accurate definition of *frontier* since community members must travel extreme distances to access services of any kind (Montana Department of Public Health & Human Services, 2011; National Center for Frontier Communities, 2014).

It is important to note that over 82% of Montana cities and towns are defined as frontier. Only 7 of Montana's 304 (2%) communities hold populations over 10,000 and of those, only 3 (1%) meet the U.S. Census Bureau's definition of "urbanized" at a minimum of 50,000 citizens (National Center for Frontier Communities, 2014; U.S. Census Bureau, 2017). This explains the abundance of high schools (81%) with student bodies of 339-120 (27%) or 119-6 students (54%) (Houghtaling, 2017). The unique, frontier features of Montana's communities and high schools result in a struggle to provide access to and consistency in robust, college-readiness experiences across all high schools simply due to distance of resources (Byun, Irvin, & Meece, 2015; Chenoweth & Galliher, 2004; Houghtaling, 2017; NICHE.com Inc, 2018).

Students begin college with the desire to draft a blueprint for their success but often lack the knowledge tools to do so. College readiness programs such as Upward Bound and Talent Search, as well as high school counselors, are invaluable in preparing students academically and also preparing them to navigate the college-choice, application, and financial aid process. However, these programs may not fully introduce the programs, people and processes that exist on college campuses to support success. Metaphorically, this is as if college-bound students are seated at a drafting table on a stool with two legs. They are unbalanced as they sketch their blueprint, since the third leg—college knowledge—is missing (see figure 1). Developing college knowledge requires learning higher education's language/jargon, structure, norms and values, also known as the hidden curriculum (Smith, 2013), as these differ significantly from high school. Yet, college knowledge is one of "the most important problems in rural students' college decision process" (Chenoweth & Galliher, 2004, p. 13). This study investigates high school students' questions about the college transition in an effort to understand their baseline college knowledge. The perspective of these students is particularly important as it highlights a unique perspective from frontier populations (Byun, Irvin, & Meece, 2015; Byun, Meece, Irvin, & Hutchins, 2012). Findings from this research can inform university educators' efforts to partner with high school counselors in geographically isolated contexts to engage in preparing their students in the college readiness process. Moreover, these findings may also inform first-year orientation and transition programming at institutions with a critical mass of rural students. Without college-going knowledge and tools to navigate the first-year transition to higher education, the gap between rural communities and the college experience remains wide and difficult to cross.

Literature Review

High school and college are two separate worlds, with different historical origins and purposes. Thus, transitioning from high school to college presents challenges. Beyond the formal academic curriculum lies higher education's "hidden curriculum," which Smith (2013) defines as "the unwritten, norms, values, and expectations that unofficially and implicitly govern the interactions among students, faculty, professional staff, and administrators" (p. 3). Once students arrive on the college campus, they encounter the hidden curriculum as it manifests in different, albeit rarely explicitly stated expectations, attitudes, and behaviors. For example, the manner in which it is expected for students to communicate with a college professor is different than the manner in which they may have communicated with a familiar high school teacher. Additionally, a college campus is an organizationally complicated place, with some centralized and other decentralized and/or duplicative support services, requiring student agency and perseverance to navigate (Seifert, Arnold, Burrow, & Brown, 2011). Moreover, a multi-faceted set of knowledge and skills is necessary, including the ability to interact with a variety of different types of people (faculty, staff, students), study independently and with groups on challenging assignments, understand the values and norms of college, develop academically-purposeful habits, balance multiple roles, and seek help when needed (Carter, Locks, & Winkle-Wagner, 2012; Conley, 2008, 2010; Karp & Bork, 2012; Tierney, Ragusa, Blumberg Corwin, & Fullerton, 2013; Wilson-Strydom, 2014).

