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# Exploring the Views of Rural Colorado High School Students

About College

A Dissertation

Presented to

the Morgridge College of Education

University of Denver

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In Partial Fulfillment
of the requirements for the Degree
Doctor of Philosophy

by

Kathleen McMahon Klug

June 2009

Advisor: Dr. Kent Seidel

Author: Kathleen McMahon Klug

Title: Exploring the Views of Rural Colorado High School Students

About College

Advisor: Dr. Kent Seidel Degree Date: June 2009

#### Abstract

Exploring the views of rural high school students about college has significant implications for the question: "Why are Colorado's kids not choosing college in greater numbers?" Since the State of Colorado has one of the most highly educated adult populations in the nation, yet consistently underperforms in sending its high school students to college this dissertation is topical in presenting the opinions and perceptions of 1,012 rural high school students.

By including the voices of rural Colorado students through a survey, by investigating what the students are thinking and feeling about their future, and by learning what their level of awareness is regarding options and choices, this study contributes to a wider body of knowledge about how rural high school students access the information that makes college choice possible. The survey which is at the heart of this dissertation was designed to examine the students' possession of college-going assets, such as knowledge about standardized tests, access to college materials, articulation of options, expectations, and awareness of college costs and financing.

One of the major findings in the *Exploring Rural Views* study was the difference between students who had been continuously exposed to college counseling and those who had not. There are statistically significant differences in the group's identification of their assets. The

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survey results pointed out that these two groups act differently; the college counseled group had more agreement, and more assets.

Other findings included: information about college is not reaching everyone who needs to be reached—approximately 11,000 kids on the Western Slope alone are identified as the "paradox group," and more needs to be done to understand why these kids do not go to college, to capture their voices and better measure their understanding of the college attainment process.

College fairs, college representative visits, the internet, virtual tours, college view books, college visits, parent and teacher expectations as well as information distribution are all necessary components of the college access continuum. These necessary components are not enough unless they are in concert as an established part of a college access culture.

#### Acknowledgements

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#### Chapter I

#### Introduction

"...when you put aside college rankings, standardized testing scores, acceptance rates and yield projections, our jobs are really about hearing students' voices—and listening" -McCandless, 2009

Joseph walked into my office. He was a recently registered, seventeen year old, first generation high school student. Joseph was part of the English Seminar, a class expressly designed to teach successful reading strategies to low performing adolescent boys. Joseph was lost. Clearly he did not give himself the luxury of looking at his future as he didn't have the power to see beyond his present struggle to get through high school. To develop the capacity to see the possibility of education beyond high school, Joseph would need to create a script for the future, one that might help him address the possibilities of an education beyond high school graduation. Joseph needed to engage in possibility thinking: "What if I could be anything I wanted to be?" Joseph had no idea how to envision his future, no idea how to include the possibility of college in a plan or map of his road ahead. He knew there were greater opportunities for him, but where or how to discover these opportunities? This was his quest.

Joseph was being raised in a single parent, legal immigrant home in a rural community. His father's only encouragement was to get out of the house as quickly as possible, get a job and make enough money to feed himself, clothe himself and pay for gas for his car. Joseph was torn about his father's encouragement to keep moving on with his life and get out of school and get a

job. Joseph had skills like translation, banking, sibling care, interpretation of school forms and requests, and knew his family's dependence upon him. He was reluctant to abandon what he saw as his contribution to the family's well-being. Joseph's father believed that education was an endeavor for the very young, and once wage-earning power entered the equation, education became a luxury. The fact that Joseph was scheduled to graduate was, in dad's opinion, a bitter pill to swallow; already at least two years of possible wage-earning time had been lost. From others' standpoint, Joseph had the potential to be a success story: a Latino male who was actually going to graduate from a rural Colorado high school and had aspirations to search for a successful future. However, without college as the next step, Joseph would eventually be left behind the rest of college-educated America as far as sustaining himself, or a family, on a wage commensurate with only his high school education. Joseph didn't know how to access his future. His questions, concerns and issues make him the epitome of what's behind this inquiry research—mainly, what the rural community students say they want and need in order to move on from high school to college.

#### Introduction to the Problem

The Lumina Foundation has estimated that by 2025, at current college graduate production rates, there will be a shortage of 16 million college educated adults in the American workforce. This means that we, as a nation, must continue to focus on approaches that make eventual college attainment more accessible. According to the Lumina Foundation's assessment, Colorado's 42 percent college attainment for working-age adults was far below the 60 percent degree attainment goal that was essential to meet the projected demand for a college educated

workforce. At the Lumina Foundation for Education, the single, specific goal recommended to address the economic and social trends clouding our state's future is to increase the percentage of citizens with high-quality degrees and credentials from 42 percent to 60 percent by the year 2025. Achieve and The Education Trust identify high school as the "final inning for many of our children" (Making College and Career Readiness the Mission for high schools: A guide for state policymakers, p. 4), and insist that American high schools have a major gap to close—a gap that threatens not only the future of the students they serve but our nation as well. Most students leave our high schools unprepared to access post secondary options.

According to McLendon, Heller, and Lee (2009), until recently, researchers had paid scant attention to the opportunities and barriers associated with high school to college transition. Although there are countless studies and books that address the contemporary college admission landscape, and literature that dispenses the advice of professional, private, for-hire, college counselors on how to matriculate to any and every college a student desires, there is a meager body of evidence about the determinants and effects of high school to college transitions, especially regarding access to college for rural community high school students. McLendon, et al. (2009) posit, what sorts of questions should researchers ask? and, what data are and are not generally available to researchers? The authors argue that researchers should begin asking more empirically oriented questions about the issues of college access and attainment. This study focused on asking questions of rural students through a survey about their perceptions and views in regard to college access and attainment. Most important to this researcher was the identification of behaviors and distinguishing qualities, positive

behaviors, resources, and attributes among the subsets of the rural students that would aid them in their college attainment process. This group of attributes is hereafter referred to as *assets*.

In his 2005 What Works to Enhance Student Success in College, Terenzini stated that matriculation to four-year college and universities involved three critical tasks: acquiring minimum academic skills, graduating from high school, and applying to a four-year institution. "Approximately one-fifth of those who meet all three criteria do not matriculate, possibly due to obstacles encountered between secondary and postsecondary institutions as well as due to financial barriers" (p. 5). What factors constitute the condition of separation from the commencement of high school (9<sup>th</sup> grade) to the matriculation to college for the rural Western Slope student? This was the focus of the present study.

Excluding the anomalous Pitkin and Summit counties, areas which include the wealthier towns of Aspen and others along the Vail-Breckenridge corridor, there has been an inverse relationship between the degree of ruralness (rurality) and the level of college attainment. Boulder County, which boasts proximity to Denver and has within its borders a major university, could take pride in the fact that its percentage of young adults (ages 25-34) with a two or four year degree was 63.4 percent (U.S. Census Bureau, 2000). Conversely, Custer County, the least populated county in Colorado (Colorado Census Bureau), ranked lowest in the percentage of young adults with a two or four year degree at 13.8 percent. Only four out of sixty-four counties in Colorado met the goal of 60 percent college attainment. This is nothing short of a crisis (Lumina Foundation for Education, 2009).

In recent years, the issues of college access and graduation have risen significantly, according to Terenzini's major research project at Pennsylvania State University. It is only in the last five years that literature regarding the college access and attainment topic has become more available. The new college access literature enumerated multiple components and strategies aiding college attainment. One of the most compelling suggestions for addressing college access and attainment came from The Tools at Hand section of *A Nation at Risk* inside Fraser's tome, *The School in the United States: A Documentary History*. This section outlined "the essential raw material to reform our educational system is waiting to be mobilized through effective leadership" (Fraser, p. 327).

This researcher decided to take the challenge of using the tools and language of reform and asked the rural students of the Western Slope of Colorado to identify college attainment assets that were part of their education experience. It has been noted by researchers such as Jonathan Sher in his book *Education in Rural America*, that despite the genuine concern for improvement in rural education amongst students, parents, and local educators, it is also notable that any reforms that garner the most support "and, not coincidently, seem to produce the most positive, significant, and lasting effects are those which are locally initiated, locally developed, and locally controlled" (p. 289-90).

Rural America is an environment that cannot be easily summarized. Quite possibly, rural school districts and communities may well represent the single most diverse and heterogeneous group in our society. As Sher observes in *Education in Rural America*, "any reform strategy that seems to circumvent local traditions, values, beliefs, and capabilities, rather than building upon them, is bound to fail" (p. 274-75).

According to A Nation at Risk the following were available resources or raw materials for reform.

- 1. The natural abilities of the young that cry out to be developed, and the undiminished concern of parents for the well-being of their children.
- 2. The commitment of the Nation to high retention rates in schools and colleges and to full access to education for all.
- 3. The persistent and authentic belief in the American Dream, that superior performance can raise one's state in life and shape one's own future. (Fraser, p. 327).

What pieces of the college access assets did the students acknowledge having or even being aware of? The "Left-Behinds", like Joseph, exhibited no evidence of knowing the vocabulary to assess their situation or navigate the treacherous path to their future. They had no road map to guide them. Because kids like Joseph spent so much time engaged in the struggle to graduate, they had limited experience in advanced, rigorous classes where the higher order thinking skills of reflection, analysis, and synthesis were modeled and utilized. These were the skills needed to assess where they were in their educational and social development in order to move from where they were to where they needed to be to be part of an educated and employable workforce. Responding to an inquiry about what he wanted, Joseph answered, "I don't know." In uttering this phrase, Joseph captured the essence of the Colorado Paradox. The disparity (gap) lay between the statement that he and over 90 percent of high school graduates uttered, "I want to go to college" compared with their actual college matriculation. Joseph said, "If I don't know, I don't go!" Joseph's statement summarized the state of paralysis that he and many students felt due to isolation, a lack of

information, a lack of vision, permission to dream, or ability to articulate their hopes for the future. A conversation, termed by McDonough, "college talk", could give Joseph, access and exposure to information, needed to be started. At the same time, listening to what he was saying regarding his attitudes, hopes and dreams, and perceptions about college access and choice was extremely important. Joseph (and students like Joseph) wanted to change from a state of mystification and paralysis to a state of empowerment, hopefulness, inspiration, connection, and most importantly, a state of being able to move forward with his life. As Tom Fox so succinctly identified in his book *Defending Access*, Joseph faces "... 'failure', usually caused by a complex web of social and political circumstances"(p. 41). According to Fox, failure to access college was not a matter of lack of skills alone, but rather, failure involved complicated and recalcitrant political problems such as cultural disparities and unfamiliarity with social "norms" that aided access. Joseph was destined to move no farther on his educational journey unless he had an opportunity to articulate where he was and where he wanted to be; Joseph needed a chance to be heard and responded to. As a rural, first generation minority with few assets for college attainment, the prognosis for Joseph was not promising, but if he had a say in his status and his strategy, perhaps there was a prescription for a better future. Listening and responding to Joseph also required an understanding of the special character of the rural community from which students like him came. In the forward to Rural Education and Training in the New Economy, Daryl Hobbs highlighted how important it was to recognize the unique needs of rural America. "A part of the problem with past generalizations about rural America is that rural America defies generalization. Rural America incorporates the nation's extremes of per capita income, culture, life style and occupation... As adaptation is being made...a greater premium is being placed on strategies and institutions designed to serve the specific needs of specific places. The model of one size fits all, whether economic or educational is being relegated to the past" (p. viii).

Capturing Joseph's voice, the voice of a rural student, provided the basis for framing the question driving this study: why are Colorado's kids not choosing college in greater numbers? "Although both the prevalence and importance of postsecondary schooling are increasing, some young adults who are academically qualified for higher education and who would greatly benefit from it, are not making the transition" (Plank & Jordan, p. 35). Were there barriers, that kids like Joseph might articulate, that revealed what kept them from accessing college in their future? If other high school students similar to Joseph were asked what they knew about college, and had an opportunity to measure their awareness, would they act differently and more proactively toward their future? The intent of focusing on Joseph's voice was not simply to present a portrait of a confused and somewhat doomed student but to highlight the opportunities for, and the inequities of, access that circumscribed his daily existence.

On September 28, 2008, Governor Bill Ritter addressed the Colorado Western Slope College Fair audience of 2,000 students, parents, counselors, and college representatives. The Governor commended everyone attending the fair, most specifically for being involved in college seeking behavior. The Governor further cited and praised the fair for providing an opportunity for rural Colorado's high school population to explore their post-secondary possibilities. The Governor attended the fair because the College Fair was, for over a thousand Western Slope high school students and their families, a place (and for some, the only place) where a conversation about the student's future occurred. The Governor was in

search of an answer to what a Blue Ribbon Commission identified as the Colorado Paradox. According to Governor Ritter, the term Colorado Paradox identified a state of contradiction existing in Colorado whereby the state of Colorado was 4<sup>th</sup> in the US in percentage of college educated citizens yet consistently underperformed in sending its high school students to college. (National Center for Higher Education). The Governor also investigated a related issue as to why 90 percent of the low-income, teenage high school students who said they planned to go to college, in fact did not go (Lumina, 2009). Plank & Jordan (1996) termed this phenomenon as "talent loss". It had been well documented that talent loss had been concentrated between poor and minority students; had this talent loss occurred among rural students? According to Susan Schramm-Pate, resistance, among rural students, to programs aimed at increasing college attendance, was one of the challenges she addressed in her report Rural Resistance to Higher Education: In Search of a Better Way, 2002. Was the same low college attainment phenomenon that had been identified in minority population and low socioeconomic status students of rural South Carolina occurring in the rural school districts of Western Colorado? If so, why? Where and when did the disconnect between these kids' original articulation of their dreams and their ultimate reality occur?

This Colorado Paradox asked the question: why are Colorado's kids not choosing college in greater numbers? Was there information the rural students were lacking that would motivate and direct them toward a college path, a path with potentially greater financial security and social status? Could the schools be a place where the solution to the Paradox would be addressed? In the book, *Rural Education and Training in the New Economy* by Gibbs, Swaim and Teixeira, we

are given a look through the window of rural community life as the authors examine the risk factors for students dropping out of high school. "...[T]he relationship between the school and the community is a two-way street, with the school both contributing to and benefiting from the greater sense of community and shared purpose found in rural and small town districts" (p. 17-18). This dissertation provides an argument for including the voices of rural students and their perspectives on college as part of the Colorado Paradox solution. This study explored the often unrecorded voices of rural students which offered insights into the common conditions that fostered, as well as impeded, college access and choice. To investigate the questions of this study, the researcher extracted and analyzed the data obtained from a large-scale survey which presented the opinions and perceptions of 1,012 rural high school students who attended a regional educational event. The analysis of the survey provided insight into what rural students described as impediments, on the one hand, and aids on the other, to college access. From these voices and their rural contexts, strategies for improving educational opportunities for these students might be developed and implemented.

The information collected from these rural voices, over one thousand students, provided the groundwork for understanding their views on access to, and attainment of, college. The students in the survey traveled great distances, on a Sunday, to discover some answers to their question: "What next?" This dissertation revealed, through survey analysis, what these individuals were thinking and feeling about what lay beyond high school for them, as well as what they knew about their options and choices. This investigation could contribute to a wider body of knowledge about what rural high school students want for their futures, as well as how they accessed the information that make choices possible.

Up until now, there had been little data collected on what rural Colorado high school students were saying beyond, "I want to go to college." This study investigated the rural students' opinions on college information, access, and options.

Historically, reformers have either disparaged the advantages inherent in small rural community schools or have taken them for granted. As a result, those advantages have often remained undeveloped potentials rather than fully utilized components of the school program...reforms that do not explicitly acknowledge both the potential for and the fact of excellence in existing rural schools (in addition to seeking remedies to current problems) will serve only to alienate and discourage the community and, thereby, reduce their own chances for success (*Education in Rural America*, p. 276).

An attention-getting statistic that launched this researcher's initial inquiry was the 2000 Colorado Blue Ribbon Commission on Education's finding that only 39 percent of enrolled ninth grade public school students matriculated into college four years after entering high school (Measuring Up, 2006). This alarmingly low figure of Colorado students who were pursuing college directly after high school was slightly less than the Census Bureau of 2002 in which nationally only 12 percent of young adults were enrolled in a four-year college and another 30 percent were taking classes at a two year college or technical school. A majority (55 percent) were not pursuing additional formal schooling. If, in a Colorado freshmen class of 100 students, only 39 percent proceeded directly to college, there is a potential crisis both on the economic and the educational fronts. If the

state average drop-out rate of 14 percent was applied (Census Bureau), the net 47 students per 100 would be the target population of the Governor's inquiry and this research. This group has been termed the "paradox group"; their existence and their voice has been the focus of this research. This population neither dropped out of high school, nor went immediately on to college. This is the group the Governor would like to listen to but has not yet "heard". The Governor would like to hear their answer to his question of why they were not going to college in greater numbers. The focus of this research was to directly ask questions that would identify the student's assets, missing ingredients or links that fostered or impeded this paradox group's pathway from high school to college.

According to *The Lumina Foundation 2009 Report*, the Colorado Governor asked a pertinent and topical question. College attainment has become increasingly important to the U.S. economy; therefore the workforce demands education and training to properly prepare students for success in the global, knowledge economy. The *Lumina Report* cited the growing gap in earnings which the report said was based on an individual's level of education. The gap widens as fewer Americans, and especially Coloradans, continue their education beyond high school. With this paradox becoming more apparent, people were asking why kids don't access college in greater numbers. Were the rural students a sub-group that had been unidentified as an underserved group, alongside first-generation, low-income, and students of color? The researcher investigated the issue of access and college attainment as it applied to the rural student; this study sought to identify the voices of the students of this sub-set in the Paradox Population and analyzed what they were saying in response to the question, "Why are kids not accessing college in greater numbers?" The hypothesis that was generated from

this question was: something is deterring or causing high school graduates to refrain from college attainment.

The research questions that framed this study are:

- 1. What are the assets of rural students seeking college?
- 2. Are there differences in assets between students attending a school with an internal college counseling program and students who have no such program?
- 3. Are there differences in assets between "First-Generation" students and other groups?

#### Significance of the Study

Understanding what the rural student has to say about the assets they have to assist them in college attainment can reveal needed actions to support greater college access and attainment. Generally, one-on-one interviews with a college counselor would, in fifteen minutes, render an assessment of what the rural Western Slope student was saying about their challenges for college attainment. However appealing, the idea of interviewing 10,000 high school students on the Western Slope, for accurate timely information, was both ambitious and unrealistic. Interview, as a method of data collection, was initially considered by this researcher, however more than half of the young people surveyed (53 percent) in the *Life After High School Survey* by Johnson and Duffett, said that there were not enough counselors in their high school to attend to their needs for college information let alone a one-on-one conversation. The students did not have counselors assigned to the college attainment task. One way to capture the voice of the rural student was a large scale survey at a time when over 1,000 of the

Western Slope high school students, representing 33 of the 58 Western Slope secondary schools, were present. Configuring the sample population (N=1,012) into four distinct groups and applying lenses of rurality, counseling, first-generation status and grade level, provided information about what assets the college seeking students of the rural Western Slope of Colorado agreed they possessed and what assets were distributed between the four groups of College Counseled Students, First-Generation Students, General Group Students, and 9<sup>th</sup> and 10<sup>th</sup> Grade Students.

#### Definitions, Operational Terms and Abbreviations

For the purposes of this study, specific meanings were assigned to abbreviations and terms.

