Evaluating the Student Retention Program of Oregon State University Using Vincent Tinto's Model of Student Departure

by

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ABSTRACT

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Title: Evaluating the Student Retention Program of Oregon State University Using Vincent Tinto's Model of Student Departure

Retention, the ability of an institution to retain students through degree completion, is a major concern for most colleges and universities. The current first to second year retention rate at Oregon State University (OSU) is about 80% (OUS 2008; 2011). Currently the OSU Strategic Plan includes the goal of increasing first to second year institutional retention to 85% by 2013 (OSU 2009). My research attempts an evaluation of the overall university retention effort. This analysis will not attempt to evaluate the effects of individual retention programs, but whether the combination of programs is theoretically sound using Vincent Tinto’s (1993) interactionalist model of student departure as a framework. The following questions guide the evaluation:

1. Are the campus wide OSU retention program efforts designed to address the interactional needs identified by Tinto (1993) as central to increasing retention?

2. What additional retention efforts does the Tinto (1993) model suggest to ensure the effectiveness of OSU retention efforts?

Findings indicate that the campus wide OSU retention program efforts are designed to address the interactional needs identified by Tinto (1993) as central to increasing retention. However, upon closer inspection it is clear that gaps exists in providing long-term interactions and addressing external factors. Policy recommendations include follow up contacts for students participating in general retention programs, addressing external obligations via providing help with child care, providing for further family involvement throughout the school year, and making at least one orientation activity mandatory for all new students.

Key words: Student Retention, Higher Education
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EVALUATING THE STUDENT RETENTION PROGRAM OF OREGON STATE UNIVERSITY USING VINCENT TINTO'S MODEL OF STUDENT DEPARTURE

Introduction

In the U.S. only 58% of entering first-time freshmen will graduate from the same college within six years (Veenstra 2009). In the Oregon University System 58.9% of freshmen beginning in fall of 2003 graduated within six years (Oregon University System [OUS] 2010). Wang (2011) reported that 60.2% of freshmen beginning in 2003 graduated within six years. The retention of students, the ability of an institution to retain students through degree completion, is a major concern for most colleges and universities. The current first to second year retention rate at Oregon State University is about 80% (OUS 2008; 2011). Currently the OSU Strategic Plan includes the goal of increasing first to second year institutional retention to 85% by 2013 (OSU 2009). The departure of students from colleges and universities has multiple consequences for the student, the college or university, and the nation. To ameliorate student departure colleges and universities develop retention programs. The success of these programs depends upon their ability to impact those factors that are related to the student departure decision. This paper evaluates the campus wide OSU retention program using Vincent Tinto’s (1993) longitudinal model of student departure.

The Consequences of Student Departure

The consequences of student departure affect the institution, individual, and society. The consequences for the institution include both financial and social losses. Individual consequences are complex and include loss of human capital, economic consequences, and social mobility. The
loss to the nation is mainly the loss of civic involvement and economic losses from decreased tax revenues.

The consequences for the institution take on two forms: financial costs and the loss of human capital. Colleges and universities suffer costs of non-persistence via direct costs and indirect costs (Schuh 2005). Direct costs include student recruitment expenditures, financial aid, and lost tuition income. Recruitment and financial aid are institutional investments in the students. The monies spent on these endeavors are wasted when a student departs. The Primary Research Group (2008) reported that public U.S. colleges spent an average of $41,357 on retention consultation services in 2007-08. OSU spends approximately $2,047,612 annually on campus-wide retention efforts (J. Jorgenson, pers. comm., November, 2011). The loss of the tuition that results from student departure reduces the resources of the university as a whole. Colleges and universities are also required to submit retention figures to federal and state governments (Hagedorn 2005). In some cases the funding levels received depend upon the college or university retaining “a significant number of its students as proof of academic success” (Hagedorn 2005, 94). Retention is also related to university rankings and reputation. Veenstra (2009) argues that college campuses suffer a social loss. The lost student may have brought a diversity of ideas and attributes to the campus; therefore, “it can be argued that the university has a social responsibility to help students be successful” (Veenstra 2009, 21). With the increasing diversity of the student population and an emphasis for diversity on campuses as a desirable trait this may be an important cost for universities.