Students arrive at college with a differing awareness of the hidden curriculum, largely as a result of the cultural capital they possess based upon their background. Students who have grown up with family and friends who have earned college degrees tend to possess a disposition of mind that values higher education. This form of embodied cultural capital is the cultivation of habit and taste, and is referred to as one's *habitus* (Bourdieu, 1986/2011). In addition to *habitus*, students who come from such backgrounds also benefit in terms of institutionalized cultural capital that academic qualifications bestow. Beyond the benefits accrued by possessing a university degree, institutionalized cultural capital confers the knowledge of higher education's norms, values, and expectations—the hidden curriculum—to students. As noted previously, more students are attending college who may not possess the cultural capital necessary to navigate higher education's hidden curriculum. These students are the least likely to have the knowledge about college that is necessary to succeed.

Rural areas of the U.S. typically have the lowest levels of educational attainment (Rubisch, 1995), and students from rural areas often face challenges due to both their first-generation student status, along with issues related to rural status (Heinisch, 2016). Heinisch found that rural students at a Midwestern university faced challenges adjusting to college, including unrealistic expectations and a longer than average adjustment period. Many of these rural students, having previously attended small high schools with students they had known their entire lives, struggled with the large university, diverse student body, and the

feeling of being anonymous (Heinisch, 2016). Understanding college jargon and accessing information about college tends to be challenging for rural students as well. Chenoweth & Galliher (2004) found that rural Appalachian students struggled with a lack of information about college in general, along with more specific information regarding financial aid. Ardoin (2013) studied rural high school students as well, finding that they tended to possess low levels of knowledge around college/university jargon and knowledge, and sometimes had a tendency to panic when confronted with typical university processes involving the college application process.

One way to assist students to decode higher education's hidden curriculum is by developing their college knowledge (Ardoin, 2013; Smith, 2013; Tierney et al., 2013). Programs such as new student orientation, first-year experience seminars, and other first-year programming may address the "college knowledge" needed for a successful transition, but not all students take part, not all colleges offer these services, their foci differ (Young & Hopp, 2014), and they occur after a student is already enrolled and attending college. In light of such uncertain student engagement and variation in programming, it seems logical that in order to prepare college-ready students, some college knowledge needs to be developed prior to matriculation.

College readiness is typically in the purview of high school counselors. Yet, high school counselors are often overwhelmed by very high counselor to student ratios (Woods & Domina, 2014), with ratios as high as 1:725 in urban settings (Kimura-Walsh, Yamamura, Griffin, & Allen, 2009). In rural settings, another problem can occur in which a single counselor is meeting the developmental needs of an entire K-12 district. Despite these challenges, school agents are often the only source or at least the most popular source of college-going information for some students. Kimura-Walsh and colleagues (2009) discovered that school agents were often the most popular source of information for Latina students, even though they were often inaccessible. Another difficulty lies in counselor preparation to address college readiness issues (Morgan, Greenwaldt, & Gosselin, 2014; Savitz-Romer, 2012). Savitz-Romer (2012) found a lack of training in graduate programs around assisting with college preparation and readiness. With a greater emphasis placed on clinical counseling in graduate coursework, college readiness coursework was either nonexistent or consisted of one course in the program.

Partnerships between high schools and colleges have great potential to prepare students to be successful in college, and calls for increased partnership between sectors have existed for years (National Center for Public Policy and Higher Education, 2009). For example, Texas has created a P-16 database and implemented innovations with high school counseling (Oliva, 2008). Hooker and Brand (2010), in their study of partnerships and programs directed at increasing college readiness and knowledge of high school students, concluded by recommending that legislators should promote providers sharing common objectives leading to college and career readiness, support programs that help students and families build college knowledge, and assist K-12 schools and colleges to collaborate more extensively. Hooker and Brand also suggested that

many community providers can assist with providing the knowledge that students need to succeed in college. As Carter et al. (2012) state, “perhaps institutions, particularly those in close proximity to each other, need to develop/recommit to consortia and combine efforts and think about transition to college options that help students from a variety of institutions learn the skills and orientations needed to be successful in a post-secondary environment” (p. 136). We are motivated to bridge the resources from Montana’s colleges with high schools and support rural, frontier students in developing the college knowledge necessary to realize their educational expectations. To those ends, our research question was simple: What questions and concerns do current high school students have about the transition to college?