#### **ACHIEVE**

Achieve is a non-profit organization that helps states raise academic standards by benchmarking tests and accountability systems against the best examples in the U.S. and around the world. The goal is to prepare all young people for postsecondary education, careers and citizenship. (Achieve, Inc., www.achieve.org)

#### **ASSETS**

Knowing a student's "assets" is critical to understanding what might be missing when the student graduates from high school and does, or does not, go on to college. Assets are defined as the positive experiences, qualities and inherent practicalities young people possess which help influence the choices they make. More specifically, "assets" are the qualities that each student has which influences their choices such as knowledge about whom they can talk to regarding post-

secondary options. There are approximately ten different, yet closely connected, attributes which ascribe to the quality of "assets". They are:

- 1. Person to talk to about postsecondary opportunities: College Talk
- 2. Designated Place
- 3. Parental expectations
- 4. Teacher expectations
- 5. College fairs
- 6. Visits from college representatives
- 7. Parental Support
- 8. Transcript, GPA, ACT/SAT awareness
- 9. Internet access
- 10. Internet knowledge

#### **AVID**

"Advancement Via Individual Determination". AVID is a college-preparatory program designed to aid economically disadvantaged, and academically average, first-generation students of elementary, middle, and high schools into college.

#### **BLUE RIBBON COMMISSION 2002**

The Blue Ribbon Commission of 2002 is a government appointed group whose purpose is to consider means by which college participation could be increased in Colorado, to analyze information addressing the number of Colorado citizens enrolled in college and to articulate the quality and availability of opportunities for higher education in Colorado.

#### **COLLEGE ATTAINMENT**

College attainment, as defined by the Lumina Foundation for Education, is the concept of addressing the challenges of educating more people beyond high

school. College-attainment rates are rising in almost every industrialized or post-industrial country in the world, except for the U.S. College attainment is important to the U.S. as the workforce demands education and training to prepare citizens for success in the global, knowledge economy.

#### COLLEGE CULTURE

College "Culture" is a composite of factors which can potentially contribute to matriculation or, if not present, will deter a student stepping forward into post-secondary electives. Such conditions include access to information and guidance during high school years, the element of expectations--personal, parental, teacher, school, community and the ability to access affordable college options such as loans and scholarships. It's important to identify what elements may be missing in a college "culture" in order to see what possible perceived barriers are present.

#### **COLLEGE IN COLORADO**

College in Colorado is a program designed, as a statewide effort, to improve college access and change expectations about college for all Colorado students. <a href="https://www.collegeincolorado.org">www.collegeincolorado.org</a> offers a one-stop resource to help students, parents and counselors plan, apply and pay for college. The Colorado Department of Higher Education has joined with partners across the state to develop resources and collaborations to assist Colorado students to plan, apply and pay for post-secondary studies.

#### COLORADO PARADOX

The Colorado Paradox, as identified by Governor Bill Ritter, is the confusing climate of education disparities found in Colorado. The state of Colorado is

ranked 4th in the U.S. in terms of the percentage of its citizens being college-educated, yet only 39 percent of Colorado's high school graduates go on to college. This paradox highlights a breakdown of some kind which the governor would like resolved. It is the presence of this paradox which has fueled my research.

#### COLLEGE READINESS FOR ALL STUDENTS

According to Patrick Terenzini of Penn State, College Readiness for all Students encompasses issues surrounding student success, including early intervention programs and their impact on student success, school curriculum, rigorous standards, and college knowledge.

#### **COLLEGE SEEKERS**

College Seekers are the students who engage in college seeking behaviors such that they have the knowledge necessary to answer the question of how they can be ready for college, and they have done the preparation required to make that happen. These students are college bound.

#### **COLLEGE SEEKING BEHAVIORS**

College seeking behaviors are those actions and choices that show a student has some knowledge of college and is making an effort to prepare for it. A student exhibiting college seeking behavior understands the role of test taking, the importance of choosing appropriate (and necessary) curricula and meets minimum academic preparedness standards.

#### **CWSCF**

Colorado Western Slope College Fair

#### **ENLACE**

"Engaging Latino Communities in Education". ENLACE is a multi-year program of the W. K. Kellogg Foundation whose purpose is to increase the number of Latino graduates from high school and college through the creation of college-focused resource centers in local high schools.

#### **EXPLORING RURAL VIEWS**

"Exploring Rural Views" is the abbreviated title of this dissertation which encapsulates the concepts of listening to students, capturing their voices and possibly discovering an answer to why Colorado's kids aren't choosing college in greater numbers.

#### FRONT RANGE

The term "Front Range" refers to the populated region of Colorado located along the eastern face of the Southern Rocky Mountains. This urban corridor stretches from Pueblo, Colorado to Cheyenne, Wyoming and includes Denver, Colorado Springs, Boulder, Fort Collins, Greeley and Pueblo. As of 2007, the population of this area was 4,175,239 of the 4,861,515 statewide population.

#### **GEAR UP**

"Gaining Early Awareness and Readiness for Undergraduate Programs". This discretionary grant program is designed to increase the number of low-income students who are prepared to enter and succeed in postsecondary education.

GEAR UP provides six-year grants to states and partnerships to provide services at high poverty middle and high schools. GEAR UP grantees serve an entire cohort of students beginning no later than the 7<sup>th</sup> grade and follow the cohort through 12<sup>th</sup>.

#### **LEFT-BEHINDS**

The "left-behinds" essentially are a subset of the Paradox Population. They are the students that, if educators and administrators are looking, have been left behind early in their high school careers. They have few working abilities which might foster access to the path from high school to college. Their fate has been sealed as they haven't taken the necessary classes. They have missed important deadlines and they haven't had the vital information or access which might have been the key to possibly expanding their options.

#### NO CHILD LEFT BEHIND

NO CHILD LEFT BEHIND is a 2001 Federal Act, monitored by the Department of Education, enacted in order to better serve states and school districts so that no child is left behind in literacy and opportunity. The objective is collaboration between the federal government, the states and the school districts in order to focus on four goals: Stronger Accountability for Results, More Freedom for States and Communities, Proven Education Methods, and More Choices for Parents (U.S. Department of Education, www.ed.gov)

#### PARADOX POPULATION

The Paradox Population is the group who engages in some college-seeking behaviors, graduates from high school, but doesn't actually go to college. At present, research shows that 39 percent of the students who start high school freshman year go to college, 14 percent of the freshmen students drop out of high school, and the remaining 47 percent are the Paradox Population. They are college seekers but not college bound.

#### **RURALITY**

Rurality is a term that applies to the degree of separation from the urban centers.

It suggests the rural and rustic characteristic of the country, country life, or country people. It is a filter applied to the data to determine the degree of ruralness of a school.

#### THE STEPS TO THE COLLEGE STEPS (TSTTCS)

The Steps to the College Steps is a curriculum written by the researcher for students, parents and schools to assist in creating a college-going culture and encourage college-going behaviors which have the likelihood of ultimately increasing college attainment for all students.

#### WESTERN SLOPE

"Western Slope" describes a geographic area which stretches from the Continental Divide to the Utah border. Within this sparsely populated portion of Colorado, there are very few towns with greater than 5,000 inhabitants, the largest city having a total population of only 49,000. The Western Slope of Colorado is a rural area with 10,000 high school students. The population of the Western Slope is approximately 600,000 people or 12.3 percent of Colorado's population.

#### Chapter II

#### Literature Review

In 1983, A Nation at Risk quoted the most recent (1982) Gallup Poll of the Public's Attitudes toward the Public Schools and reported that people strongly supported a theme, heard during the *Nation at Risk hearings*, that education was the major foundation for the future strength of the country. They even considered education more important than developing the best industrial system, or the strongest military force, perhaps because there was the understanding that education was the cornerstone of both. Access to high level education has been debated for decades. The debate has generated a vast array of issues associated with access. This study of college access and attainment builds on a large field of recent research, a wide variety of associated issues, and a variety of disciplinary approaches. Research related to college access and attainment is rooted in studies of college choice, college admission, college culture, and equity. Much of the research cited here was a direct result of investigation into the reasons for the Colorado Paradox. The purpose of this study is to examine the possible causes for the gap existing between college attainment for students who, when asked, professed that they wanted to go to college and planned to attend college, but who after high school graduation, did not actually achieve that goal. As the gap continued to grow in Colorado, especially among underserved populations, it was important to understand the variables that contributed to the widening chasm. What were the challenges to college attainment? A selected review of the literature is presented here to document the history, characteristics, challenges,

and culture that surrounded the issue of college access and attainment and the relationships between these factors and college matriculation.

Student Perspectives: Why student voices matter

In order to start to answer the question of why more Colorado Western Slope students do not go to college, the literature was reviewed to determine if rural students have been asked directly why they were not fulfilling their own stated aspirations for attending college. There were several reports, articles, and books that were tangentially related to the central research question and addressed particular aspects of college aspirations, accessibility, affordability, and awareness among different groups. This review included an extensive examination of all articles that were related to capturing voices regarding college attainment with a particular focus upon possible rural issues regarding college attainment. Hossler and Gallagher (1987) commented that the research and literature on college choice was "almost entirely lacking" in causal studies that used large samples of high school students and attempted to understand the interaction of family and student background, characteristics, student achievement, and student motivation upon the predisposition stage of student college choice (p. 428). Achieve and The Education Trust authored a report in November, 2008, that outlined strategies for closing the gaps in opportunity and achievement which consign far too many young people to lives on the margin of the American mainstream. Achieve is a bipartisan, non-profit organization that works to help states raise academic standards, improve assessments and strengthen accountability to prepare all young people for post secondary education, careers and citizenship, and to serve as a national voice for preparation for post secondary options (www.achieve.org). Achieve and The Education Trust's Making College and Career Readiness the

Mission for High Schools: A guide for state policymakers presented a step by step process for making "college readiness for all students" the core goal for our country. Achieve determined, "Whether they're [high school graduates] going to college or directly into the workforce, all high school graduates need the same rigorous preparation to be successful" (p. 5). The Achieve Report revealed impediments to college attainment, including hidden barriers to college attainment such as academic standards, class choices, rigorous curriculum, teacher preparation, standardized tests, college placement standards, accountability systems, and interim checks on student progress toward graduation and preparation for college. Achieve's investigation around the five essential questions under scrutiny (standards, course selection, curriculum, assessment, and accountability) illuminated the need for accurate data collection and unflinching data analyses. Achieve suggested that data are not available to adequately answer the questions surrounding college preparation and attainment. Achieve's report highlighted the lack of accurate data; this researcher concurs, having found the lack of data to be the single most frustrating research problem of this study. "Despite recent state and federal actions, educators, parents, and policymakers in far too many places still do not have accurate information on how many students graduate from high school. Fewer still have accurate information about what happens to students after they graduate" (p. 35). This was especially true regarding data about rural children.

The National Educational Longitudinal Study 1988 is often cited as one of the most important sources of information about college access. This study was conducted over a period of time and collected data at multiple points in students' educational careers. The result is a deep dataset that makes it possible to

investigate the relationship between a student's experience in high school and his or her progression into and through college (Bedsworth, et al., 2006). The limitation of the study is its emphasis on the high school experience, not on the barriers to college as identified and articulated by the students themselves. *Reclaiming the American Dream 2006* (Bedsworth, Colby, & Doctor, 2006) and *The Lumina Foundation Report 2009* were quoted by President Obama (Pope & Quaid, 2009) to explain the phenomenon of low college matriculation. These studies are well documented reports on the state of student support systems for the college bound student. *Reclaiming the American Dream* study offered recommendations and proposed actions necessary for change and for creating a college going culture. However, while it failed to capture the actual voices of the students, it did provide material for this study's questionnaire by defining particular college seeking assets.

Evidenced Based Practices that Promote Transition to Postsecondary

Education: Listening to a Decade of Expert Voices (Webb, Patterson, & Syverud,

2008) was a repository of student voices. This document reported on the responses
of students with disabilities who identified their needs for transition to

postsecondary education. The summary included five areas: self-determination,
social skills, academic preparation, accommodations, and assistive technology

(AT). The purpose of this report was to identify a set of evidence-based transition
practices that increased college attainment. This report is a rich resource because
it includes the voices of students and articulates their needs. However, the Webb
report was constructed from the perspective of disabled students. Nevertheless,
the disabled population's voice was helpful in communicating transition practices
that might aid any population toward college attainment.

Plank & Jordan's 1997 study, *Reducing Talent Loss*, focused on the factors that contribute to individuals' postsecondary destinations. The study illuminated the importance of increased levels of information, guidance, and critical actions that positively and significantly affected initial enrollment in four-year postsecondary educational institutions. This study examined how access to information and guidance during the high school years, and how taking different actions could affect the likelihood of an individual's following one postsecondary path or another. Plank and Jordan's work provided a framework for the survey questions in the current study that were asked in order to define the state of rural student access, and to identify some of the components contributing to the college matriculation anomaly on the Western Slope.

In the review of the literature on college awareness and the voices of students, the Colorado Department of Education survey: 1999 What Works? Colorado High School Senior Survey, stood out. This study involved students from 132 high schools in Colorado. Two important questions were posed in this study. The first question was "what motivates today's students in school," and the second question was "how prepared are these students for their future?" (Colorado School-to-Career Partnership 1999, p. 5) The report provided the first reflections from 8,663 high school seniors regarding their school experiences and plans for the future. What initially captured this researcher's attention was the breadth of this study and the sheer number of students involved; however, on closer examination, the research was centered on the question of career determination not college attainment. Although it captured the voice of students, the focus was mainly on the correlation between career experiences and plans for the future. "Career experience." as defined by the study, was the opportunity for students to

access a broad selection of career development activities, many of which were provided by the state of Colorado's School-to-Career program. Students who were considered to have more extensive career experiences had one or more of the following experiences: a job connected to a class or school, a written academic/career plan, participation in a mentorship program, work towards certification, or participation in an internship or apprenticeship program. The 1999 What Works? Colorado report concluded that students with career experiences were more likely to go on to post-secondary education than those students without career experiences.

In an attempt to understand the factors that shaped the decision to attend postsecondary education institutions, Hossler & Stage (1999) conducted a large scale survey of student opinions in regard to college access issues. Hossler & Stage gathered data from 2,497 ninth grade students and their parents to test the hypothesis that parent expectations were, in fact, the most influential factor on college attainment. Their findings indicated that any look at college attainment needed to include the element of parental expectations, and the role these play in college attendance, which they found to be significant. Hossler & Stage's study concentrated on extant school and parent data, and left out the actual student's voices

Hossler's work in the eighties is considered seminal work on college attainment. He is the main architect of the three-stage model of college choice. "The body of literature regarding information sought, obtained, and utilized by students planning to pursue postsecondary education relied heavily on Hossler's three-stage model of college choice" (NPEC, 2007, p. 6), as well as on several variations on the themes of his model (Hossler and Gallagher, 1987; Hossler,

1984; Hossler, Schmit, and Vesper 1999). Virtually every dissertation, study, and report on college attainment has referenced Hossler's model. It is important to include the actual language of the model in this literature review because it frames the entire college attainment process and informs the context for the questionnaire construction of the current study. Hossler's three-stage model is comprised of predisposition, search, and choice, and is briefly described as:

"Predisposition" is the self-reflective stage culminating in the decision to pursue postsecondary education. Individual and environmental background factors have the strongest influence at this stage, informing one's self-image, preferences, and inclinations.

The "Search" stage is characterized by the gathering of information about college in general and specific colleges, and culminates in a "choice set" of preferred college options. At the outset of this stage, social networks tend to have the strongest influence, but these yield to the institutions themselves as prospective students come to interact more with individual institutions.

In the "Choice" stage, students and their families interpret the collected information within the context of their personal and social circumstances, resulting in decisions about whether to apply to college, which colleges to apply to, and which college to attend.

(Hossler & Stage, 1992, p. 427)

The Hossler-Gallagher model provided valuable vocabulary and information about access sequencing, stages of attainment, and the formation of the decision to go on to college.

McPherson and Schapiro's (Eds.) *College Success: What It Means and How to Make It Happen* (2008) includes a chapter by William Trent that examines the Gates Millennium Scholars Program and success in college. The report, based on longitudinal data for 12,000 undergraduate students, highlighted the elements that contributed to each applicant's college attainment and ultimately to their Gates' Scholar Award. But several questions remained unexplored and unanswered. According to the Gates report, "We are unable at this time to explain how they (the students) became informed about making the right choices in early middle school that would allow them access to and prepare them effectively for taking more rigorous high school classes, and we cannot rule out the possibility that the schools themselves are the source of guidance" (p. 93). This admission led this researcher to design questions that asked the survey takers if they knew about admission requirements. Like the Gates Foundation's researchers, this researcher wanted to know how the survey-takers knew about college academic requirements, especially if they were first-generation college bound students.

The most powerful and ubiquitous voice that stood out on the question of college access was William G. Tierney, a professor at The University of Southern California.

Tierney has numerous publications on the subject surrounding the essential question of this dissertation. As an editor of *Urban High School Students and the Challenge of Access* (2006), Tierney orchestrated a collection of five remarkable urban students' stories that personalized the entire process of college access, admission, affordability, and assistance. Tierney captured the voices of these urban students and personalized the entire process so profoundly that his work was reviewed as the prototype of what was needed to document and personalize every student's excursion through the college-seeking journey. However, how can a researcher record the day-by-day details of a multi-year procedure for every student? Five urban students had their stories, struggles,

and successes were documented in detail. A weak link in the literature was that most articles, reports and studies were presented from an adult educators' perspective, and although some presented interesting models and frameworks for addressing the transition from high school to college, most did not represent the views and voices of the students. "All too often discussions about the problems of high schools and the challenge of access overlooks the very individuals about whom there is so much purported concern—the students themselves" (Tierney, 2006, p.vi). Based on cultural biographies, Tierney's Urban High School Students and the Challenge of Access examined the lives of five urban adolescents preparing for college. His research concluded that there were many barriers and challenges on the routes and difficult paths to college attainment. Tierney's Challenge of Access book reaffirmed this researcher's quest to try to capture some of the same data in regard to the college access issues, but from the rural students' perspective and on a much larger scale. In an effort to define the parameters of effective college outreach programs, Tierney, Corwin, and Colyar (2005) edited a collection of works focused on understanding college access for under-represented students. The Nine Elements of Effective Outreach (2005) examines how various components operate within the context of preparation programs. The nine elements were identified as: Culture of the student, Family engagement, Peer influence, Onset date of college preparation, Counselor availability, College prep curriculum, Mentoring, Co-curricular activities, and College preparation program cost and delivery. Tierney, et al., describe the phenomena "self-elimination," a process by which students take themselves out of college attainment contention because they cannot access the information they need to navigate the process or the adequate and appropriate guidance to get over the college-going hurdles.

Tom Fox, in *Defending Access* (1999), claims that there are a series of assumptions and practices deeply entrenched in education that work against access.

"These political struggles are represented in higher education by arguments over what constitutes canons in various disciplines, in discussions about various forms and amounts of writing assessment, in controversies over proposed policies concerning racial and sexual harassment, and in debates over affirmative-action policies for admission and hiring" (Fox, 1999, p. 1). The assumptions and practices came in the form of "undefined or vague standards (usually simply resting on status-quo conditions) [and] remain a primary tool of hegemony against access..." (p. 75). Fox maintained that access barriers are related to societal structures that prevent students from being successful in college. These barriers include an inability to learn to conform to the discourse standards of the university or conform to academic rules of order. Fox asked an essential question: Who writes the rules and cultural norms that aid or impede access? Fox believed there was a "nagging conflict between the plurality of writing in disciplines and a focus on standards that seems completely unnecessary" (p. 73). The effect of this requirement to conform to standards (e.g., strictly-defined writing compositions freshman year) was used "less as a way of raising expectations for students than as a means of excluding students" (p. iv). Fox captured the voices of African-American students in his collection of original student narratives, but was mainly focused on the lack of access based on the writing and composition standards of colleges. Fox (1999) recounted the following from his college composition class experience:

In my experience as a teacher, however, the lack of skills only rarely explains failure. Instead, failure is usually caused by a complex web of social and political circumstances. These circumstances are hardly ever experienced or perceived as "political," but rather are cast as individual maturity problems, lack of organization, intellectual deficits, psychological

problems, lack of preparation, and other individual faults of students (p. 72).

The author explored the practice of teachers as "gatekeepers" of college access and success by assigning failure to students who had diminished composition and communication skills for social and political not aptitude reasons.

# College Culture Fundamentals

There seem to be certain factors present in an environment that promotes college seeking behaviors. These factors are fundamental to creating a culture where college seeking behaviors flourish. Several researchers have found that college attainment increases when certain college culture fundamentals are present. One such research report by McClafferty, McDonough & Nunez (2002) discussed nine principles of a college culture. Their nine principles are: College Talk, Clear Expectations, Information and Resources, Comprehensive Counseling Model, Testing and Curriculum, Faculty Involvement, Parent Involvement, College Partnerships, and Articulation. According to the authors, these nine elements of a college culture contribute to college attainment. For example, when students had the opportunity to talk about the idea of college, began to envision themselves going to college, and could articulate this vision, it enhanced their chances of actually going to college. The questions on this researcher's survey for the present study were influenced by the framework of the nine principles of a college culture. It was important to investigate these particular elements and determine if these essentials were part of the Colorado Western Slope's rural student's experience.

A report from the College Access Foundation (2008) suggested that building bridges to college access might be difficult in rural communities due to geographical distances and limited resources. In the report, data were used to identify agricultural

communities where there was "an unemployment rate nearly double the national average and that one in three adults didn't have a high school diploma" (College Access, 2008). College Access in Rural Areas stated that in many rural communities, dropout rates were high and admission rates to college were low. The research affirmed once again the critical status of rural students in relation to college attainment. The report described the relationships established between rural communities and businesses to address the economic and educational issue particularly critical to rural students. Along the same lines, Gibb's Rural Education and Training in the New Economy (1998) and Nachtigal's Rural Education: In Search of a Better Way (1982) examined the rural experience and clarified the differences between the suburban/urban and rural educational practices.

In an extensive study of African American students, Nettles and Perna (1997) spoke to the challenges of inadequate academic, social and psychological preparation. This study captured the conditions of the college preparation and expectations environment, but not the students' voices. Nettles and Perna isolated the factors of low expectations, deficient cultural opportunity, and meager academic preparation that impeded African American students' college attainment and outcomes.

In *Creating a College Culture at the Elementary School Level*, Samarge (2006) examined what pre-adolescent children had to say concerning their college aspirations. Samarge advocated for the establishment of a college culture in the middle school years. Samarge's dissertation was based on the research of McDonough of UCLA who had extensively examined rural college opportunities and challenges. McDonough's body of work clarified the sub-set of the "Rurals" as an underserved population, and focused on her primary concern for the Rurals' college access and attainment problems.

Cabrera and LaNasa (2001) studied barriers to higher education. Their research indicated that the most significant predictor in determining whether or not students

would apply to college was their socio-economic status (SES). These conclusions were echoed in a 1998 study by McPherson and Schapiro which found that high achieving students who were poor were five times less likely to go to college than high-achieving students who were rich. McPherson and Schapiro's *The Student Aid Game* (1998) examined new strategies of institutions for the allocation of resources. The manipulation of financial aid to entice students with the most talent through merit aid may indeed have affected students with the highest financial need but less talent. Socioeconomic status, however, was not the only determinant of college attainment. Concurring with McPherson and Schapiro, Public Agenda's *Life After High School* (2005) concluded that "high tuition costs are still a deal killer for many who might otherwise continue their education" (p. 3).

Fullinwider & Lichtenberg's *Leveling the Playing Field* (2004) provided the starting place for understanding how the college admission process shapes educational opportunity. Fullinwider & Lichtenberg examined an entire range of social inequities. The authors reviewed students who possessed "irrelevant advantages" and through these advantages were able to compound their admission chances; these same irrelevant advantages (only use quotes first time) defeated the student who did not possess them. These advantages include access to internships, summer experiences, networks of people who had jobs to dispense, language immersion programs, and other enrichment experiences. The line between relevant and irrelevant advantages wasn't always sharp and was an admission advantage, if in fact, the student made something of the offered advantage. Fullinwider and Lichtenberg concluded that educational opportunity in America was influenced by the timing and dispensing of information on college, counseling, testing accommodations, social advantages, early decision advantages, legacy, and ruralness.

Johnson, Dufffett, and Ott, 2006 conducted a large-scale examination of the aspirations and experiences of America's young adults ages 18 through 25 for Public Agenda. A number of key questions propelled this research and provided a template for the *Exploring Rural Views* questionnaire designed for the present study. The authors explored what lay behind the fundamental and sometimes life-altering choices young people made during the years after high school. According to *Life after High School* (2005), the most heartening message was that the vast majority of today's young adults believed strongly in the value of going to college after high school. *Life after High School* included the persistent questions of what role the expectations of parents, teachers, counselors, and mentors played in making students believe in education's ability to improve their lives. Hossler and Schmidt suggested that expectations were a key determinant of whether the student's aspiration of going to college would be met (Hossler, Schmidt et al., 1999).

# Historical Perspective

Jerome Karabel's *The Chosen* (2005) provided a historical perspective on the college admission process in the first half of the 20<sup>th</sup> century. Karabel's conclusions expressed his hypothesis that the college admission process in America was originally structured to exclude certain groups and to maintain enrollment for America's elite in the elite institutions. However accurate or flawed his assertion, Karabel's history of admissions is a valuable and insightful resource for understanding the pieces of and players in the college admission process in America.

The American School, by Joel Spring (1990), provides an outline of the role and influence of education throughout our nation's history. Thomas Jefferson spoke to M. A. Jullien in 1818 of his hope for the role of education, "If the condition of man is to be progressively ameliorated, as we fondly hope and believe, education

is to be the chief instrument in effecting it". Spring asserts that the American educational focus has shifted from the Jeffersonian ideal of using education as the instrument of creating an informed electorate, to placing more emphasis on educating the population to sustain itself and contribute to the national economic well-being. The beginnings of education in American Society were decidedly rural in nature as most early Americans lived in dispersed farming communities or very small towns. In the book *Pillars of the Republic* about the history of schooling in America, Kaestle (1983) notes that "despite [the] many similarities of architecture, curriculum, and local financing, rural schools...reflected the nation's diversity. Rural schools were tied to their communities; as those communities varied, so did their schools. In some areas, teachers taught in foreign languages" (p. 17). In the two hundred plus years since this time, the nature of rural schools has hardly changed at all. Community and area characteristics are an important component of rural schools and to address rural students' issues about college access is to understand that these rural schools still reflect the pluralism found among the rural communities they serve. (Education in Rural America, 1997). In the 18<sup>th</sup> century,

"...parents had considerable power in early rural education. They directly controlled what textbooks their children use[d]; through the district school committee or old-field subscription groups, they controlled what subjects would be taught, who the teacher would be, and how long school would be in session" (Kaestle, 1983, p. 22).

These insights about the roots of rural education offer some explanation of how present day standards and expectations for rural community schooling evolved. An early 20<sup>th</sup> century Boulder County (Colorado) Superintendent of Schools wrote

"the rural districts were a home-like situation where the teachers were extremely sincere and most of them very capable. They had a 'tutor' attitude toward their children. It was a love affair. (The children) loved the school and the teacher loved them, and the community was back of them...sort of a family affair" (Dyni, 1991, p. 5).

As America progressed socially and economically, the value of an education was no longer just a political or intrinsic calculation. Census Bureau 2000 statistics reported that a high school graduate with a diploma earned considerably more than a graduate with no educational diploma, and a college diploma earner could expect at least double that of a high school graduate (www.census.gov/prod/2002pubs/p23-210.pdf). New Census statistics suggest that the lack of postsecondary education is a ceiling for not just earning power but sustainability. A factor repeatedly mentioned in the literature surrounding college access and attainment is economic motivation. The earning-to-education ratio is a strong motivator for high school students to pursue college. Spring (1990) examined the question of the modern role of public high schools in America. Spring suggested high schools should equip graduates such that they could continue their education into the university, because having a university degree significantly shifts the earning to learning ratio.

The new Lumina report, A Stronger Nation through Higher Education (2009) offers a detailed explanation of a "big goal" to significantly increase higher education attainment, to reach 60 percent of Americans holding high-quality, two or four year college degrees and credentials by 2025. The Lumina Report (2009) stated that the disparity in income between educational levels is widening as minorities and underrepresented groups continue to be underrepresented in higher education.

A majority of the research examined for this study, like the Lumina report, address typical underserved students such as low SES students, African American and Latino students, first-generation college-goers, and disabled students. Where do the "Rurals" fit in the literature of the underserved and where are their voices recorded and acted upon? Lumina's Kipp, Price and Wohlford (2002) found that affordability and accessibility were the most significant and often mentioned barriers for the low-income student. Are they barriers for the Rurals? This researcher wanted to ask the rural students of the Western Slope.

Schramm-Pate, 2002, authored a paper on Rural Resistance to Higher Education: In Search of a Better Way, which provided insight into the phenomena of rural resistance. "Rural resistance" was defined as a collection of behaviors constituting opposition to any and all attempts to "fix" or "normalize" rural schools and children to be more like their urban and suburban counterparts. Schramm-Pate focused on the rural challenges to the perceived overbearing power and stifling influences of urban higher education institutions and government agencies that were focused on increasing college attendance and success. Schramm-Pate clarified key challenges for rural schools such as isolation, recruitment and retention of certified teachers, limited resources, increased demands for accountability, low expectations of students, and lack of leadership. The identified gap between rural and suburban/urban schools informed this researcher's data analysis, and influenced the decision to apply a "rurality" index to the data to sort schools that sent students to the Colorado Western Slope College Fair. The Schramm-Pate paper also informed this researcher as to the assets of rural schools such as teacher satisfaction with their work environment, small school size, and close ties to the community (2002). The commonalities in systems of rural school administration, according to Schramm-Pate, also aid in the education of rural children. According to

Paul Nachtigal (1982) this resistance is reflected in the rural communities' social dynamics, size, degree of isolation, cultural priorities, and economic resources. Because rural communities have different characteristics and different needs, they cannot be defined as miniature versions of cities. It is important to look to their different characteristics in order to understand why hearing what rural students' have to say is critical to successful improvements in rural education. Nachtigal points out "to be effective, improvement efforts must be concerned not only with the education problems that exist within the four walls of the school, but also with the larger community social issues—the sociopolitical milieu within which the school operates." (p.272). This is due to the tightly knit personal nature of the rural community's social structure. As Milbrey McLaughlin writes in *Rural Education* (1998) "...unless the locals are convinced it's worth doing, it won't work" (p. 282).

In any effort to change or improve conditions for rural students, the advocate for change must be central to the local community. There is a basic distrust of outsiders. Members of the rural community believe that outsiders view the rural community as a petri dish for research, that they are not committed to the future of the community, that they have no vested interest in the rural community and that they are all about manipulating changes from a distance. Consequently, outsiders are looked upon with suspicion and distrust. In order to best serve the government's objectives of greater matriculation, and at the same time create successful permanent solutions for the students as well as the rural community, the unique dynamics of a rural community must be considered with regard to all aspects of an educational program (McLaughlin, 1998, p. 285).

In 1982, Nachtigal constructed a binary opposition chart of basic differences between the operational cultures in rural and urban schools. These differences are

critical not only to understanding the sample population of this study, but also how to propose and sustain changes that aid college attainment in the future. Nachtigal's book is a valuable resource on the characteristics of rural student culture as it illuminates styles, behaviors, habits, traditions, and assets of the Rurals.

<u>Rural</u> <u>Urban</u>

Personal/ tightly linked Impersonal/ loosely coupled

Generalists Specialists

Homogeneous Diverse

Non Bureaucratic Bureaucratic

Verbal Communications Written Memos

Who said it? What's said

Time measured by seasons

Time measured by clocks

Traditional values Liberal values

Entrepreneur Corporate Labor Force

Make do/Respond to environment Rational plan/ control environment

Self-sufficiency Problem solving left to experts

Poorer (less spendable income) Richer (more spendable income)

Less formal education More formal education

Smaller/ less density Larger/greater density

It is important to understand the characteristics and culture surrounding the rural student because:

"Nearly one in three of America's school-age children attend public schools in rural areas or small towns...Yet if you listen to the education policy debate, particularly around the impacts of the new No Child Left Behind law, chances are you still will not hear much about

rural schools. In most of the 50 states, they are left behind from the start. (Beeson & Strange, 2003, p. 3)

Maltzan's 2006 study suggests rurality as an often overlooked demographic by which students might be identified at national, state, and regional levels for purposes of access and retention in higher education, just as first generation college students have recently been identified by many institutions of higher education for admissions purposes. U.S. Department of Agriculture researcher Robert Gibbs observed in High School Standards and Expectations for College and the Workplace (1998) that "as the demand for workers with higher education qualifications rises, many rural policymakers have come to view local educational levels as a critical determinant of job and income growth in their communities" (Kendall, 2007, p. 2). The rural dilemma referred to in Gibbs' report suggested that "areas that are predominantly rural are subject to additional pressures. The share of rural jobs in low-skill occupations fell between 1990 and 2000, mostly as a result of rising skill requirements and an increase in higher skill occupations" (Gibbs, 1998, p. 2). According to Gibbs, rural communities need to develop a strategy to respond to the shifting workplace demands. Schramm-Pate (2002) pinpointed specific weaknesses in schools in rural and remote areas such as lack of strong leadership, specialization, and certified teaching staffs. Maltzan's dissertation suggests that rural students are at high risk for access to college issues, "yet this risk may easily go unrecognized or unaddressed in higher education in light of the privileged racial identities they carry. This privileged social identity renders white rural students invisible in discussions of access and equity in higher education" (p. 214).

Intervention and Transition Pre-Collegiate Literature

A review of the literature on college access and college attainment identified a wide representation of writings over a twenty year period that identified the transition

and preparation for the change from high school to college. The transition literature had its basis in the influential 1983 report *A Nation at Risk*, (Fraser, p. 321) which gave consensus voice to the prerequisites for college. Programs that addressed educational problems came out of legislation inspired by the *A Nation at Risk* call to action.

It is difficult to find accurate and current statistics for many college transition programs, probably because the programs were started as grassroots movements to get students to access college at greater rates. Locating statistics on programs as GEAR UP was problematic. Rather than rely on secondary sources, James Davis, Team Leader of GEAR UP, was contacted directly about the organization and its data points: "I am not sure how familiar you are with the program so I will begin at the beginning. GEAR UP is a discretionary grant program designed to increase the number of low-income student who are prepared to enter and succeed in postsecondary education." According to Davis, GEAR UP has three objectives: 1) Increase the academic performance and preparation for post-secondary education for GEAR UP students; 2) Increase the rate of high school graduation and participation in post-secondary education for GEAR UP students; and 3) Increase GEAR UP students' and their families' knowledge of post-secondary education options, preparation and financing. GEAR UP provides six-year grants to states and partnerships to provide services at high-poverty middle and high schools. GEAR UP offers two types of grants: states and partnerships. State grants are competitive six-year matching grants that must include both an early intervention component designed to increase college attendance and success and raise the expectations of low-income students and a scholarship component. The governor designates which state agency will apply for and administer the grant. GEAR UP state grantees are required to designate 50 percent of their funds to the early intervention component and 50 percent of their funds to the scholarship component unless they receive a waiver. GEAR UP also offers

partnership grants. Partnership grants are also six-year matching grants that must support an early intervention component and may support a scholarship component designed to

increase college attendance and success, and raise the expectation of low-income

students. Partnership grants must consist of one or more degree granting institution(s) of

higher education, one or more local education agency(s) and two other community

organizations or entities. Although any member of the partnership may organize the

project, the partnership must designate a local education agency or an institution of

higher education as the fiscal agent.

All GEAR UP grantees are required to provide 50 percent of the cost of the

program. Matching funds may be provided in cash or in kind and may be accrued

over the full duration of the grant award period. GEAR UP grantees are also

required to provide comprehensive mentoring, outreach and supportive services to

students participating in the program.

Table 1

GEAR UP Details

Appropriation: \$313,212,000 in Fiscal Year 2009

Grantees: 41 states and 163 partnerships serving 48 states, American

Samoa, Palau and Puerto Rico

Students Served to Date: 2,100,000

Average State Award: \$2,890,000

Average Partnership Award: \$1,105,000

Maximum State Award: \$3,500,000

Maximum Partnership Award: \$800 per student per year

Fiscal Year 2007: 85% of GEAR UP students graduated from high school

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According to Davis, GEAR UP is getting results, with 60 percent of its students enrolling in college.

ENLACE (Engaging Latino Communities in Education), a multi-year initiative with thirteen programs in seven states, was designed to strengthen the educational pipeline and increase opportunities for Latinos to enter and complete college. According to ENLACE, only eleven percent of Latinos have a Bachelor of Arts degree. The strategies of ENLACE were reviewed with a focus on the connections and corresponding principles to other programs that have been deemed successful like TRIO and GEAR UP. ENLACE, a program of the W. K. Kellogg Foundation, is guided by the belief that children are not a problem to be solved, but assets to be developed. The program, in its third phase of operation, is attempting to affect the nation's fastest growing segment of the nation's college-age population, 40 million Latinos. At the heart of the ENLACE philosophy are several principles: all children and youth can learn, solutions exist in the community, multiple perspectives lead to the best answers, and common causes drive social change and designed a solid sustainable program. ENLACE's figures are reported state by state, and according to the hosting Kellogg Foundation, ENLACE has a very good chance of succeeding in serving this segment of the nation's college-age population.ENLACE, founded in 1997, is in Phase III of a commitment to foster preparation for the workforce, and success through college, in the Latino community.