Methodology and Method

The purpose of this qualitative study was to explore the questions that high school students in a frontier state, Montana, have about attending college. The setting within an extremely rural state is intentional, as research across rural Midwestern states found rural students tend to have lower educational aspirations than their non-rural peers, even after taking into account student, family, teacher, and school characteristics (Molefe, Burke, Collins, Sparks, & Hoyer, 2017). Additionally, Byun, Meece, & Irvin, (2012) report that rural students are less likely than non-rural students to complete their bachelor’s degrees. Thus, addressing questions about college and developing prospective students’ college knowledge may facilitate a greater likelihood for rural students to realize their educational expectations. The study was conducted within the phenomenological framework (Creswell, 2013). This approach of qualitative research involves the researcher observing and interacting with participants in their natural environment in an effort to understand the essence of an experience. Although the amount of time in which the research team had contact with each group of students was not as long-term, engaged, or sustained as is customary with phenomenological studies, the team engaged directly with each group of students with whom we met. Our goal was to describe and then thematically interpret the questions high school students had in the anticipation phase prior to transitioning to college. We engaged with students using a semi-structured protocol. Based on a review of the literature and pilot interaction with Montana high school students, we generated an initial set of seven categories as a starting point in our conversation. These categories were: Applying and Paying for College, Living Away From Home, Making Friends and Getting Involved, Finding Support and Resources, Succeeding in College Classes, Being Well and Staying Healthy, and Exploring Majors and Careers. The research team carefully considered the most interactive way to connect with high school students. We discussed the pros and cons of traditional focus groups and other qualitative data collection methods. Ultimately, we chose to gather data through a game because we believed it would generate the greatest amount of student interaction and inclusive participation.

Sample

During the spring of 2016 the research team met with primarily junior and senior high school students from five high schools and one homeschool group across central Montana. High schools were purposefully selected based on size, geography, and college-going resources. High schools varied in size from more than 1,800 students to extremely small (40 students in grades 9-12). Students ranged in aptitude and desired post-high school goals and included students who were enrolled in multiple AP courses and definitively college-bound to those unsure of their next steps after graduation. In most cases, we met with students during their regular class period, approximately 50 minutes. The number of students in a class varied from 30 students to 7. One small rural high school, which participates in the federally-funded GEAR UP program, chose our visit as a school assembly and we met with all grade 9-12 students for nearly two hours.

Data Collection

We began each class period with introductions and the purpose of our visit. We clearly articulated that we were not recruiters for our university nor were we visiting on behalf of the institution. We asked students to get in small groups of three or four. Groups of students were provided erasable markers and as many as eight colored laminated tiles, on which they generated the questions they had about attending college. If, for example, a group of students had a blue card, the corresponding general theme for the blue cards was "Succeeding in College Classes"; they wrote their questions on the cards increasing in point value from 100 to 500 similar to the well-known TV game, Jeopardy. As students completed their tiles, photographs were taken to capture the exact wording of the responses for later data analysis. Once we placed the tiles on a whiteboard by category horizontally, and increasing in point value vertically, the game began. One of the benefits of the Jeopardy game was that the questions were created with some level of anonymity. This allowed students to ask questions that they may have been uncomfortable asking in other settings. Because students worked in small groups to generate the questions, the game process normalized having questions and concerns about the transition to college.

The first group of students chose a theme or category and the point value for that particular question; for example, "Exploring Majors and Careers for 300." The question was read aloud and the team had one minute to formulate an answer to that question. Following that team's response, other groups were invited to comment and build upon the original answer. The research team facilitated the game, anonymously recorded all questions generated, and one or two team members took notes observing student behaviors and interactions. Following each school visit, the team created a working document to share observations and reflections until a debrief session could be held to discuss each session at the schools.