In What Works (Colbeck, et al., 2003) it was noted that there is an artificial separation between K-12 and the postsecondary options. "Some policy researchers suggest a well-articulated K-16 plan would alleviate these barriers and create a seamless educational system from kindergarten through the undergraduate years" (p. 5). The transition programs are an attempt to unclog the K-16 pipeline of obstacles. The Center for Research, Evaluation, And Training in Education (CREATE) issued a final report in February of 2002 that evaluated the eight best practices in AVID schools with regard to college attainment. The purpose of the study, by Guthrie & Guthrie, was to assess the relative efficacy of the 11+ AVID (Advancement Via Individual Determination) Program Essentials. AVID, a college-preparatory program, was designed to aid economically disadvantaged and academically average first-generation students, with the ultimate goal being college attainment. Originally begun only at the high school level, the program presently serves fourth grade through twelfth grade students. The CREATE study concentrated on eight programs with more than 2000 participants. The Magnificent Eight: AVID Best Practices (2002) evaluated strategies and outcomes of the AVID comprehensive plan intended to upwardly shift the college attainment rates for underrepresented minorities. The college application practices and acceptances for senior high school students were examined and scrutinized to see if the application and strict adherence to the eleven principles of AVID's design made a difference. AVID's principles bear a striking resemblance to McDonough's nine principles of a college culture, discussed above. The essentials of AVID considered critical to success were secure funding, good tutors, dedicated teachers, student willingness to work, and parent

involvement (CREATE, 2002, p. 26). The eight successful California schools highlighted in the study were researched for their "best practices." It was found that careful adherence to the core principles of AVID such as high levels of school, teacher, and student commitment were success factors (p. 3). According to the AVID Center Western Division, (personal correspondence, April 2, 2009), college attainment intervention programs like AVID were originally grassroots attempts to address the students' needs for direction and information in regard to post secondary education. According to Mikkol Ruiz, Director, AVID, 2009,

"the data our data team was able to access is part anecdotal, and part actual. Unfortunately, we do not have an official count on how many students have been impacted by AVID. The program began in a high school classroom when a teacher had an idea about how to raise achievement in a group of students she felt was being underserved by the education system. She had no idea whether it would work, and after it did, the program just sort of grew from there as districts desired to duplicate her results, and after many years became a national non-profit corporation. That is to say, we have not always collected data in the certification system we use today. Below is a statement from the data team on the numbers we do have" (Ruiz, personal communication, April 2, 2009).

"Here's our official statements related to the questions about AVID students: Since 1990, more than 65,300 AVID students graduated from high school and planned to attend college. We can't speak to matriculated, as that implies they enrolled in the first semester, which

we don't track. Today, AVID has been adopted by more than 4,000 schools in 45 states, the District of Columbia and 15 countries, and serves more than 320,000 students, grades 4-12. We don't track the total number of kids served since inception. We can't simply add up the students each year as some of these kids were AVID students in previous years and would result in a duplicated count. Below is a table showing the AVID students reported in General Data for each year in Colorado. This only represents sites that reported data and had it approved." (AVID, raw data, personal communication via email, April 2, 2009).

Table 2

AVID Student Enrollment in Colorado

Year	AVID in Colorado
1999	546
2000	716
2001	1,040
2002	1,820
2003	2,139
2004	2,598
2005	3,199
2006	4,562
2007	5,331
2008	6,164
Total	28,115

Deciding on Postsecondary Education (National Postsecondary Education Cooperative, 2007) stated that access to and use of practical, accurate, and actionable information was a critical dimension of the complex pathway students and families followed in enrolling in postsecondary education. Research showed that an effective search process was essential for college retention and success. The

purpose of the National Postsecondary Education Cooperative's Improving
Information for Student Decisions about Postsecondary Education project was to
gain a better understanding of data and information that potential students—
especially underserved students—used and needed to assist them in making
decisions about postsecondary education. This study identified elements important
to the entire college attainment process. The information discovered was pertinent,
but the voices of the students were, once again, absent.

The most recent Lumina Foundation Report (2009) examined the extent that the current system of higher education provides access to a college education for residents of each state. The report followed up on the Lumina Foundation's 2002 analyses of more than 2,800 public and private four year and two year colleges and universities in the fifty states and the District of Columbia. The goal of the research was to help policy-makers and other interested parties assess the extent to which current higher education systems provided access for the residents of their states, and to pinpoint specific regions of each state that merited special attention. The data used for the research was from the year 1998, for the 2002 report, and from the year 2000 for the 2009 report. The studies documented the environment in which students made decisions about whether they would go to college, and where they might be able to enroll (Kipp III, Price, & Wohlford, 2002, p. 60). The Lumina Report concluded that unequal opportunity existed among the states and within each state. In general, access to higher education was broadly available at two-year colleges but access to four year institutions was less widespread, even at public colleges and universities, and at current college graduate production rates there will be a shortage of 16 million college-educated adults in the American workforce by 2025 (2002, p. 2). Considering the Lumina

report's findings, the question arises regarding rural public school students: Are accessibility and affordability the only factors restricting the flow of students from high school into college?

# Summary

The Census Bureau confirmed that the correlation between learning and earning has never been greater. (www.census.gov/prod/2002pubs/p23-210.pdf) A college degree for the entire population of our country was repeatedly cited as one of the major influences on the health and prosperity of our democracy.

"First, if we fail to make sufficient investment in the potential of our people, we will hinder the development of a knowledgeable and skilled workforce - the only type of work force that can truly succeed in a global economy. Second, if we allow unequal opportunity in higher education to persist, we will limit the ability of Americans to participate in a civil and open society" (Kipp, 2002, p. 4).

The acquisition of knowledge is a way for people to move beyond the lowest rung of Maslow's 1943 pyramid, mere survival. Education has never been so important. Reports by Swail & Perna, 1997; Tierney, 2001; Cabrera & LaNasa, 2000; McDonough, 2008; NELS, 88; NPEC, 2007; McPherson & Schapiro, 2008; Fullinwider & Lichtenberg, 2004; Bedsworth, et al., 2006; Fox, 1999, which have all been reviewed in this dissertation, have each echoed the idea that education is a ticket for individuals to sustain self and family, earn a professional wage and live the life of a contributing citizen. Research supports that college students are at a significant competitive advantage over their peers who entered the workforce directly from high school. (Kendall, 2007). Perna and Swail (1997) posited that "both individuals and society at large benefit when an individual earns a college

degree" (p. 99). They elaborate by enumerating the benefits of a college degree and showing how there is a trickle-down effect from general society to the individual's household. Society has been affected by the increased productivity of labor resulting from higher levels of education, the neighborhood has benefited by having individuals who exhibit less dependency and more volunteerism, increased voting rates, and greater civic involvement. Perna and Swail also noted that gaps in college access and completion have not been closed, despite the resources the federal government has pledged to close them, and they conclude that making financial aid available for students isn't enough to ensure equal access. Perna & Swail, in their report *Pre-College Outreach and Early Intervention* (1997), discuss the range of variables influencing college enrollment behavior. "These include educational aspirations, academic achievement, academic preparation, and availability of information about college" (p. 100). Perna and Swail write that precollege outreach and early intervention programs, sponsored by the federal government as well as some private entities such as Eugene Lang's I Have a Dream Foundation, have played a critical role in students' ultimate educational attainment levels (p. 102). In a 1992 National Education Longitudal Study (NELS, 1992), it was shown that participation in any type of outreach program during high school almost doubled the odds of at risk high school graduates enrolling in a four year college (p. 103). This study was designed with the core belief that college is possible; that all students are capable of continuing their education beyond high school.

"Going to college long has been the apotheosis of the American dream.

Not only did college graduation signify that one had 'made it,' but the glamour of a four-year intellectual respite, in ivy-draped classroom

buildings, with the world's great scholars attracted millions seeking the surest ticket to a better life. From V-J Day to today, the number of U.S. college students has soared from under 1 million to more than 17 million, and the correlation between learning and earning has never been greater" (Yarrow, 2007).

Several books, including Steinberg's *The Gatekeepers* and Karabel's *The Chosen*, discussed the traditional sentinels of admission into elite and highly selective schools. They assert that social engineering of classes has been part of the admission scene since the early part of the 20th century. American university education initially fashioned itself upon the English model. This model of education was primarily for the elite, or at least the purposeful, like the ministers who served as both spiritual guide and community leader in the colonies. But times have changed and the need for college is now promoted aggressively from an "earn to learn" philosophy as a necessity for survival. The Lumina Report 2009, A Stronger Nation through Higher Education, commented on the argument that college should be reserved for a small, elite group which in turn drives the innovation that leads to economic growth. In the opinion of the Lumina report this elitist view is mistaken. Lumina posited that the overall level of educational attainment is the true measure of the vibrancy of the economy, and that higher education must be the driving force behind the economy. The fact that a small percentage of people are educated to high levels does little to insure that economic woes will be reversed.

According to Swail and Perna (2002), access to college could be conceptually defined to include educational aspirations, academic achievement, academic preparation, and availability of information about college. Throughout

Swail and Perna's considerable literature on college access, school and non-school variables were identified as aids and impediments to accessing college. These include many of the same principles of a college culture as the nine that McDonough, et al., (2000) present.

Rural public schools face several challenges and issues that impede student access as well as actual admission to college. A review of programs like TRIO, AVID, GEAR-UP, and ENLACE shows that strategies are being tried with segments of the population which are like Colorado's Paradox Population.

According to Bedsworth, et al. in *Reclaiming the American Dream* (2006) the transformative effects of higher education are clear, and access to college is one of the most serious educational and social issues facing the U.S. today. Despite widespread agreement that a college degree leads to better life outcomes for individuals and to a better society overall, only half of students who enter ninth grade eventually enroll in college. Of those who do enroll, 75 percent eventually earn an associate's or bachelor's degree. In other words, only one in three students who enter high school will receive a college degree. Those statistics represent more than just a Colorado Paradox. They indicate a national educational crisis that hopefully this study will help address and offer recommendations to lessen.

# Chapter III

# Methodology

The purpose of this study is to contribute to advancement of knowledge about the issues of college access and attainment in Colorado. This study assessed the perceptions of rural high school students (N=1,012) regarding college access and attainment. This purpose was realized by collecting data from the attendees of a college fair in order to conduct a quantitative analysis of their perceptions. The research problem addressed by this study was that although the number of high school graduates increased in a state that boasts a highly educated population, high school graduates of Colorado have not been accessing college at increasing rates. Statistical survey research was used as a methodology. Survey research is the method of collecting information by asking a set of preformulated questions in a predetermined sequence in a structured questionnaire to a sample of individuals drawn so as to be representative of a defined population (Hutton, 1990: 8). Fogelman, 2002, in a discussion on surveys and sampling favors a broader definition of survey research like Cohen et al. (2002), quoted in Research Methods in Educational Leadership and Management, "Typically, surveys gather data at a particular point in time with the intention of describing the nature of existing conditions, or identifying standards against which existing conditions can be compared, or determining the relationships that exist between specific events" (2000: 169). Either Cohen's more contemporary and inclusive definition or Hutton's narrower definition are applicable to the essential methodology of this study. Exploring Rural Views was a quantitative, large scale, cross-sectional survey, designed to investigate the issues and concerns rural students had about

college access. The resources used in the review of literature related to college access and attainment were housed and researched at Penrose Library at The University of Denver. The Educational Resources Information Center (ERIC), Dissertations & Theses (DAI), and the library's resource search systems PEAK and Prospector at DU as well as the researcher's collection of literature on college access and attainment. Additional literature was referenced from the coursework on College Counseling from Harvard's Summer Institute on College Counseling and UCLA's syllabus of Professor Steven R. Antonoff in Professional College Counseling.

The study started with the general question: "Why are Colorado's kids not choosing college in greater numbers?" The hypothesis that was generated from this question was: something is deterring or causing high school graduates to refrain from college attainment.

The research questions that framed this study are:

- 4. What are the assets of rural students seeking college?
- 5. Are there differences in assets between students attending a school with an internal college counseling program and students who have no such program?
- 6. Are there differences in assets between "First-Generation" students and other groups?

#### Research Design

The survey was designed to gather data to help identify the issues and concerns that blocked the transition from high school to college. The questions were designed based on the most identified factors relating to college access found

in the literature. The advantage of this study design is that responses were collected directly from rural high school students about their beliefs. The survey provided a large scale snapshot of the targeted population's opinions (e.g., Babbie, 1990). This survey was set up to capture information on the assets students had in four essential areas of college access, asking rural students to what degree they:

- have access to a place where they can concentrate on the college search and admission process,
- 2. have a person with whom they can engage in college talk,
- 3. have the necessary materials and information about college choices,
- 4. know the costs of college attendance,
- 5. know how to access scholarships and financial aid,
- 6. think the people in their lives expect them to be college bound.

This survey was economical and anonymous, and produced a high response rate and quality data for analysis.

#### Theoretical Model

This researcher used a three stage model of college choice to frame the study. The framework is a combined model titled the Hossler-Gallagher Model (1987). Hossler is considered the seminal college choice theorist, and was the primary developer of the stages and vocabulary that defined the college choice process. This model outlines three stages in the process of student college choice (Hossler & Stage, 1992, p. 427):

- 1. Predisposition: students' decisions or aspirations to continue their formal education after high school.
- 2. Search: the process of considering types of postsecondary educational institutions to which to apply.

3. Choice: the selection of an institution to attend.

Elaboration on the stages and what actions are assigned to each particular stage are as follows:

Predisposition is the self-reflective stage culminating in the decision to pursue postsecondary education. Individual and environmental background factors have the strongest influence at this stage, informing one's self-image, preferences, and inclinations.

The Search stage is characterized by the gathering of information about college in general and specific colleges, and culminates in a "choice set" of preferred college options. At the outset of this stage, social networks tend to have the strongest influence, but these yield to the institutions themselves as prospective students come to interact more with individual institutions.

In the Choice stage, students and their families interpret the collected information within the context of their personal and social circumstances, resulting in decisions about whether to apply to college, which colleges to apply to, and which college to attend.

(Hossler & Stage, 1992, p. 427; NPEC, 2007, p. 6).

The Hossler-Gallagher model provided valuable terminology and information about access sequencing, stages of attainment, and the formation of the decision to go on to college.

#### Research Site

The site selected for the survey was Aspen High School. It was chosen because it hosted the 4th Annual Colorado Western Slope College Fair. Gaining permission for the use of this site for the College Fair, year after year, required

taking advantage of breaks between high school events, athletic contests, community meetings, as well as weather considerations, and the Colorado High School Athletic Association regulations in regard to school events. The potential site conflicts for the Athletic Director and Administrative Team at the school district level were solved by choosing to host the event on a Sunday, by engaging a completely volunteer corps, and by funding the event through private donations. Aspen High School served as a practical site for the 180 college and university representatives, because Aspen has an airport, good highway, and facilities to host the college and university representatives, the fair guests and the speakers. The fair represented an opportunity to gain access to 5-10 percent of the Western Slope rural high school students. Physically, the site had large spaces that were able to comfortably accommodate 150 national colleges in one area and 30 Colorado colleges in another area. The site was chosen for the College Fair because it offered free and available space on an autumn Sunday, provided complete community support in the form of a devoted and experienced volunteer corps, as well as the proactive support of the district and high school administrative teams, including the superintendent and the principal.

A regional college fair was one way to attract high school students from the 27 western slope counties of rural Colorado. The Western Slope is a unique geographic area stretching from the Continental Divide to the Utah border. The 27 counties, from which the College Fair participants come, cover approximately 47,174 square miles, an area larger in size than the entire state of Pennsylvania. The Western Slope is less densely populated than the eastern portion of Colorado, only a few towns have populations in excess of 5,000. The area's largest city, Grand Junction, has a total population of only 46,898. The Western Slope is a

region in stark contrast to the eastern (Front Range) part of the state, and has very few post-secondary option opportunities, or events, for its over 10,000 high school students.

The potential sample was selected by inviting all high school students in the 27 counties of Colorado's Western Slope to attend the fair, on a Sunday, in late September. The potential attendees were invited by postcard invitation and encouraged to take advantage of free bus transportation to and from the fair. The Colorado Western Slope College Fair (CWSCF) committee's aggressive invitation and communication plan gave the fair survey a potential population sample of approximately 10, 000 students. All high school principals and counselors were individually invited to attend the fair by the hosting principal and superintendent. They were also invited to attend a pre-fair College Representatives' Brunch, as well as a dozen unique and informative workshops that were part of the fair day activities. The fair was offered completely fee free. Parking was arranged. Free shuttles ran to and from the free parking. Posters were sent to and displayed in every invited school. Several reminder phone calls and bus information packets were sent to each school. The communities of Glenwood Springs, Carbondale, and Aspen hung banners across their main streets, and posters were prominently displayed in every branch of Alpine Bank, in 32 different communities of the Western Slope. Over 1,000 posters were displayed in businesses and community gathering spots on September 1 and remained in view throughout the four weeks leading up to the fair date.

Just before the fair, an information session was given by Stanford
University at a major high school in the largest Western Slope city, Grand
Junction. Only four students showed up to see the Stanford representative give an

one hour presentation about the university. At this meager gathering, the need for the fair, and the opportunity for post-secondary shopping, was affirmed. It is easy for this researcher to deduce that not many other colleges or universities could afford to recruit or attract applicants in such an expensive manner; one representative for four potential applicants. Of the four attendees at that particular session, only one of them was academically in the range of Stanford's 2008 applicant pool.

## Research Population

The students invited to the College Fair are as diverse as the Western Slope landscape. In 2007, the number of students attending public school in each of the 27 invited counties spanned from a total of 21,942 students in Mesa County (Grand Junction area) to only 64 students in all of San Juan County (county population 578). In 2007, 27 counties educated a total of 88,346 students (kindergarten through twelfth grade). This equals approximately the same number of students attending school in the Albuquerque, New Mexico school district. However, this covers a geographic area that is over 260 times as large. Of the 88,346 students in the 27 county area, 22,856 (or 25.87 percent) are Hispanic. The highest percentage of Hispanic students occurs in Lake County, where 66.17 percent of its student population is Hispanic. The Western Slope also has a strong Native American presence with 2,421 or 2.74 percent of its students being of Native American heritage. Montezuma County, in the southwestern corner of the state, has the highest percentage of Native American students; 22.01 percent of its student body is Native American. Neighboring La Plata County's student body is 9.60 percent Native American. (Census) The students can be characterized as rural due to the fact that all the schools are designated by the State of Colorado as rural,

with varying degrees of rural designation. The students' interest in, and commitment to, the Colorado Western Slope College Fair was notable; many students traveled long distances to attend. For example, students coming from Mancos in Montezuma County traveled 272 miles and drove six hours to reach the Fair. Students from Rangeley, in Rio Blanco County, traveled 3 hours and 162 miles. Students from Sanford, in Conejos County, traveled 282 miles--five and one half hours. It is important to mention the vast expanse and ruralness of the Western Slope to illustrate how difficult it is to have a gathering of any representative number of rural Western Slope students.

The geography of the Western Slope makes it difficult for the college representatives to individually visit 58 rural high schools in order to disseminate information and draw attention to their specific colleges. The fair gives the representatives an opportunity to come to one place where a variety of the region's students are invited and encouraged to attend. To insure that a diverse group of students attended the fair, an aggressive campaign by the *Pre-Collegiate Program* directors was launched; bus transportation was offered and provided, and free lunch tickets were dispensed for all *Pre-Collegiate* participants who attended the fair. All of these efforts were directed at giving every student of the rural Western Slope region an opportunity to engage in the activity exploring post secondary options and engaging in possibility thinking for their future.

### Role of the Researcher

Special consideration for the multiple roles this researcher held needed to be given with regard to the survey, the site, and the sampling. The role of the researcher in the survey was that of designer, producer, and principal investigator. It was a challenge to manage the role of university doctoral student, at the same

time that this researcher functioned as Director of The Colorado Western Slope College Fair, and as Aspen High School College Counselor.

"At one level, reflexivity denies the possibility of researchers ever achieving an entirely objective position in relation to research, because they are part of the social, political, and educational worlds they are studying" (Morrison, 2002, p. 22). The role of this researcher as an active participant in the research process was clear but careful. This researcher has been employed at Aspen High School for 15 years and has been assigned to two different schools in the District. The survey questions and content were influenced by educational and advising experiences with over 2,000 students during those fifteen years. The last eleven years of teaching and advising were among senior high school students. Considering the varied roles, and any potential conflicts, it was important to maintain the administrative and social duties of the CWSCF Administrator while delegating the Aspen High School College Counselor duties to a colleague. Simultaneously, the duties accompanying administration of a large scale survey needed to be managed. In an effort not to intimidate any student by directly asking them to take the survey, a group of twenty-five volunteers administered the survey. The volunteers attached the survey, a pencil and a consent form to clipboards, and after careful training, they casually asked every student in the registration line if the student would like to take a survey while waiting to register and receive their name tag. Potential conflicts for this researcher came in the form of balancing the traditional role of being a college advisor and a source of information for students, with the role of Fair Director, which required directing 2,000 attendees and college representatives. Where two distinct duties of informing and directing could be in conflict with the researcher's role of the

university doctoral student, it was important to be able to separate and segment the roles, one from another, completely removing the researcher from the operation of administering the survey. It was important to be able to collect data from every entering student but it was also important not to tell, direct or inform any student with mixed messages about the fair and the survey. The ultimate goal was to learn from the students coming to fair and have them feel free to answer the questionnaire in an atmosphere without any coercion or influence.

#### Instrumentation

This study utilized a twenty question, Likert scale survey to measure the responses of the CWSCF participants with regard to college access and attainment. There were some difficulties in creating a survey that would elicit information from all the participants in a timely manner while they were waiting to enter an event of some importance and significance for them. The questions were created to include as many specific variables as possible. Variables such as designated place, assigned counselor, expectations of others and test awareness were important to include, not only to better define study predictors and outcomes, but also to prompt students' memory recall in order to inventory their assets just before they entered the "college access arena" where they had the opportunity to meet and speak with 180 college representatives and Directors of Admission.

#### Data Collection Procedures

Once the survey was reviewed by the thirty-five member Colorado
Western Slope College Fair Committee and adjusted for clarity, organization of
concepts, and brevity, it was submitted to The University of Denver's Institutional
Review Board and approved for use on September 28, 2008. A consent and

information form (Appendix B) was also approved by IRB that accompanied the survey on collection day.

The brightly colored, one page, twenty-question, Likert scale survey was administered in a swift manner, and in a relaxed setting. One thousand and twelve students took the survey while waiting to be admitted to the fair and while standing in queues for their admission nametag. The students were asked to take less than five minutes to fill out a convenient survey, printed on brightly colored paper and attached to a clip board, complete with a pencil and a yellow disclaimer form. The disclaimer form declared it to be voluntary and anonymous. An opportunity to win a *College in Colorado* \$500.00 Scholarship in exchange for a completed survey was prominently and colorfully displayed at the registration booth. The drawing for this scholarship was advertised to be within an hour of the completion of the survey, and was awarded to the student whose name was drawn from the pool of tickets. Each student who completed a survey was given the opportunity to write their name on the back of a separate ticket and place it in a pool for the scholarship drawing.

# Response Rate

One-thousand and one-hundred surveys were distributed by the Survey Committee of the 4<sup>th</sup> Annual Colorado Western Slope College Fair and one-thousand and twelve were returned to the volunteers. The 1,012 students who took the survey were attendees of the 4<sup>th</sup> Annual Western Slope College Fair. These students came a distance which ranged from one hour driving time to six hours driving time. Of the fifty-eight Western Slope high schools, thirty-three were represented. Ten thousand Western Slope high school students were invited and approximately 1,400 students attended the fair.

### Data Analysis

The 1,012 surveys were collected from the registration team at the 4<sup>th</sup> Annual Colorado Western Slope College Fair on September 28, 2008. The results were then entered immediately into Zoomerang in order to create an Excel Spreadsheet that could be transferred to SPSS, a statistical analysis program. The survey was constructed to look at the essential components of college seeking behaviors and assets. The data from the survey could be analyzed according to the categories: Place, Person, Information, and Expectations. A factor analysis was conducted to define the underlying structure in this data matrix and to explore the structure among a set of variables and as a data reduction method. The factor analysis determined two dimensions or factors of the study. A coding matrix was constructed to combine the questions that were essentially related to each other. Several other lenses were used for more detailed analysis of the survey data: first generation status, direct college counseling, degree of rurality, size of school, and grade level of the students. By looking at the subgroups of respondents, and the other variables, it was possible to see the perspectives of the rural student on the issues surrounding college access and choice.

# Significance

Based on data collected directly from rural students via survey, this researcher postulates possible impediments to college attainment for rural students, thereby giving educators more information upon which to make recommendations for improvement in rural public schools. This research may assist in clarifying the missing pieces to college attainment in the rural public schools of Colorado and also redirect energy on higher education's potential, to help solve the crisis identified by President Obama, Colorado's Governor Bill

Ritter, and many national and regional leaders since the release of 1983's *A Nation at Risk*.

#### Limitations

With the survey there was a possibility that the survey participants might fill in the bubbles thoughtlessly, or with a meaningless pattern, or answer all questions the same. Another response possibility had to do with the researcher's role as the resident College Counselor. The students who saw the researcher in the role as a college counselor might fill in the survey with what they thought the counselor expected. The possibility of reactivity was always present. It was adequately addressed in the construction and distribution of the survey, and by the clearly stated anonymity of the survey. The researcher removed herself from the fair registration area to avoid potentially influencing answers by her presence. The survey was designed to be able to extract, for analysis, all the answers that came from the students of the high school where the researcher was the college counselor. To insure that every student who entered the fair was offered the survey there was a team of casually dressed identifiable volunteers. The volunteers all wore a similar shirt, bandana, and colorful nametags identifying them as survey distributors and volunteers. Their warm, friendly, casual demeanor made it easy for the kids to say "yes" to the survey. The simple form of the survey and the one page, clear formatting, as well as perceived brevity also contributed positively to the number of volunteer survey participants. One limitation, apparent as the students unloaded from the buses, was that all the students who came to the fair were obviously engaged in several aspects of college seeking behavior, like college talk, college evaluating, college information exchange, interviewing, engaging representatives, asking questions, and

presenting themselves as consumers of the college product and experience. Only at that moment did the researcher consider that these kids may fall into the category of College Seekers and not the Paradox Population, the original focus of this study. Because this epiphany was contrary to this researcher's initial expectations, the absence of the Paradox Population became an opportunity. The momentary concern about this limitation became an opportunity to collect data on a subset of the Rurals, the College Seekers. Important data could be collected from these Rurals that would inform interested parties as to what assets these rural College Seekers possessed, and conversely what assets might be lacking in the repertoire of the Paradox Population. While attempting to record the voice of the rural student who was not accessing college, the researcher realized that, in fact, the Paradox Population was not significantly represented at the fair. Even with this shift in expected attendees, the survey was still a viable way to add to the body of knowledge about aids to assist rural students in accessing college in greater numbers. The reliability of the constructs is adequate with a Cronbach's alpha of .808.

The limitation of the data analysis was that it was a snapshot of one segment of the rural Western Slope high school students. While examining the data, the voice captured turned out to not be the voice of the Paradox Population, the original focus of this study. The collected data produced another phenomenon; while attempting to discover the voice of the rural student who was not accessing college, it was discovered that the survey revealed the voice of the rural student who was exhibiting college attainment behavior. The opinions that this group rendered may be instrumental in revealing reasons that Colorado's Western Slope students were not accessing college in greater numbers.

A final limitation discovered during analysis of the survey was the scope of the questions and the Likert scale choices for answers. The original survey was designed to have the rural high school students identify the common challenges and issues that they faced on the road to college attainment. A revision of the survey would include a way to have the students allocate a degree of specificity to missing college attainment components.

# Chapter IV

## Presentation of the Data and Findings

This study explored the voices and assets of Colorado's rural students in response to the issues of college access and attainment.

The questions that framed this study are:

- 1. What are the assets of rural students seeking college?
- 2. Are there differences in assets between students attending a school with an internal college counseling program and students who have no such program?
- 3. Are there differences in college seeking assets between "First-Generation" students and other populations?

To investigate these questions the researcher analyzed the data obtained from a large-scale survey about the assets, opinions and perceptions of 1,012 rural high school students who attended a regional educational event. The frequency analysis provided insight into what impediments, aids, and assets various groups of rural students identified with regarding college access. The analysis of the data

rendered several statistically significant differences between subsets of students represented in the survey sample.

#### Constructs

The survey was reviewed by the Colorado Western Slope College Fair Committee for the purpose of organizing the questions into constructs. Some questions were deemed superfluous, and although analysis was conducted, some questions are not reported on in detail in this chapter. Based on the literature and the experience of the CWSCF Committee, the survey questions were clustered around Hossler's three stages of college attainment: Predisposition, Search, and Choice stages.

Predisposition is the self-reflective stage culminating in the decision to pursue postsecondary education. Individual and environmental background factors have the strongest influence at this stage, informing one's self-image, preferences, and inclinations. Questions 3 and 12 related to internal and external expectations about college-going were reflective of this stage of college attainment.

The Search stage is characterized by the gathering of information about college in general, as well as specific colleges in particular, and culminates in a "choice set" of preferred college options. At the outset of this stage, social networks tend to have the strongest influence, but these yield to the institutions themselves as prospective students come to interact more with individual institutions. Questions 4, 7, 9,14,15,17, and 20 related to gathering information were reflective of this stage of college attainment.

In the Choice stage, students and their families interpret the collected information within the context of their personal and social circumstances, resulting in decisions about whether to apply to college, which colleges to apply to, and

which college to attend. Questions 5, 11, 18, 19, 21, and 22 related to assessing the information and determining direction were reflective of this stage of college attainment. A factor analysis findings indicated that the questions held together as valid constructs.

Originally the survey had twenty questions and five descriptive pieces of information requested of the respondent. Question 10 was determined by factor analysis to be inconsistent in a construct of related factors. Question 10 was determined to be too ambiguous and was eliminated from the final data analysis. Nineteen questions were used to make up the raw data set for the final analysis. The survey questions were both Likert scale, binary, and descriptive in nature.

Table 3

Fair Attendees by Grade

Demographic information of the fair attendees

Grade	Frequency	Percent	Valid Percent	Cumulative Percent
9	70	6.9	7.7	7.7
10	98	9.7	10.8	18.5
11	400	39.5	44.2	62.7
12	338	33.4	37.3	100.0
Subtotal	906	89.5	100.0	
Missing	106	10.5		
Total	1,012	100.0		

Among the 1,012 attendees of the CWSCF, 903 noted gender on their survey. 396, (39.1 percent) of the attendees were males and 507, (50.1 percent) were females. *Sample Group Sub-sets* 

Although the surveyed students were all residents of the Western Slope of Colorado, where all schools fall under Colorado Department of Education's (CDE) Rural classification, the sample population (N=1,012) was divided into four distinctive cohorts to highlight their differences and distinguishing

characteristics. The first group having distinguishable variables is labeled *College Counseled Students (College Prepped)* and consists of the students of high schools two and eight in the sample group, both of which have an internal college counseling department with a designated college counselor who concentrates on the college admission process. An assumption was made by the researcher in the construction of this group. Even if some students declared themselves "First Generation" students and attended either school two or eight, the student was assigned to the *College Counseled* sample set. Because the researcher is also a practitioner, the influence of an internal college counseling department was considered and declared an overriding influence on the *First Generation* student. This decision was made as a result of familiarity with both college counseling programs in schools two and eight.

Sample group Set 2 is comprised of *First Generation Students* who are identified as the student who answered "no" to the two questions, "Did your mother complete college?" and, "Did your father complete college?" The exception to the designation of *First Generation Student* status was if they attended schools two or eight.

Sample group Set 3 is named *General Group* and refers to the rest of the population who were neither sample group Set 1 or sample group Set 2.

A fourth sample group comprised of all grade 9 and 10 students was set up separately for comparison to determine if the younger students in each of the sample group sets responded in a similar manner to their 11<sup>th</sup> and 12<sup>th</sup> grade counterparts in their cohorts. Note that Sets 1, 2, and 3 contain all four grades of students, but Set 4 contains grades 9 / 10 only, and was compared against the full (mixed) group of 11 / 12 grade students. Sets 1 and 2 have some overlap as first

generation students were also part of schools 2 and 8 which are categorized as the college prepped set

Table 4

Number of Students in Each Group

College Prepped	First Generations	General Group	9 <sup>th</sup> & 10 <sup>th</sup> Grades
333	291	468	168

The sample population (N=1,012) represented 33 of the 58 high schools of the Western Slope of Colorado in the following percentages and numbers.

Table 5.33 High Schools at Colorado's Western Slope 2008 CWSCF Fair

Number of School	Frequency	Percent	Valid Percent	Cumulative Percent
1	3	0.3	0.3	0.3
2	273	27.0	27.1	27.4
3	9	0.9	0.9	28.3
4	85	8.4	8.4	36.8
5	11	1.1	1.1	37.9
6	59	5.8	5.9	43.7
7	32	3.2	3.2	46.9
8	60	5.9	6.0	52.9
9	4	0.4	0.4	53.3
10	22	2.2	2.2	55.5
11	13	1.3	1.3	56.8
12	58	5.7	5.8	62.5
13	78	7.7	7.8	70.3
14	69	6.8	6.9	77.1
15	6	0.6	0.6	77.7
16	10	1.0	1.0	78.7
17	2	0.2	0.2	78.9
18	6	0.6	0.6	79.5
19	15	1.5	1.5	81.0
20	1	0.1	0.1	81.1
21	4	0.4	0.4	81.5
22	11	1.1	1.1	82.6
23	33	3.3	3.3	85.9
24	17	1.7	1.7	87.6
25	2	0.2	0.2	87.8
26	8	0.8	0.8	88.6
27	32	3.2	3.2	91.7
28	14	1.4	1.4	93.1
29	7	0.7	0.7	93.8
30	3	0.3	0.3	94.1
31	26	2.6	2.6	96.7
32	4	0.4	0.4	97.1
33*	29	2.9	2.9	100.0
Subtotal	1006	99.4	100.0	
Missing	6	.6		
Total	1012	100.0		

<sup>\*</sup> All other schools instead of Schools 1 to 32.

Thirty-three schools of the fifty-eight invited high schools were represented by students at the CWSCF.

The following figure shows that the overwhelming number of attendees of the Colorado Western Slope College Fair expressed the aspiration, "I want to go to college." Lumina 2009 reported that this assertion was a clear indicator of the desire on the part of the student to attend college. According to Hossler's research (Hossler & Stage, 1992, p. 433) over 80 percent of all upper level high school students who indicated that they planned to enroll in a Post Secondary Institution (PSI) eventually followed through on their plans. It was important to gather the data on this variable to see if the "will to go" was present in the sample group.

#### I want to go to college.

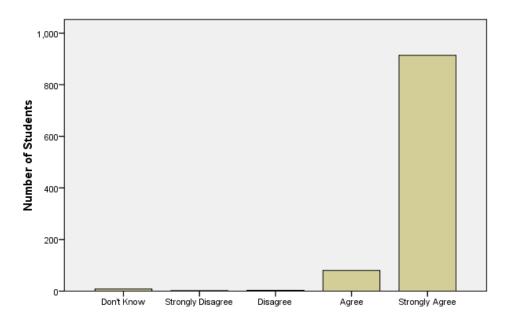


Figure 1. Number of Students who Desire to Go to College.

The above chart indicates that the data from the CWSCF attendees aligns with the *Lumina Report 2009* findings where over 90 percent of high school kids said they wanted to go to college. The *Lumina Report* says that when kids make

the positive assertion of wanting to go to college this becomes an internal expectation. This internal expectation has been credited in the literature as a motivator that engages students in college-seeking behaviors, like attending the college fair, engaging in college talk, and articulating their hopes and dreams for the future. The second predisposition variable measured, "my teachers believe that I am college bound," rendered similarly high 'yes' responses that indicated that overall the sample population (N=1,012) had a strong predisposition toward college with both internal and external expectations driving them toward college attainment.

#### My teachers believe that I am college bound.

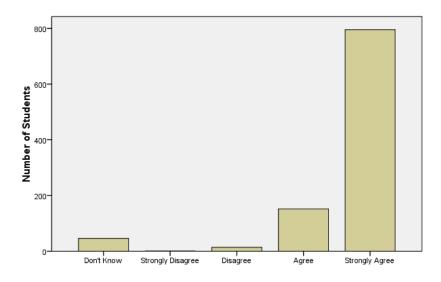


Figure 2. Teachers Believe That I am College Bound

Survey questions were coded to reflect the different aspects of college attainment. Questions 3 and 12 were assigned to the predisposition category; the answers were then analyzed to determine if the groups believed that in fact they wanted to go to college (internal expectation) and if others (teachers) believed they were going to college (external expectation). The next group of questions

was designed around Hossler's Search stage of college attainment and pertained to information gathering and analysis. Finally, the third group of questions were organized around the characteristics of the Choice stage of college attainment and contained statements like *I know the cost of college*, *I know how to finance college*, and, *I know what scholarships are available in my school and my area.*Designated College Counselor vs. No Designated Counselor

In Table 6 the answers given by schools (2 and 8) that had internal college counseling programs and a designated college counselor were compared to schools that had no such designated person or specific program. In the College Counseled Students versus the non-Counseled (Schools 2 and 8 versus other schools) an independent samples t-test was conducted to analyze the data. This group was segregated from the other groups by the researcher's knowledge that over the last five years, 90-96 percent of the graduates of schools 2 and 8 have gone directly from high school to college. Although CDE did not yet have the immediate matriculation rate from Western Slope high schools, schools (2) and (8) released this matriculation rate on their school's profiles. According to Dr. H. Baker of CDE, the department intends to have this data as part of school accountability reports in the near future. The necessary research data to assess Western Slope college attainment is noticeably absent from CDE's common data set of educational information. These data are critical in the differentiation of the subsets of the Western Slope population and to any evaluation of the Colorado Paradox.

Table 6
Schools with A College Counselor versus Schools with No College Counselor

Tann		Schools 2	or 8	Not Schools 2 or 8			, 1C	10	
Item	N	Mean	SD	N	Mean	SD	<b>-</b> [	df	p
3 I want to go to college.	332	.98	0.13	675	.99	0.10	0.93	524.92	.354
4 There is a designated place at my school at which I can find college information.	333	.98	0.13	675	.85	0.36	-8.53	952.67	.000
5 The designated college information place is open and easily accessible.	333	4.66	0.64	673	3.99	1.06	-12.46	969.13	.000
6 The college information materials at my school are current.	332	.95	0.21	676	.78	0.42	-8.81	1003.94	.000
7 College information materials at my school are helpful.	332	4.69	0.62	676	3.82	1.09	-16.00	985.21	.000
8 I have current and adequate information about college entrance requirements.	333	4.29	0.97	678	3.66	1.20	-8.95	797.51	.000
9 I have access to my counselor to talk about college.	332	.97	0.18	679	.92	0.27	-3.15	916.80	.002
11 My counselor believes that I am going to college.	332	4.70	0.64	676	4.55	0.80	-3.17	806.72	.002
12 My teachers believe that I am college bound.	331	4.77	0.58	677	4.69	0.65	-2.03	721.68	.043
13 I know what needs to be included in a completed college application.	332	3.91	1.16	676	3.56	1.19	-4.47	676.07	.000
14 I know what is on my transcript and my cumulative GPA.	333	.80	0.40	677	.84	0.36	1.66	606.50	.097
15 I know the role of standardized tests (ACT, SAT) in the college application process.	333	.85	0.36	676	.86	0.35	0.54	1007.00	.592
16 I have information about standardized testing.	332	.85	0.36	677	.79	0.41	-2.11	729.88	.035
17 I know where to find college resources on the internet.	333	.83	0.38	675	.87	0.34	1.61	601.53	.108
18 I am generally aware of the cost of college.	333	4.44	0.87	677	4.27	0.91	-2.79	1008.00	.005
19 I am generally aware of how to pay for college.	333	3.92	1.23	676	3.67	1.21	-3.09	1007.00	.002
20 I know what scholarships are available in my area or through my school.	330	.60	0.49	674	.50	0.50	-3.02	665.83	.003
21 I believe that college will increase my earning power.	330	4.74	0.61	675	4.76	0.56	0.53	1003.00	.595
22 I believe that a college degree will give me significant social standing.	316	4.58	0.80	644	4.53	0.72	-1.03	958.00	.303

There are statistically significant differences (p<0.05) between the group that has a designated college counselor and the group that does not have a designated college counselor on thirteen of the nineteen questions. In this study, the counselor vs. no counselor comparisons rendered the most disparity of agreement. The College Counseled students answered in greater agreement on more questions compared with the non-College Counseled than on any other table of comparison.