Data Analysis and Trustworthiness

We analyzed the data using the constant comparative method of qualitative analysis. The constant comparative method, developed by Glaser and Strauss (1967 as cited in Boeije, 2002), utilizes the approach of comparing and contrasting collected data through the process of analysis, forming categories and summarizing content. Constant comparative method is used to develop concepts or categories from the data by coding or analyzing the data, comparing each unit to the previous one at the same time (Kolb, 2012). Given the goals of this project, conclusions were tested against an *a priori* framework (the initial seven categories), rather than developing an emerging formal grounded theory (Fram, 2013).

This type of qualitative analysis requires a systematic approach to the analysis to ensure trustworthiness and credibility. First, we ensured the validity of the data by photographing each question with a camera and accurately typing the document. From these data, we engaged in consensual qualitative research (Hill et al., 2005). We worked in a group to analyze and code every question, and decisions were made by consensus. Such an approach ensures credibility of the emergent findings in that no fewer than three and often six people from differing personal and educational backgrounds had to agree on the appropriate code. Researcher bias is reduced through the consensual team approach to developing themes collaboratively (Hill et al., 2005).

Positionality

The research team consisted of the principal investigator, who is a faculty member in a higher education graduate program, three graduate students and two undergraduate students. Everyone on the research team had a personal or professional interest in the topic. For example, one of the undergraduate researchers had hosted scholarship search workshops in her home community. A graduate researcher shared she was first in her family to attend college and empathized with students preparing for this transition. As a team, we held one another accountable for recognizing our bias and perspectives as we engaged in the data analysis.

Results

The beginning categories were developed based on previous conversations with high school students, counselors, and a review of the literature. Through a Jeopardy-style game, we invited students to generate questions they had about transitioning to college within seven categories. Our data analysis used a constant comparative method and identified greater variation and complexity to the salient questions on the minds of high school students. Following is a review of the expanded ten categories with their sub-categories. We present the number of generated questions in parentheses and examples of verbatim questions in italics.

The initial category applying and paying for college evolved to college choice and preparation (12) with the questions generated having “process” or “how to” type emphases. Questions included: *Is it better to go to college close to home or far away? What high school classes help with college? and How many back-up schools should I apply to?* These are clearly questions germane to those who have not yet matriculated but who are thinking carefully about the college choice and preparation process.

Having generated questions about applying for college, students then begin to ruminate, and to some extent, fixate, on how they will pay for it. Financial literacy (80) was the category with the most questions branching into sub-topics of understanding federal financial aid, understanding loans, financial planning for tuition, fees, and books, and financial planning for living expenses. Questions included: *How does the FAFSA actually work? How long does it fully take to pay off college loans? Where do I physically pay? and How do you pay bills?* The focus on the cost of college manifested also in students’ questions about managing time (25), particularly with respect to studying and balancing academic and work obligations. Questions included: *How do I manage my time around studying? Should I make personal deadlines for myself with assignments? How to balance classes and a job? and How many classes is “too many” classes?*

Understandably, students had a number of questions with respect to living away from home as well as making friends and getting involved, as the familiar often changes dramatically when starting college. Living away from home (49) inspired questions aligning with functioning as an independent adult (*What happens if there is an emergency and your family lives far away?*), living situations (*Do you have to live on campus if you do not live at home?*), and separating while maintaining important family and friend relationships from home (*How do I deal with homesickness?* – six separate questions mentioned homesickness directly). Making friends and getting involved (50), drew questions oriented around establishing friendships (*What is the best way to meet people? Where can I find life-long friends?*), finding and selecting extracurricular activities (*What variety of clubs/activities are available? How do I find out about them?*), and understanding sports and fraternity/sorority life (*Where do I go to try to find out how to be on the football team? How do sororities and fraternities work?*). Finally, students recognize that living in a new environment will call on them to develop communication and interpersonal skills (16) with roommates, peers, and faculty. Questions included: *What do I do if I do not like my roommate? What if your roommate scares you? How do you communicate with your professors? and Can your professor be your friend?*

Students know that college classes will be different than high school but they are not sure how. Succeeding in college classes (51) questions branched into sub-topics of understanding expectations and organization (*How much work do we have to do out of class?*), seeking help with coursework (*Are the teachers available to help if we have questions? How accessible are tutors?*), developing academic success strategies (*What are good ways to take notes during lectures?*), and attending/missing class (*Do you need to go to every class to graduate?*).