Questions 3 and 12 refer to the predisposition of college attainment. The survey question on college aspiration 3 (I want to go to college), rendered no statistically significant difference. Consistent with the literature, most of the students who attended the fair declared that they wanted to go to college. There was a statistically significant difference (p=0.04) between the college counseled group and non-college counseled group on question 12 (My teachers believe that I am college bound) with those in the college-counseled group to be more likely to believe that their teachers believe that they are college bound.

The Search stage of college attainment was reflected in binary questions 4, 7, 9, 14, 15, 17, and 20. Students in the college-counseled group were more likely to believe that there is a designated place at their school where they can find college information (4), college information materials at their school was helpful (7), they have access to their college counselor to talk about college (9), and know what scholarships are available in their area or school (20) (all p<0.03). There was no difference between the groups on their understanding of the role of standardized tests in the process (15).

The Choice stage of college attainment was reflected in Questions 5, 11, 18, 19, 21, and 22. The college counseled group was more likely to believe (p<0.01) that the designated college place at their school is open and easily accessible (mean=4.66) compared to the non-designated college counselor group (mean=3.99). The group with the designated college counselor is more likely to believe that their college counselor believes that they are going to college (11), aware of the cost of college (18), and aware of how to pay for college (19) (all p<0.02). There was no statistically significant difference between the groups on the beliefs that college will increase their earning power (21) and that a college degree will give them significant social standing (22).

Survey questions 6, 7, 8, all related to college information materials showed statistically significant differences between the two groups. The perception of the college counseled group was that they agreed in greater numbers that they had current, helpful and adequate college information materials (all p<0.001).

First Generations vs. Non-First Generation Groups

In Table 7, the *First Generation vs. Non-first Generation Students* comparison groups, the first generation students qualified as First-Generation answered "no" on both question 23 and 24, "Did your mother complete college" and "Did your father complete college" (p<0.05). Eleven of the nineteen questions showed statistically significant differences in the mean answers of the students. On all of the eleven questions with statistically significant responses, all eleven differences demonstrated that the First Generation students were less likely to believe that they had services, information, and access than the non-First Generation students.

The survey question on college aspiration, 3 (I want to go to college), rendered no statistically significant difference. As reported in the literature and predicted by the researcher, most of the students who attended the fair declared that they wanted to go to college. There was a statistically significant difference (p<.001) between the First Generation group and non- First Generation group on question 12 (My teachers believe that I am college bound) with those in the First Generation group to be less likely to believe that their teachers believed that they were college bound.

The Search stage of college attainment was reflected in binary questions 4, 7, 9, 14, 15, 17, and 20. Students in the First Generation group were less likely to believe that there was a designated place at their school where they could find college information (4), college information materials at their school was helpful (7), they had access to their college counselor to talk about college (9), and knew what scholarships were available in their area or school (20) (all p<0.03). There was no difference between the groups on their understanding of the role of standardized tests in the process (15) and knowing where to find college resources on the internet (17).

The Choice stage of college attainment was reflected in Questions 5, 11, 18, 19, 21, and 22. The First Generation group was less likely to believe (p<.001) that the designated college place at their school was open and easily accessible (mean=4.00) compared to the non- First Generation group (mean=4.28). The First Generation group was less likely to believe that their college counselor believes that they were going to college (11), were less aware of the cost of college (18), and were less aware of how to pay for college (19) (p<.001). There was no statistically significant difference between the groups on the beliefs that college

would increase their earning power (21) and that a college degree would give them significant social standing (22).

Survey questions 6, 7, 8, all related to college information materials and showed statistically significant differences between the two groups on two of the materials questions. First Generations displayed no statistically significant difference in the belief that the information at their school was current (6). The perception of the First Generation group was that they were less likely to believe that they had helpful (7) (p<0.02) and adequate (8) (p<0.005) college information materials than the non- First Generation group.

The statistically significant data difference in the answers of the First

Generation group and the non-First Generation group on Table 7, was the

predisposition question 12 (My teachers believe that I am college bound). The First

Generation group (mean=4.52) agreed in lesser numbers that their teachers

believed that they were college bound than the non-First Generation group

(mean=4.91). This is a notable data point for a discussion on expectations and the

effect expectations have on actual college attainment.

Table 7
First Generation vs. Non-first Generation Students

Item		First Gener	ration	Non-First Generation			+	df	
ICIII	N	Mean	SD	N	Mean	SD	- i	uı	p
3 I want to go to college.	246	.99	0.09	680	.99	0.09	-0.10	924.00	.920
4 There is a designated place at my school at which I can find college information.	246	.85	0.35	682	.90	0.29	2.02	373.49	.044
5 The designated college information place is open and easily accessible.	247	4.00	1.12	680	4.28	0.95	3.72	925.00	.000
6 The college information materials at my school are current.	248	.81	0.40	681	.84	0.37	1.01	414.82	.314
7 College information materials at my school are helpful.	247	3.94	1.09	680	4.14	1.04	2.52	925.00	.012
8 I have current and adequate information about college entrance requirements.	248	3.67	1.24	682	3.93	1.14	2.92	406.53	.004
9 I have access to my counselor to talk about college.	248	.92	0.28	682	.94	0.24	1.16	388.36	.248
11 My counselor believes that I am going to college.	247	4.46	0.85	680	4.65	0.72	3.22	381.13	.001
12 My teachers believe that I am college bound.	247	4.52	0.81	681	4.79	0.52	4.91	323.63	.000
13 I know what needs to be included in a completed college application.	248	3.52	1.20	680	3.71	1.20	2.15	926.00	.032
14 I know what is on my transcript and my cumulative GPA.	247	.81	0.39	683	.84	0.37	1.12	408.90	.263
15 I know the role of standardized tests (ACT, SAT) in the college application process.	247	.83	0.38	683	.87	0.34	1.54	395.72	.124
16 I have information about standardized testing.	248	.76	0.43	681	.83	0.38	2.05	398.26	.041
17 I know where to find college resources on the internet.	247	.81	0.39	681	.86	0.34	1.77	392.72	.078
18 I am generally aware of the cost of college.	248	4.21	1.02	682	4.37	0.86	2.29	382.70	.023
19 I am generally aware of how to pay for college.	248	3.44	1.33	681	3.86	1.17	4.35	393.55	.000
20 I know what scholarships are available in my area or through my school.	247	.45	0.50	677	.55	0.50	2.72	922.00	.007
21 I believe that college will increase my earning power.	248	4.69	0.68	677	4.77	0.54	1.76	365.76	.079
22 I believe that a college degree will give me significant social standing.	233	4.55	0.71	650	4.54	0.75	-0.01	881.00	.994

Table 8

General Group vs. Groups 1 & 2

Itama		General G	roup	Groups 1 or 2				1t	
Item	N	Mean	SD	N	Mean	SD	<del>-</del> ι	df	p
3 I want to go to college.	466	.99	0.11	541	.99	0.11	-0.01	1005.00	.993
4 There is a designated place at my school at which I can find college information.	466	.86	0.35	542	.92	0.26	3.43	854.75	.001
5 The designated college information place is open and easily accessible.	463	4.02	1.02	543	4.37	0.94	5.61	1004.00	.000
6 The college information materials at my school are current.	465	.77	0.42	543	.89	0.32	4.87	851.75	.000
7 College information materials at my school are helpful.	466	3.82	1.08	542	4.35	0.94	8.30	930.92	.000
8 I have current and adequate information about college entrance requirements.	467	3.70	1.17	544	4.01	1.14	4.38	979.60	.000
9 I have access to my counselor to talk about college.	468	.93	0.26	543	.95	0.23	1.38	924.40	.169
11 My counselor believes that I am going to college.	466	4.61	0.76	542	4.60	0.74	-0.16	1006.00	.872
12 My teachers believe that I am college bound.	467	4.76	0.54	541	4.67	0.69	-2.09	998.95	.037
13 I know what needs to be included in a completed college application.	465	3.59	1.19	543	3.75	1.19	2.18	1006.00	.030
14 I know what is on my transcript and my cumulative GPA.	467	.86	0.35	543	.81	0.39	-2.05	1006.73	.041
15 I know the role of standardized tests (ACT, SAT) in the college application process.	466	.87	0.34	543	.84	0.37	-1.34	1002.50	.180
16 I have information about standardized testing.	466	.81	0.39	543	.81	0.39	-0.03	1007.00	.973
17 I know where to find college resources on the internet.	465	.89	0.32	543	.83	0.38	-2.80	1005.26	.005
18 I am generally aware of the cost of college.	466	4.30	0.86	544	4.35	0.94	0.82	1008.00	.410
19 I am generally aware of how to pay for college.	465	3.75	1.14	544	3.75	1.29	-0.11	1005.87	.911
20 I know what scholarships are available in my area or through my school.	464	.53	0.50	540	.54	0.50	0.21	1002.00	.836
21 I believe that college will increase my earning power.	464	4.77	0.54	541	4.74	0.61	-0.86	1003.00	.389
22 I believe that a college degree will give me significant social standing.	444	4.50	0.75	516	4.58	0.74	1.78	958.00	.076

Table 9

9<sup>th</sup> and 10<sup>th</sup> Grades vs. 11<sup>th</sup> and 12<sup>th</sup> Grades

Item		and 10th	Grades	11th and 12th Grades				df	
Itelli	N	Mean	SD	N	Mean	SD	ι	uı	p
3 I want to go to college.	166	.99	0.11	735	.99	0.11	-0.02	899.00	.983
4 There is a designated place at my school at which I can find college information.	167	.80	0.40	738	.91	0.29	3.27	206.57	.001
5 The designated college information place is open and easily accessible.	167	4.07	1.04	735	4.23	0.99	1.90	900.00	.057
6 The college information materials at my school are current.	168	.79	0.41	736	.84	0.37	1.52	231.92	.129
7 College information materials at my school are helpful.	168	4.01	1.08	735	4.09	1.05	0.90	901.00	.371
8 I have current and adequate information about college entrance requirements.	168	3.58	1.28	738	3.90	1.13	2.94	229.80	.004
9 I have access to my counselor to talk about college.	167	.92	0.28	738	.94	0.23	1.10	222.42	.271
11 My counselor believes that I am going to college.	168	4.46	0.86	734	4.62	0.72	2.31	224.14	.022
12 My teachers believe that I am college bound.	168	4.60	0.78	734	4.73	0.59	2.05	211.81	.041
13 I know what needs to be included in a completed college application.	168	3.41	1.20	734	3.71	1.18	2.99	900.00	.003
14 I know what is on my transcript and my cumulative GPA.	168	.75	0.43	737	.85	0.36	2.80	221.08	.006
15 I know the role of standardized tests (ACT, SAT) in the college application process.	168	.71	0.45	735	.89	0.32	4.65	206.22	.000
16 I have information about standardized testing.	167	.68	0.47	736	.83	0.37	3.85	216.98	.000
17 I know where to find college resources on the internet.	168	.76	0.43	735	.87	0.34	3.09	216.49	.002
18 I am generally aware of the cost of college.	168	4.25	0.89	736	4.33	0.91	1.00	902.00	.317
19 I am generally aware of how to pay for college.	168	3.70	1.24	735	3.75	1.22	0.51	901.00	.611
20 I know what scholarships are available in my area or through my school.	165	.56	0.50	735	.51	0.50	-1.15	244.07	.251
21 I believe that college will increase my earning power.	168	4.73	0.64	734	4.75	0.57	0.38	900.00	.704
22 I believe that a college degree will give me significant social standing.	156	4.58	0.67	704	4.51	0.77	-0.98	858.00	.327

The General Group vs. Groups 1 & 2 (College Counseled and First-Generation Students Combined)

Referring to Table 8 the General Group vs. Groups 1 & 2 (College Counseled and First-Generation Students Combined) comparison groups, there are nine statistically significant differences (p<0.05) between the group that are identified as General Group students and student in Groups 1 & 2. There are statistically significant differences (p<0.05) between General Group verses.

Groups 1 & 2 on nine of the nineteen questions.

The survey question on college aspiration, 3 (I want to go to college), rendered no statistically significant difference. As predicted and reported in the literature, most of the students who attended the fair declared that they wanted to go to college. There was a statistically significant difference (p<.04) between the General Group and Groups 1 & 2 on question 12 (My teachers believe that I am college bound) compared with the responses of the General Group to be more likely to believe that their teachers believe that they are college bound than the students in Group 1 & 2.

The Search stage of college attainment was reflected in binary questions 4, 7, 9, 14, 15, 17, and 20. Students in Groups 1 & 2 were more likely to believe that there is a designated place at their school where they can find college information (4), college information materials at their school was helpful (7), and they have access to their college counselor to talk about college (9). There was no statistically significant difference on knowing what scholarships were available in their area or school (20), and understanding the role of standardized tests in the process (15).

The Choice stage of college attainment was reflected in Questions 5, 11, 18, 19, 21, and 22. The Group 1 & 2 was more likely to believe (p<.001) that the designated college place at their school was open and easily accessible (mean=4.37) compared to the General Group (mean=4.02). The General Group agreed that their college counselor believes that they were going to college (11) at the same statistically significant rate as Group 1 & 2; also the General Group showed no statistically significant difference in their awareness of the cost of college (18), or in their awareness of how to pay for college (19) (p=0.91). There was no statistically significant difference between the groups on the beliefs that college would increase their earning power (21) and that a college degree would give them significant social standing (22).

Survey questions 6, 7, 8, all related to college information materials and showed statistically significant differences (p<0.05) between the two groups on all three materials questions.

The 9th and 10th Grade Students vs. The 11th and 12th Grade Students

There are statistically significant differences (p<0.05) between the group designated as 9<sup>th</sup> and 10<sup>th</sup> Grade Students and the group designated as 11<sup>th</sup> and 12<sup>th</sup> Grade Students on nine of the nineteen questions. Questions 3 and 12 refer to the predisposition of college attainment. The survey question on college aspiration, 3 (I want to go to college), rendered no statistically significant difference. As predicted and reported in the literature most of the students who attended the fair declared that they wanted to go to college. There was a statistically significant difference (p<0.05) between the 9<sup>th</sup> and 10<sup>th</sup> Grade Students and the 11<sup>th</sup> and 12<sup>th</sup> Grade Students on question 12 (My teachers believe that I am college bound) with

those in the 11<sup>th</sup> and 12<sup>th</sup> Grade Students group responding in higher agreement that their teachers believed that they were college bound.

The Search stage of college attainment was reflected in binary questions 4, 7, 9, 14, 15, 17, and 20. Students in the 11<sup>th</sup> and 12<sup>th</sup> Grade Students group were more likely to believe that there was a designated place at their school where they could find college information (4) (p=0.001). The groups on Table 9 showed no statistically significant difference in their agreement on the statement that the college information materials at their school were helpful (7) or that they had access to their college counselor to talk about college (9), and again no statistically significant difference in their agreement that they knew what scholarships were available in their area or school (20). There was a difference between the groups on their understanding of the role of standardized tests in the college attainment process (15) (p<0.03).

The Choice stage of college attainment was reflected in Questions 5, 11, 18, 19, 21, and 22. The 9<sup>th</sup> and 10<sup>th</sup> Grade Students and the 11<sup>th</sup> and 12<sup>th</sup> Grade Students showed no statistically significant difference in their agreement group that the designated college place at their school was open and easily accessible. The 11<sup>th</sup> and 12<sup>th</sup> Grade Students group was more likely to believed that their college counselor believed that they were going to college (11) (p<0.03). There was no statistically significant difference in agreement on the questions "I am aware of the cost of college" (18), and "aware of how to pay for college" (19). As in all other group comparisons, there were no statistically significant differences between the groups on the beliefs that college will increase their earning power (21) and that a college degree will give them significant social standing (22).

across all groups have answered these three questions in agreement with no statistically significant difference.

Survey questions 6, and 7, were both related to college information materials and showed no statistically significant differences between the two groups. The perception of both 9<sup>th</sup> and 10<sup>th</sup> Grade Students and the 11<sup>th</sup> and 12<sup>th</sup> Grade Students groups was that they agreed in the same numbers that they had helpful and current college information materials. On question 8, there was a statistically significant difference between the groups 9<sup>th</sup> and 10<sup>th</sup> Grade Students and the 11<sup>th</sup> and 12<sup>th</sup> Grade Students on whether on not they agreed that they had current and adequate information about college entrance requirements (p=0.004). The 11<sup>th</sup> and 12<sup>th</sup> Grade Students group were more likely to believe (p<0.03) that they had the current and adequate information about college entrance requirements.

### Data Chapter Summary

This chapter presented the quantitative results of the data collected to explore the views and perceptions of rural Western Slope students in regard to college access and attainment assets. The chapter presented the sample selection, response rate, demographic characteristics, and an analysis of the operation research questions. The data was collected by a survey instrument. An univariate data analysis was performed on the data.

The major result of the analysis of the data was identification of statistical significance between the College Counseled Group and the non-college counseled group on thirteen of the nineteen questions. The College Counseled group had higher agreement numbers on questions about college costs, college information, and demonstrated a higher agreement that they had assets for college attainment.

For the last ten years, the governors of Colorado have asked, "Why are kids not accessing college in greater numbers?" This researcher sought to answer that question by gathering rural views and perceptions from the high school population of Colorado's Western Slope in regard to college attainment and access. The broad themes that emerge from the data are that there is no *one size fits all answer* to college attainment for the rural or any other population. An examination of the data and analysis of the subtle and significant differences within a population inform this study as to what assets each sample set possesses and what variables are present and absent in each group. This data can inform the schools of the Western Slope as to the assets or missing pieces of the college attainment puzzle. The inventory might give schools of all sizes and rurality a place to start to address the question of why more kids are not accessing college in greater numbers.

One of the major findings in the *Exploring Rural Views* study demonstrated the difference between students who have been continuously exposed to college counseling and those who had not. Differences in the group of *College Counseled Students* demonstrate the effect of a college-going culture. The effect is elaborated when combined with specific strategies to engage students in college seeking behaviors like: college talk, articulation, class selection and planning, rigorous curriculum, test preparation, internal and external expectations, college conversations, a college center, academic awareness, and most of all a place to tell their story and share their hopes and dreams for the future.

The survey questions were designed to establish the extent of college knowledge in each subset of the Western Slope high school population. Response

to each research question gave a measure of the degree of asset ownership that each group possessed.

A fact that prompted this investigation was that high school kids, when asked, declared overwhelmingly, "I want to go to college." The survey statement, *I want to go to college* corresponds with the findings of several recent national studies, *Lumina* and *Measure Up*, who reported that 90 percent of kids responded, "I want to go to college." *Exploring Rural Views* wanted to assess where high school kids on the Western Slope of Colorado thought they were in regard to the possession of assets that could assist them on the road to college attainment.

### Chapter V

#### Conclusions and Recommendations

# Impetus for the Study

In his address to a joint session of Congress, (February 24, 2009),
President Barack Obama called for every American to pursue some form of
education beyond high school. It is an ambitious goal—some might say
impossible. Currently, only two of every five American adults have a two- or
four-year college degree. Millions of Americans struggle even to finish high
school, with one in four dropping out. And even a high school degree is no
guarantee a student is ready for college.

Particularly alarming are the college rates for low income and minority students. One recent study (Lumina, 2009) reported more than 90 percent of low-income teens said they planned to go to college-but only half actually enroll (Pope & Quaid, 2009).

Matriculation to college is prominent on the national as well as the State of Colorado agendas. The literature is rich with examples of college access and attainment studies focused on low SES populations, minority, and ethnic populations. Largely absent at the college access discussion table is one voice, the rural student. The data from *Exploring Rural Views* study indicated that it is possible to gather and analyze information from this population, and related subpopulations, that informs the schools and the government how to measure what assets students have, and what they need to access and attain college matriculation. A review of the literature indicates that the last thirty years have been spent in an effort to collect the voices of the students who were not naturally

accessing college directly from high school. While Gibbs, Sher, and Nachtigal highlighted the rural educational experience in the sixties, seventies, and eighties; the literature of the nineties and new century find little representation or discussion on the rural voice. It has been subjugated by the voices of the more prevalent and studied urban and minority populations. The assets of rural students were enumerated and documented in literature by Gibbs, Sher, and Nachtigal. These authors and authorities on Rurals mention assets of a rural education including:

Table 10. Assets of the Rurals

close-knit family

community ties

environmental awareness

educational responsibilities

job and chore experiences & responsibilities

civic connections

awareness of local issues

less fear

lower pupil to teacher ratios

After fifteen years in the classroom teaching literacy and literature, five years in action research as a College Counselor, and engagement with thousands of kids through the Colorado Western Slope College Fair, this researcher understands that each student deserves to have their aspirations for their own future articulated and heard. When kids are heard and listened to, they seem to start down the road of exploring post-secondary options. Once a dream is

articulated and shared, it takes on a new dimension. The dream has life and movement. In the student's mind the educational goalpost is suddenly adjusted from a K-12 mindset into a K-16 end zone. Kids like Joseph will move forward if they know the rules of the game for college access and attainment.

The survey data reports that 90 percent of our rural students are saying they want to go to college and the reality is that only 39 percent of any 9<sup>th</sup> grade class actually matriculates to college directly from high school; this low number of matriculated students creates a tension called the Colorado Paradox. The Governor wonders why it exists and so does this researcher. The Governor needs to be answered. Action needs to be taken across our state. The fact that only 12.3 percent of Colorado's population lives on the Western Slope diminishes our voice in this call to action but it does not diminish the resolve to get the assets of rural education working for us in this campaign to equip our kids for the 21<sup>st</sup> century workforce and society.

#### Conclusions

After examining the responses of 1,012 rural students, it is clear that all students want to go to college. With this desire unanimously voiced, it is evident and imperative that schools, educators, and communities work to meet that aspiration with action.

Many conclusions emerged as a result of work done on *Exploring Rural Views*. To begin with, college-counseled students, students in schools 2 & 8, who have a designated college counselor assigned to the task of college attainment, show more agreement in survey statements, as compared to non-counseled students. College-counseled groups show agreement by identifying more assets; assets such as "yes" to a designated college place, "yes" to being able to find

information about college, "yes" to understanding college entrance requirements and "yes" to having greater access to a counselor. Interestingly, both college-counseled students and non-college-counseled students answered almost unanimously in agreement that a college degree enhanced both their earning power and their social standing. All subgroups of Rurals, regardless of their college going assets, collectively said "yes" to the belief that college would increase their social standing and earning power. The literature shows that expectations coupled with desire are hugely important for getting college attainment results.

There are measurable and statistically significant differences between underclassmen, grades 9 & 10, and upperclassmen, grades 11 & 12. It is clear from their answers to the survey that there are developmental and awareness differences with regard to college attainment assets between the grades. For example, there is greater agreement among the upperclassmen regarding the understanding of the role of standardized tests and their beliefs regarding counselors' and teachers' college expectations for them, such that between these two groups expectations assets were more in evidence in the upperclassmen.

The Lumina Study sets a goal for 60 percent national college graduate rate by 2025. As a result of this dissertation, it is this researcher's belief that for Rurals, this goal is attainable, realistic, and can be accomplished with concerted, coordinated planning and effort. The goal of getting Rurals to access and attain college in ever increasing numbers is achievable as long as it is done incrementally and in harmony with the context of the school and civic community.

#### Recommendations

To attain college, Tierney and Corwin (2007), suggest that the best thing to do is to get started: do something, do anything. Even starting with small changes is forward movement toward creating a college going culture. Every high school from each corner of the western part of Colorado, regardless of budget or paid personnel, can do something to address the Colorado Paradox. It is a strong recommendation of *Exploring Rural Views* that each school get started in its own way on the path to solutions to the Colorado Paradox. It is possible for each and every school to take small steps to create a culture where college-going behaviors are fostered and encouraged. The recommendations of this researcher to address the Colorado Paradox are simple and straightforward:

- 1. Understand and embrace the culture of your school.
- 2. Find out what the students in your school want for their future.
- 3. Discover a place where those hopes and dreams can be articulated.
- 4. Find willing, creative, and capable people either in the school or the community to work with the students.
- 5. Engage the community as a partner in the future of the kids in your town.
- 6. Be possibility thinkers.
- 7. Know and appreciate your students.
- 8. Be honest about the college landscape and promote the philosophy and policy of fit and match for each student and the colleges they choose.
- 9. Invite College Representatives to your school.
- 10. Promote and attend college fairs in your region and state.

This being said, the following are suggestions and ideas for making things happen.

In the course of doing research for Exploring Rural Views, on a visit to

Reed College in Oregon, a great first step was suggested by a rural student who found her way to college in a most unlikely fashion. She told this researcher that once a week a volunteer came into her high school with catalogues, brochures, information and stories about colleges. She hung banners of the college she was going to talk about each week on the wall behind a portable table which was set up in a high traffic area. The young lady who was from rural Wisconsin visited the table each week and chatted about the school whose pennant was posted that week. The volunteer began leaving the pennants up after each visit and thereby eventually established her hallway space as the "go to college" place at this high school. One week the girl asked this volunteer where she had gone to college. Through this modest, inexpensive, volunteer program came the rural Wisconsin student's matriculation to the small, little known Reed College in Oregon.

The Steps to the College Steps.

The most important first step is a commitment by the high school and its administration to address the college access issue, and collect real data on what the present day situation for college attainment is in their district. An attempt to collect data for the 58 high schools in the present study through the Colorado Department of Education (CDE) was in vain. This researcher was told that no such reports were available or required as part of each school's accountability reports that are part of the NCLB legislation. How many students in the 9<sup>th</sup> grade say they want to go to college? Four years later, how many actually matriculate to a 2 year or a 4 year college?

A second place to start addressing the problem of low numbers of kids accessing college could be to create an Office of College Counseling and begin to with a modest college counseling program. Turn any unused space into the

designated place that promotes a college going culture and college seeking behaviors with simple items like free college posters or pennants from community members or alumnae of the high school. The college counseling office could be staffed with a combination of volunteers, local college educated citizens could make appearances, experts could give mini-workshops along with actual college representatives. This researcher's College Counseling Office was a repurposed hallway and little used elevator lobby.

## Summary

This study opened with a vignette about Joseph, a real boy with a real story and a grim prognosis for the future. Joseph is a classic example of the rural high school student who would have fallen into the Paradox Population without intervention. He did not know about the possibility of college, nor was there a family expectation that he should continue his education past his sixteenth birthday. Joseph puts a face on the Colorado Paradox. Joseph did find support and information through an involved college process, and he got a handle on his options. He is in college today and his story is one of success. The outcome for many other students in situations similar is not so positive.

As a researcher and practitioner, I designed the *Exploring Rural Views* study to determine the condition of other rural students, and to take an inventory of students' perceptions of themselves on the continuum of college attainment. The over-all purpose of this research was to examine the problem of low numbers of students accessing college immediately after high school, referred to throughout the study as the Colorado Paradox. How can it be that Colorado's population has a relatively high level of college graduates, while current numbers of high school graduates going on to college are critically low?

I identified the exciting opportunity to survey students from all over the Western Slope as I made it part of the registration process at the College Fair. It was an amazing opportunity to quantify the understandings and perceptions of students from rural Colorado regarding the whole college process.

The survey was administered and collected at the Colorado Western Slope College Fair (CWSCF) where more than 1,400 rural students gathered to pursue the question of what was available as an option post high school. The Fair serves as the invitation to all the students of the region to "jump into" the college process. The CWSCF is an annual event and the survey may have a place at future events as a further discovery tool to quantify the assets that rural high school students need to attain college in greater numbers. Even more succinct survey questions could render richer data and an even more precise account of assets and behaviors that can aid college attainment. The survey instrument for the Rurals who attended the College Fair was designed to be a catalyst to get the conversation started on the Western Slope in regard to college attainment. The researcher believes that these findings may be applicable to other Colorado populations including other rural areas and even inner city areas.

The survey analysis provided information that could initiate a departure from the traditional practices that have failed to encourage increasing matriculation to colleges. All parties who are concerned about the Colorado Paradox including members of the Blue Ribbon Commission, the CWSCF Committee, College in Colorado, the thirty-three attending high schools, the counselors, the parents, the Western Slope educators and the Governor of Colorado, want to know why our kids are not accessing college in higher numbers and what the schools and the citizens of Colorado can do about it?

Implications for Application and Further Research

The results of the CWSCF survey provide material to further explore and mine the data of the Western Slope Rural in greater depth. The findings of this study inform both the researchers and the practitioners as to the importance of recording, listening to and hearing the voices of the students regarding college access and attainment. Nothing can or will replace the unfiltered voice (structured surveys are NOT "unfiltered") and perceptions of the students in the context of their school, community, and region. Kids know what they want and what they believe. The survey provided these students with an opportunity to voice their perceptions of the college process, to understand their college-going assets, and to take an inventory of their place on the continuum of college attainment.

While this researcher had general anecdotal impressions, and direct experiential evidence, the voices of the rural Western Slope student had not previously been recorded and translated into quantifiable data. This CWSCF study was a beginning. The survey was one way to begin to assess and address the problem of low college attainment.

The necessary continuation of this research is the discovery of the other rural voices, particularly those of the Paradox Population, the high school students who do not demonstrate any college seeking behaviors and do not go on to college. What do they believe regarding the college process and a college degree? What college-going assets are possessed by the Paradox Population and what assets do they need? Do they have the same desire but not the information? Can they be encouraged to consider college as an option for them? The unanswered question of this study is how the "Left-Behind" Paradox Population would respond in a similar survey. This researcher predicts that a comparison of

the College-Counseled verses the true Paradox Population would render major disparities in assets for college attainment and an understanding of options. The unfinished research of this project is to seek out, record and quantify the data of this still unaddressed and unrecorded population.

What assets did the College-Counseled students in the survey possess and identify as their own? Does a designated College-Counselor make a difference to college attainment? If it is true that a college counselor makes a difference in college attainment, will it eventually be the expectation of the rural student to have such a person to aid in the attainment of college?

According to President Obama, access to the K-16 educational pipeline should be the goal of the entire nation, not just K-12. Is the lack of a designated college counseling person and designated college information place an impediment to the goal of expanded college attainment? Without a strategy to provide such a person and place in every school in America, can students articulate and identify the missing assets they need to acquire to make the leap immediately from high school into college? Recognizing that schools face serious financial constraints, are there ways to provide college services despite limited resources?

If the *Exploring Rural Voices*' survey was redesigned, it could have questions that would more completely identify the specific college-going tools or assets that kids have and do not have in order to navigate this windy and perilous road into college. What do they need and want? What do they believe they have now as assistance? Every teenager needs to be engaged in the process of answering the question, "What next?" for his/her post-secondary option. Are they on a clear college track? Do they see an immediate entry into the work force, or

do they have any plans or expectations at all? Are they open to options and possibilities? How are they to answer if the schools do not create and promote a college-going culture and curriculum, and confirm that options exist for every student?

It is not enough to say that a college degree will increase their chances for an economically sustainable future. Students need to know how to navigate the process that will help them matriculate to, and graduate from, college so the college degree effect can in fact take place in their lives or at least be considered a possibility. The questions asked of the Western Slope Rurals are an exciting first step toward finding solutions to the Colorado Paradox. This research is an important first step to the researcher, who is also a practitioner, and will help inform the field of college counseling and contribute to the body of literature on Rurals and college attainment to the benefit of many.

We can look forward to learning more from these students each fall as we continue to include a "College Knowledge" survey as part of the CWSCF program. We can get excellent information from the college-interested students and their parents, and that is good. We need to develop more ways to encourage and inform students who do not see a college track in their futures.

The reflections on this study have exposed some small but immediately applicable steps to changing a non-college going society into an increasingly higher college matriculating culture. For example:

- 1. Involve every student in the creation of a personal, class and school vision statement. What are the hoped for outcomes of the K-12 education?
- 2. Identify the stakeholders and establish partnerships among them to promote and foster a college-going culture. i.e. parents, students, college

- counseling, college representatives, community alumnae, civic leaders, school administrators, and teachers.
- 3. Share stories and anecdotes about college and the variety and range of choices.
- 4. Promote a philosophy that college choice is as individual as a well fitted shoe. It takes time to get the fit just right. It is a process of shopping, trying it on, and articulating a style that is just right for each person. No "one size fits all" philosophy works in shoe sales or in finding a college match.
- 5. Research needs to be on-going by practitioners who can put data to use, to inform, create and share a body of "best practices."
- 6. The public schools in America should bond together in creating a curriculum for college attainment and life-long learning that is introduced incrementally and embedded across the curriculum in order to excite the students for a K-16 curriculum. Students need not set their minds on high school graduation as the sole purpose and completion of their academic journey. Sights need to be set higher.

The survey information gained from the CWSCF is an excellent start, and it helps point the way in determining ways to assist students in their post-high school choices. There is some insight into the Colorado Paradox but more research work needs to be done. No less an authority than the President of the United States views expanded college attendance as a priority. We can do no less. There are answers, and there are ways to determine them. The results can be extremely positive for the students of the Western Slope and for the whole State of Colorado. Governor Ritter, are you listening?

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### Appendix A

The Western Slope College Fair Survey

- 1. Gender
- 2. Grade
- 3. I want to go to college.
- 4. There is a designated place at my school at which I can find college information.
- 5. The designated college information place is open and easily accessible.
- 6. The college information materials at my school are current.
- 7. College information materials at my school are helpful.
- 8. I have current and adequate information about college entrance requirements.
- 9. I have access to my counselor to talk about college.
- 10. My counselor believes that I am going to college.
- 11. My teachers believe that I am college bound.
- 12. My counselor also does my scheduling.
- 13. I know what needs to be included in a completed college application.
- 14. I know what is on my transcript and my cumulative GPA.
- 15. I know the role of standardized tests (ACT, SAT) in the college application process.
- 16. I have information about standardized testing.
- 17. I know where to find college resources on the internet.
- 18. I am generally aware of the cost of college.
- 19. I am generally aware of how to pay for college.
- 20. I know what scholarships are available in my area or through my school.
- 21. I believe that college will increase my earning power.
- 22. I believe that a college degree will give me significant social standing.
- 23. My mother completed high school.
- 24. My father completed high school.
- 25. Name of School.

### Appendix B

#### **Informed Consent Form**

# For CWSCF Survey

September 28, 2008

You are invited to participate in a study that will assess your college knowledge. In addition, this study is being conducted to fulfill the requirements of a Ph.D. Dissertation. The results of the study, conducted by Kathleen M. Klug, will be used to inform the writing of a Ph.D. dissertation. Kathleen M. Klug can be reached at ###-### #### or kklug@------, University of Denver, Denver, CO 80208, (phone number), (e-mail address).

Participation in this study should take about 5-7 minutes of your time. Participation will involve responding to 20 questions about college. Participation in this project is strictly voluntary. The risks associated with this project are minimal. If, however, you experience discomfort you may discontinue your participation at any time. We respect your right to choose not to answer any questions that may make you feel uncomfortable. Refusal to participate or withdrawal from participation will involve no penalty or loss of benefits to which you are otherwise entitled.

Your responses will be anonymous. This means that no one will be able to connect your identity with the information you give. Please do not write your name anywhere on the questionnaire. Your return of the questionnaire will signify your consent to participate in this project.

If you have any concerns or complaints about how you were treated during the survey/interview, please contact Susan Sadler, Chair, Institutional Review Board for the Protection of Human Subjects, at 303-871-3454, or Sylk Sotto-Santiago, Office of Research and Sponsored Programs at 303-871-4052 or write to either person c/o University of Denver, Office of Sponsored Programs, 2199 S. University Blvd., Denver, CO 80208-2121.

You may keep this page for your records.

Teaching and counseling over 2,000 high school students has taught me that college attainment is a process. As a rural high school college counselor, I have learned to observe, suggest, guide, and mentor students in every stage of this process. I have learned that in order to have a successful program where college attainment is the end result, a step by step approach needs to be designed and followed. Sensitivity to the culture in which the program is embedded is important for ultimate success, as well as engaging parents as partners in the process.

Any program, however modest, could be planned and realized in incremental stages. An Office of College Counseling should be charged with creating opportunities for high school students to know about and take advantage of the great variety of post-secondary options through college fairs, a program of college representatives on campus, guided financial aid and information sessions, summer workshops, parent communication workshops, newsletters, brown-bag informational sessions, and personal college consultation and counseling. Most of these events and experiences can be achieved by engaging people other than the teaching staff and overscheduled counselors to participate in the actual information-dissemination stages. The regular school counselor could serve as overseer to parent volunteers who would organize free materials from colleges and set up a place where students could come for information, resources, and knowledge about various colleges and college entrance requirements.

Picking a college today is different and far more difficult than it was twenty years ago. You are exposed to more college choices

few years ago. You will find that colleges are more diverse and more specialized; thus finding one that is right for you may seem more difficult. College is no longer a four-year escape from reality. Indeed the costs and the ramifications have made these years integral to the realization of your goals. Significantly, as college costs have risen, the need to make an informed choice is even more important. And with the average student able to gain admission to most colleges, the spotlight is shifted from, "Where can I get in?" to "Where will I fit in?"

(Antonoff, 1999, p. iv).

Even a volunteer staffed office can be coordinated to start on "the steps to the college steps." Generally, there is a desire in most communities to help because the residents want their children to be prepared for sustainable careers. College degrees earn more than twice what a simple high school diploma earns and the evidence is clear that you "earn what you learn".