Being well and staying healthy (62) became the most complex category with

three main sub-categories: food and dining resources (*What are on-campus food options for people with allergies or who want to eat healthy?*), physical and mental wellness (*How much sleep do I really need?*), and services for maintaining wellness. The complexity of questions generated under services for maintaining wellness led to further delineation regarding how to find specific resources related to fitness (*What kind of exercise facilities do you have?*), medical (*What kind of services does the Student Health Office offer?*), and counseling and mental health (*Where can you go if you have mental issues?*). It is worth noting twice as many questions pertained to understanding the extent and scope of counseling and mental health services than medical.

Students seem to be inundated with the question, “what are you going to study?” It’s a harmless enough question posed by well-meaning family members at graduation parties but it comes with some level of anxiety for the college-bound student. One explanation for the number of questions in the exploring majors and careers (47) category may be that students feel they have to declare a major before they get to college. Students may not have the maturity or the resources to determine a career path at this point, as was evidenced by the sub-categories of exploring interest and vocation (*What’s the best way to find subjects you may be naturally good at?*) and choosing and changing a major, tinged with anxiety and worry (*How many times are you allowed to change your major?*). Students were also interested in the process of choosing a major (*When should a person have declared a final major by?*) and curious about opportunities provided for career exploration (*Do colleges offer work study to explore majors?*).

Finally, there were questions that didn’t seem to fit into any category or sub-topic and these were classified in general help (14). Questions included: *What if you are a shy person? Where do you look for help? and How involved are community resource groups in college campuses?*

Discussion

This study sought to understand the questions current Montana high school students had about going to college. The best way to find this information was to approach the students themselves as the experts (Paterson, 2015) and engage in a phenomenological study to describe the lived experience of high school students in the anticipatory time prior to transitioning to college. Approaching them in a game-focused manner allowed for a shared exchange of information and generated a robust dataset.

Over 400 questions demonstrated students’ thirst for college knowledge (Conley, 2008; Hooker & Brand, 2010) and awareness that transitioning from high school to college would require developing new skills to navigate the college milieu. If one envisions college readiness as a stool upon which students sit to draft their unique blueprint for college success (see Figure 1), high school counselors have done an admirable job advising in terms of academic preparation as well as college and financial aid application. Yet, a great opportunity lies in adjoining the ‘college knowledge’ leg to the stool. Developing stronger partnerships

between high school counselors and college recruitment, admission, orientation, and transition staff would provide a bridge for high school students, parents, and counselors to engage in the valuable conversation exposing the often hidden curriculum of higher education. High school counselors are already succeeding in providing application and enrollment information to students, and a partnership with college faculty and staff could aid in making the hidden curriculum explicit, providing students with valuable social and cultural capital to successfully transition to college.

The high school students in our focus groups had a number of questions regarding preparing for college and navigating the system as students. A major focus of concern included how to meet people with similar interests and make friends. This is a seemingly simple question, but an essential one, particularly for students from rural communities who may have grown up with the same friends all their lives. If new students do not meet others with common interests, feel accepted, and feel like they belong, they won't stay in college (Hausmann, Ye, Schofield, & Woods, 2009; Tinto, 2012). Moving from a town or city where a person has lived their entire life to a completely new place brings on stressors that students may have never experienced before. In addition, most have never lived with a stranger in a small dorm room, and high school students had many questions regarding roommate conflicts. Questions about how to declare a major and concern about changing majors were at the top of the list as well. Students conveyed the impression they must choose a major when they apply to college or soon thereafter. The anxiety with which students spoke about majors suggests a clear opportunity for career counselors and academic advisors from college campuses to partner with high school counselors around preparing students to be college and career ready.