The college application process and the college admission landscape have changed dramatically over the past few years. The Office of College Counseling must be an office committed to staying current on the latest trends and strategies that will aid the students in finding the right educational fit for their post-secondary years and gaining admission to the institutions of their choice. The College Counseling program or office's effectiveness can be evaluated immediately by several factors: the number of students and families using the services, the number of applications successfully submitted the acceptance rate

and range of colleges, and the satisfaction of the students and families with the process. The results of College Counseling are more than the acceptances that the students receive. The results can be evaluated as the students of any one class matriculate at a college and eventually graduate from one such college because it was the right academic, social, and geographic fit for them.

#### Parents

According to Hossler and Stage (1992), one of the most influential and important factors in college matriculation is the partnership between the student and their parents. Thus the creation of a parent and student curriculum is both a necessary and prudent component of any college counseling program. A perfect relationship for effective college counseling is a triangulation between the parent, the student and the office of college counseling which is eventually shifted to a triangulation of the student/parent, the office of college counseling, and the college admission office.

A message about and a mission statement for college counseling should be communicated to the parents. Parents should be invited into the process as partners with their student as they explore post secondary options that make sense for the student and the family. The family must be included as the price tag for college has increased to the point where going to college for any one member of the family has huge impacts on the other members. Another step toward college attainment is the presentation of a curriculum for parents as partners that outlines the components of college attainment. One way to establish a compelling and warm environment is to make it inclusive, fun, and rewarding for all parties. Here is a sample message for parents:

Welcome to the college admission process. This can be an exciting time in your life. It is a time when you can get closer to your child and be a sounding board and resource for him or her. The College Counselor is in this process to share college knowledge and to support your student as he/she looks ahead to post secondary options.

The College Counseling Office is dedicated to helping each student achieve admission to the college of his/her choice within a process of thoughtful consideration of options. The target goal is to find the right college match for each student and to assist the student in the process of application.

#### Mission

Services

The mission of the Parent Curriculum should be to engage parents as partners in their child's college admissions process and to communicate to parents both the scope and sequence of the components of the process of college admission.

The services recommended are based on five years of an effective (96 percent rate of graduates going directly to college) college counseling program in a public school. Services that are generated out of the College Counseling program or office are varied and include group meetings (usually with the entire class, i.e. Class of 2010) that include both students and parents and are intended to share general information and answer questions about the college search/application/selection process. Each group meeting should be focusing on one of the four areas of knowledge that needs to be imparted: Student Knowledge, College Knowledge, Application Knowledge, and Financial Knowledge. After the group meetings, there should be individual meetings which focus on the unique interests, desires, and needs of each student (and family) as

he/she traverses the college admissions process. Consider having two of these meetings in junior year and in senior year, the average individual meetings should be four. All of these services should be supported by a college counseling communications page that covers all the material for parents and students who have conflicts with scheduled meetings. The web site, e-mail and phone support supplement and reinforce group and individual meetings.

### The Curriculum for Success

Information about college access and attainment is best presented in short workshops usually scheduled in the early evening after sports and school and just before dinner. This is in order to facilitate working parents coming directly from work, and not having to go home and back out again. The idea is to engage parents with their students in the process. The Steps to the College Steps is a curriculum written by this researcher in a language that considers *prepositions* important; nothing is done to or for the student but rather with, beside, along with, and *through* the student. The higher the percentage of first generation potential college bound students in any class, the more imperative these workshops are to inform the parents who may not have any experience with college, or ideas about how to access this new world of college. Parents have the opportunity to learn along with their son or daughter and to be as informed as their students. They can be introduced to the vocabulary of college attainment and be empowered to develop opinions, advice, and expertise on the entire process. It is suggested that the information is presented in segments as to not overwhelm either the student or their parents. There are four basic sections of knowledge in *The Steps to the* College Steps curriculum. These concentrations can be presented in one-hour workshops divided by different knowledge bases.

The introductory workshops might highlight Student Knowledge. The mission statement for this part of the curriculum could be "Know thyself!" The goal for the student and his parent(s) would be to gain understanding and articulate the student's preferences, priorities, goals, and accomplishments as they relate to the college admission process and college choice. Student knowledge involves understanding the student in the broader context of his/her school and the U.S. cohort of high school students making application to college. Tools of the Student Knowledge seminar are the Parent/Student Surveys and could be designed to elicit information from both the student and parent that contributes to the asset inventory of the student, i.e. a question on the survey asks: what three attributes or characteristics do you (your child) possess? A critical part of this time with the students and parents is to talk about and distribute the official transcript of every student present. The transcript distribution is an important transitional step in the student knowledge section of the college attainment process because, like a rite of passage, it transfers the ownership and custody of the evidence of rigor, challenge, academic choices, and grades to the student, and it informs the parent as to the reality of the student's academic status. This information is vital. When the conversation about College Knowledge is introduced, and concepts like range of GPA's for admitted students are discussed, the transcript informs, and to a certain degree, the transcript drives part of the choice process. Standardized test scores are another key component to a student's understanding of their numeric profile. The numeric part of college attainment is not warm and neither fuzzy, nor much fun, but it is a part of the process that defines a certain aspect of the student, and it needs to be clearly understood. The next part of the Student Knowledge workshop is the fun part for the counselor; getting to know the student through the eyes of

the student and their parents is the magical part of counseling. Student hopes, dreams, and goals are written, articulated, graphed, cartooned, and communicated to the counselor, to the parent, and from the parent, and to and from the student. This triangulation of shared vision is what makes the process rewarding, individualized, and effective.

College Knowledge is the next workshop topic. It is focused on the student and his parent(s) learning about colleges; colleges that may provide a good fit and match for the student. College Knowledge is also about the current state of college admissions (it's not your daddy's college admission process anymore!). Important topics included in this section are: the college admissions landscape in 2008 and beyond, the role of fit and match in building the student's college list, increasing awareness of the vast number of colleges in the U.S., resource availability and information management. There is a brief review of the merit of using an Excel spreadsheet to track colleges of interest and an introduction of resources for college research (i.e. books, web sites, etc.).

Application Knowledge is the third phase of college attainment, the most exacting but tedious part of the process. The goal is for the student and his parent(s) to gain understanding of the "nuts and bolts" of the college application process. Topics covered in this section are: the Common Application, online applications, general application information, application deadlines, college application essays, and letters of recommendation. A great way to impart this information in a fun, lively, and effective manner is to conduct Summer Workshops that involve the entire class. The curriculum could be designed for two day summer workshops taking place during the summer, between the junior and senior years, and intended to jump-start the application process. During the

workshops, students draft application essays, begin work on the Common Application, complete a Student Activities Resume, complete interest inventories, write requests for letters of recommendation from teachers, and generally get involved with the application process and procedure.

The last concentration is Financial Aid Knowledge. This topic has become increasingly important and pressing as the sticker price for college has increased and the economic times have shifted. The goal in Financial Knowledge, for the student and his parent(s), would be to discuss and determine the importance of financial considerations as they pertained to college attendance and college choice. The topics that should be covered are college costs, and the priority of financial considerations, doing a cost analysis of attending certain colleges, the FAFSA( a financial profile required by public institutions), and the CSS Profile (another financial profile required by some private institutions). In addition, teaching the importance of "value" shopping for a college can be introduced as the workshops concentrate on making a fit and match for the student, the family, and their resources. The focus of the workshop should be on how to talk about money and the effects of college attainment on the rest of the family.

### **Process Components**

The analogy of a journey can be an effective communication image and device to serve as both an invitational and experiential metaphor to reach the parent and student audience. PowerPoint presentations use the language and icons relating to the road ahead, construction zones, hazards, road signs, curves, maps, compasses, warning lights and other journey vocabulary are familiar and well understood imagery. The bridge to both students and their parents can be easily

destroyed with roadside bombs of assumptions and badly constructed infrastructure. The assumption that one or both parties know the college admission landscape and game, the language that surrounds the process, and the requirements that each institution requires is a huge pot hole that is easy to hit. These assumptions can interrupt a smooth journey through the process. Such hazards can be avoided by communicating, consulting, coordinating, and collaborating with both parents and students and by covering all the topics while allowing them to navigate the way with a check list of strategies and components.

This researcher bases recommendations for navigating the road ahead on five years of conducting workshops, individual meetings, and navigating with over 500 students to college matriculation. Communication is the first navigational tool in any college counseling toolbox. Talk with parents about the spectrum of the college admission process and how to be involved and effective as a guide and resource. Meet the student, and his parent(s), to discuss the student's "driver's seat" position, and the student's responsibility to do the majority of the work, with advising and guidance from a supportive "passenger" or "back seat" position. Communications include posting college opportunities (like Engineering Day at CSU) and college representatives' visits with e-mail advisories to class distribution list, updating the web site to include relevant and timely college information, and maintaining a library of current publications and internet resources about colleges.

The second effective navigational tool is Consultation which involves meeting with every junior and his/her parents to begin the college conversation.

This conversation involves reviewing the role and importance of standardized tests, and a review of test taking opportunities and reporting. Another part of

consultation involves an early stage essay read through, and comments on the general direction of the essay, but not editing of the essay. The art of consultation also includes discussing college choices that seem like a fit for each student as well as suggesting others that may fit the student's profile.

The third navigational tool to aid students and parents on the journey is Coordination. This involves keeping all the pieces of the college attainment process organized, current and available. The Office of College Counseling should keep up-to-date lists of college admission officers and contact people for visits to colleges. Coordination involves reviewing the individual application process in on-going student meetings. The office needs to prepare materials and alert the students to the deadlines for necessary forms.

Collaboration is the final navigational tool in the College Counseling repertoire of strategies to aid students and their parents through the process. The concept of shared responsibilities and shared vision is developed. The student, parents, and college counselor share strategies and emphasize the power of working together for a common goal of fit and match with a student and a college.

# The Road Ahead Series

According to Samarge, 2002, and Hossler & Stage, 1992, the more engaged the younger population is in articulating their hopes and dreams for the future, the more likely they will engage in college going behavior and college attainment activities to achieve their aspirations. Over 90 percent of the CWSCF attendees stated that they believed, "going to college would improve both their earning power and their social status". In order to assist the middle and lower school students with opportunities to engage in college aspirations, a college

counseling office should offer some workshops and seminars that are age appropriate for this group. These events could be at the request of the parents and administration of the individual schools and basically lay out the road ahead that leads to college. In the pre high school years, at the request of parents of elementary and middle school students, the College Counseling Office could present an annual meeting to address the current state of college admissions, to answer questions, and dispel myths about the college admission process. This meeting usually takes place in the spring. At the start of high school, the College Counseling Office could present an annual meeting for early high school parents and students. Topics covered should include the current college admissions landscape, what should be done now to plan for your child's college education, course selection, the International Baccalaureate Programme, summer programs, the wide world of colleges, and a lively question and answer session to put people at ease when they begin to articulate their hopes and dreams for their, or their children's future.

# The Primary Client in College Counseling

Juniors in high school are the primary clients of the college counseling program at any school. Developmentally they are poised to move from the Predisposition stage to the Search and Choice stages of the college attainment process. One effective strategy for educating this group in the intricacies of the process is a group meeting. Each group meeting should have a specific emphasis, at the same time focusing on all four aspects of the parent/student curriculum. The topics covered in group meetings should address information and answer questions of concern to all students and parents involved in the college process. A November meeting is recommended to welcome parents and students to junior

year and the College Planning Process. This meeting could provide an overview of important aspects of the college planning process that occur in the junior year including college visits, building the college list, standardized testing, timeline, and the concepts and philosophy of College Counseling at the high school.

The next meeting might best be scheduled in February and could cover post college fair insights and experiences, College Knowledge, follow-up on representative visits, college landscape shifts and discoveries, a NACAC report to parents, Counselor philosophy reiterated, review students evaluation of colleges taken from fall semester break, trends, College Visit reports as well as the suggestions and code of parent behavior on college visits presented.

The last junior meeting could be scheduled in May to discuss the College Knowledge Report, go over the Resources display and demonstration, Naviance demonstration, discuss an overview of the process ahead, remind about summer workshops dates posted, inform the undergrads with graduate panel highlights, review upcoming registration for courses and rigor reminder, test dates and registration, and outline the student reporting responsibility. An overview of senior year and college choice time might be given. Suggestions could be presented on how to best use the summer months, possible enrichment opportunities, and authentic experiences vs. resume building.

After introducing the students and parents to all the elements of college counseling and the lexicon of college attainment, it is important, especially in a rural setting to shift from the group to the individual. Individual meetings with the student and parent(s) should focus on the unique interests, desires, and needs of the student in the college process. Early in the second semester of the junior year, the first formal meeting with the student, their parent and the College Counselor

should take place. Some students and their parents will enter the meeting with a preliminary list of colleges; other students and parents enter the meeting with little information about the college planning process. The goals for this initial individual college planning meeting are to exchange hopes, dreams, and perspectives on post secondary options, define roles and expectations and give an example grid and do some possibility thinking and idea exchange. Listening is necessary by all parties.

A second meeting is usually recommended in April/May of the junior year to make sure there is a student data check point, evaluate the range of the student in context of some suggested colleges, test assessment review and make a plan for future testing, recommend college visits and college evaluation aides, and make a composite of elements that are an ideal fit and match college for student, preparation and sign up for the summer college workshop, and examine checklist for application knowledge (i.e. get activity sheet facts together for resume) are all part of the second individual meeting.

#### Senior Year

An effective college counseling center moves seamlessly from junior to senior year and continues the information dissemination begun in the junior year. Again, each group meeting should have a specific emphasis, as well as touch on all four aspects of *The Steps to the College Steps* curriculum. September is an important time to welcome students and their parents to senior year and get the momentum rolling on college attainment. Take advantage of the student entering stage three the choice stage of college attainment.

Financial Aid Workshops could be held with an invited guest expert who speaks about costs, financial management, and aid for a 21<sup>st</sup> century college

education. By late September the college counseling office will identify any member of the senior class who is MIAs (Missing in Action). These seniors will have to play catch up and there needs to be an express strategy to get these kids up to speed or at a speed commensurate with their hopes and dreams for post secondary options. By early winter a second Financial Aid Workshop should be constructed that talks about dates, deadlines, forms, filings, and FAFSA. A member of the college community could come and conduct this workshop. This is in order to put parents at ease regarding possible concerns raised about "discussing their financial matters with the whole town". Financial Aid Workshops need to be thoughtfully constructed so everyone enters the conversation as a learner and an information seeker.

In early January, a proven effective strategy for enhancing a college-going culture is to sponsor a Graduate Panel on *Discoveries and Surprises in College* evening session that informs the current students about what newly graduated students say about their college experience. Students can take advantage of the Graduate Panel – each year, recent high school graduates are invited to speak with students and parents about their college discoveries and surprises. This year, in Aspen, the panel discussion was filmed by and aired on the local television station, Grassroots TV.

January also brings the FAFSA filing opportunity and another Financial Aid Workshop where an invited expert could walk parents through the FAFSA on-line and answers their questions. In April or May a transition to college meeting could be tailored to the seniors. One year, this researcher had the Director of Admission of the State University come and talk to the kids about what an incoming college class can expect and what is expected of them.

Minimally, the college acceptance list might be reviewed and tweaked, and financial packages should be reviewed. Throughout the year the web-site is updated with reminders of deadlines, opportunities for accepted student days and college representative visits announced.

### Communication Tools

A college counseling web site could be created and introduced to students of all grades, teachers, parents, and the community. The web site could provide an opportunity for the College Counseling Office to communicate with students, parents, and the community through posting of important college information and resource links and through targeted e-mail.

E-mail is used as an effective communication tool and distributes reminders and information to groups of students and parents (e.g. all juniors and parents) as well as to individual students. The College Counseling Office could send e-mails to seniors to communicate about missing paperwork (e.g. SSR Reports, etc.). Email is also increasingly used to communicate with and answer parents' questions. Every month at Aspen High School (AHS), the High School Newsletter is distributed to the entire high school community. News from the College Counseling Office could be included in each monthly edition of the high school newsletter. A school Profile provides information about the high school which is useful for distributing to colleges, parents, students, and members of the community. A profile could be mailed with every application to better inform the colleges of the student's high school, the programs, the grade distribution of the graduating class, and the demographics of the school. Also at AHS, the Front Hall College Board is a place where all upcoming events are posted and

invitations issued to specific groups. Representative visits are posted and announced well in advance of visit.

The Wall of College Acceptances could be a prominent tool used to communicate the success of each student in his/her college attainment process. Each student might have a congratulatory sign with their name and acceptance(s). This wall is ideal for demonstrating the variety and breadth of applications (one school had the variety 48 states and 5 international countries in their acceptances). Permission to post the good news must be granted (or not) by each student. On Graduation Day a full page newspaper insert on the Graduates and their plans could be published. This insert would advise the community of the choices made by the graduating class and serve to display the wonderful variety and individual matches that are apparent in the profile of each graduating class.

#### Students

The students of Colorado's Western Slope are fortunate to have a high quality college fair. This college fair, hosted by one high school, brings college representatives from 180 colleges to meet with students (and parents) from the Western Slope of Colorado. This is "possibility shopping" at its best! The fair along with a Speaker/Information Series that invites Deans of Admissions/College Presidents to visit one high school to speak with parents and students about destressing the college admissions process.

Transition to College is a new topic that covers both students' and parents' questions and concerns as high school seniors and their parents prepare for the transition from high school to college (for parents, empty or less full nest).

Any college counseling office needs to have benchmarks or indicators that progress is being made toward college attainment. Good data collection is a

practice that will inform and drive better exchange between programs and promote best practices. Management of data can be done with information systems like Naviance, an interactive process of managing the college search, application and choice process. A Student Survey collects perceptions and information about the process to inform the office to adjust or energize certain effective practices. Another important component of effective college counseling that both informs the counselor and engages the parent is a parent survey and letter. One of the counselor's primary responsibilities in a public school is to write the school recommendation for the student. The parent questionnaire is essential inside information for this task. Parent Letter completion shows willingness to assist in the work of supporting this process, and the anecdotes and stories are irreplaceable.

The Colorado Western Slope College Fair is a great chance for parents to familiarize themselves with colleges by "shopping" colleges and meeting the decision-makers in admissions. The fair is free. The week before the fair there could be "brown bag" lunch time prep periods (25 minutes) that explain who is coming and the opportunities each student can have at the fair. Siblings and parents should be encouraged to come to the fair, and students who parents are following the web, newspaper, bulletin boards, encourage their students to attend the Brown Bag Information Sessions.

There are many ways to create an effective college counseling program, and there are several keys to success: strategic use of web site, email, and phone, clearly articulating responsibilities of college counselors, students, and parents in the college admission process, being accessible and creating space to maximize both working and meeting spaces, and engaging a creative speaker series from the

community and the colleges. In conclusion, the best recommendations of this researcher to address the Colorado Paradox are always the most simple and straightforward:

- 1. Understand and embrace the culture of your school.
- 2. Find out what the students in your school want for their future.
- 3. Discover a place where those hopes and dreams can be articulated.
- 4. Find willing, creative, and capable people either in the school or the community to work with the students.
- 5. Engage the community as a partner in the future of the kids in your town.
- 6. Be possibility thinkers.
- 7. Know and appreciate your students.
- 8. Be honest about the college landscape and promote the policy of fit and match.
- 9. Invite College Representatives to your school.
- 10. Promote and attend college fairs in your region and state.