The implications of our study are, in part, that colleges and high schools must work together to address the questions and concerns of students before they matriculate. Doing this would lessen the distance for students in remote towns, avert a large portion of anxiety, and make students more confident before attending college. Partnering so as to provide students with information on how to "do college," what David Conley (2008, 2010) and others (see Tierney et al., 2013) refer to as "college knowledge", could assist in a successful college transition. This is not a new or novel revelation (see Hooker & Brand, 2010; Oliva, 2008). The Association for the Study of Higher Education partnered with the Pell Institute on the Study of Opportunity in Higher Education for the express purpose of connecting researchers and practitioners in meaningful dialogue centered on college readiness and success (ASHE, 2016).

Such partnerships are aligned with the land grant mission of many universities across the United States. The Blueprints for Student Success-Montana project draws from the land grant pillar of community outreach and has collaborated on a local level across the state. First, we partnered with high school counselors to interact with their students, gathering data largely as a needs assessment. Second, one of the key messages we heard from high school counselors is that anything derived from the study's findings could not require more of counselors' limited time. Thus,

we have developed a multi-pronged approach using social media and technology to develop students' college knowledge in a self-guided fashion.

First, we created a Facebook page, Blueprints for Student Success-Montana, and Twitter handle, @_blueprints, where we post questions from the high school students with advice we gathered from current college students from across the state. Social media is a means to normalize the questions students have about the college transition. From our data collection, we also learned that college-bound high school students often don't know which questions to ask of whom. To that end, we have partnered with undergraduate computer science students to demystify higher education's organizational structure and language. They are doing this by providing parents, counselors, and students with an easy-to-navigate website, www.blueprintsforstudentsuccess.com, which provides an overview of the student support services common on college campuses, including a description of what the unit does and the questions appropriate to ask office staff. Finally, computer science students are developing an interactive computer game geared towards college-bound high school seniors. The objective of the game is to develop players' college knowledge by inviting them to solve common challenges faced by students in their first year of college. These include handling roommate conflicts, seeking help with a class after receiving a lower than expected grade, exploring a major, and maintaining a sense of balance between academic responsibilities, social engagements, work, and health and well-being. The overall purpose of the game is to introduce college-bound students to higher education's language, structure, culture, norms and expectations, and allow students to 'go to college' in a virtual space, letting them practice, fail, and learn how to connect with important people, programs, and services on campus that exist to support their success. Future research will investigate how partnerships between colleges and high schools foster greater college knowledge among students and how this knowledge manifests in college success.

Demonstrating a need for real-time resources for building college knowledge, and identifying a multi-pronged solution for accomplishing this task, this study provides a framework to inform the development of similar programs and partnerships. While most high school students may have an interest in becoming savvy about college, each region may have methods of delivery specific to their populations. Partnerships between university and high school educators that are research-based and result in context-informed practice are the key to preparing college ready students. An example is an outreach event developed in a partnership between Great Falls College, the College of Engineering at Montana State University, and a Great Falls School District in Montana. In 2016, a collaborative event ("Think Like An Engineer") was organized and hosted at Great Falls College with day-time activities for students considering engineering or computer science careers. As an added feature at this event, a Parent/Family session was hosted in the evening. Representatives from the College of Engineering Outreach Team and instructors from the Community College presented using interactive, hands-on methods. Participants were introduced to topics including STEM careers and majors, what successful college students do, and using a 2-year college as a

stepping stone to a Bachelor's degree. Key to this event was the guest list, which consisted of high school students from Great Falls and surrounding communities within a 100-mile radius. Through the evolution of this event organizers have moved the date to autumn in order to avoid hazardous travel conditions and begin to reach out to financial aid representatives and the Cooperative Extension to broaden college readiness outreach, regardless of major interests, for more Montana youth.

The results of our study can be applied to the work of professionals in orientation and transition programs in a multitude of ways. An example involves high school students' numerous questions around choosing a major in college. High school students' questions are a reminder that clear information about exploring and choosing a program of study in college is an essential part of transition and first-year experience programming. For example, one author's work in advising and student success programs involves informing students about advising pathways and degree programs during orientation on her campus. All academic advisors meet with students one-on-one for short advising sessions, something that tends to be conducted in small groups at most orientations. The one-on-one format allows for time to address worries and misconceptions about how majors and interest areas (used to place students with advising teams) are different, when students declare a major, and why the advising center asks students to clarify their interests while at the same time reassuring students they have time and space for exploration. Questions and concerns about financial aid was another category we found from our research. All colleges provide new students with information on the FAFSA and financial aid, but the results of the current study indicate a need for much more detailed information, beginning in high school and continuing into the transition-to-college period. Financial literacy programs are becoming more common at the college level, but the results of our study indicate a need for financial literacy to be integrated into multiple levels of orientation and transition programming.

Our results speak to the need for better collaboration not only between high schools and colleges, but also between Admissions and First-Year Experience (FYE) and Transition programming staff in colleges. The admissions functions and FYE programs may be organizationally separate in postsecondary education, and yet both require engaging with prospective and new students who have numerous questions and anxieties about college. In addition, collaborations with advising functions would be useful as well, as advisors are typically well-versed in the major choice process. The sharing of college knowledge could begin during admissions visits to high schools. The Council for Advancement of Standards in Higher Education (CAS) can be used to guide these collaborations between admissions and FYE/transition programs and advising. For example, for both admissions and orientation programs, CAS states that they must contribute to:

Student's formal education, which includes the curriculum and the co-curriculum, student progression and timely completion of educational goals, preparation of students for their careers, citizenship and lives, student learning and development (2015, p. 368 and 463).

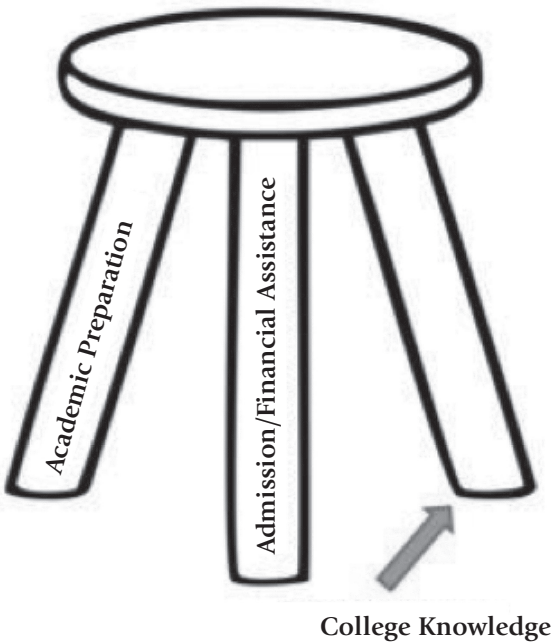
These standards indicate that admissions and orientation can and should contribute to student’s formal education, which includes having the college knowledge necessary to realize educational goals and prepare for careers and citizenship.

This study adds to the literature on rural students’ understanding of the transition to college by expanding the inquiry to the Mountain West region. We provide multiple examples of how research findings have manifested in partnerships to address the unique challenges of providing college readiness tools and programming in a frontier state. It is our hope that this research-to-practice partnership, a staple in K-12 education, becomes the norm in higher education as well. Recruitment, Admissions, Orientation, Transition, and Retention staff members are well-positioned to provide critical leadership in this regard.

In conclusion, it is not for lack of academic aspiration or ability but rather a lack of information and college-going knowledge that reinforces the barrier of access to higher education for many rural students. Building relationships and partnerships linking educational resources to assist rural students in successful college application, matriculation and degree completion can close the seemingly great divide in a frontier state.

FIGURE 1

College Readiness Stool



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