The consequences to the student include lower self-confidence and self-esteem as well as a “likely economic impact” (Stillman 2009, 76). The U.S. Bureau of labor Statistics (2011a; 2011b) reports that in 2003 the weekly salary for a person with some college or an associate’s
degree was $731 and the associated average unemployment rate was 7.6%” compared to a $1,047 weekly salary and an average unemployment rate of 4.4% for a person with a bachelor’s degree. Education is considered the highest contributor to social mobility (Berger and Lyon 2005). This is especially true in the current technology-based economy where a high school diploma is no longer sufficient to attain financial stability and social mobility.

Lower college retention rates have ramifications for all countries, including the United States, given higher education’s role in social mobility. Decreased individual earnings lead to decreased federal and state tax revenues. In addition “an educated populace is more likely to be involved in civic duties, like voting” (Ishitani and DesJardins 2002, 3). Considering the widespread impact, it is imperative that colleges and universities make use of retention research and conduct institutional studies of retention.

Evaluating OSU’s Retention Program

My research attempts an evaluation of the overall university retention effort. This analysis will not attempt to evaluate the effects of individual retention programs, but whether the combination of programs is theoretically sound using Vincent Tinto’s (1993) interactional model of student departure as a framework. Tinto’s model is the basis for most retention formulas (Braxton, Hirschy, and McClendon 2004; Seidman 2005) and provides a framework by which to evaluate an overall retention program. Due to the multiple causes of student departure, it is imperative that colleges and universities have multiple interventions to address them. It is also important that colleges coordinate their efforts in collaborative ways to ensure a campus-wide approach to student retention. However, most evaluations focus on the efforts and impacts of only one intervention as opposed to the combined institutional effort. It is therefore possible that
there are unidentified gaps in the overall effort that can only be identified via a broader evaluation. This work advances the study of student retention by attempting this broader evaluation, examining the university efforts as a whole versus evaluating individual retention programs. The following questions will guide the evaluation:

3. Are the campus wide OSU retention program efforts designed to address the interactional needs identified by Tinto (1993) as central to increasing retention?

4. What additional retention efforts does the Tinto (1993) model suggest to ensure the effectiveness of OSU retention efforts?

To perform the evaluation program design data were gathered for each campus-wide retention program. The data were examined using a content analysis methodology (Robson 2002). Tinto’s (1993) interactional model of student departure provided the codes used to analyze each program individually, and then the summary data were examined to provide insight on the overall OSU campus-wide retention effort. Finally, policy recommendations are provided based on Tinto’s (1993) model.
The study of student retention has occupied educational scholars and practitioners for more than 70 years (Braxton et al. 2004). However, colleges and universities were not truly concerned with retention for much of their history. Early colleges and universities were elite institutions with small numbers of students, many of whom did not graduate. It was not until the early 1900s, when industrialization led to an increased demand for higher education, that colleges and universities began examining student enrollment and attrition; however interest faded due to the great depression and lower enrollments. The modern study of retention began after World War II. The G.I. Bill, the National Defense Education Act of 1958, and the Higher Education Act of 1965 all increased access to higher education for new groups of students. The increase in enrollment brought with it a more diverse student body and a shift toward degree seeking students. A college education became more important than high school degrees “became less sufficient for future economic and social attainment” (Berger and Lyon 2005, 15). These developments led scholars, practitioners and policy makers to begin exploring the issues of student retention.

By the 1970’s, retention had become a major focus in higher education, and sociological models of retention were developed. William Spade’s model explored retention as a product of student’s interaction with the college environment (Berger and Lyon 2005). Vincent Tinto (1993) expanded upon Spade in his interactional model of student departure. Kamens showed how “institutions with greater size and complexity, coupled with a superior capacity to place graduates in prestigious social and occupational roles” (Kamens as represented in Berger and Lyon 2005, 19) had higher student retention rates. Astin concluded that involvement in academic endeavors and campus life was the key to student retention (Astin as represented in Berger and

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Lyon 2005). The theories developed in the 1970s are still being utilized by scholars and practitioners of student retention especially those developed by Vincent Tinto (Berger and Lyon 2005).

A rapid expansion of the study of retention occurred in the 1980s, as did the beginning of enrollment management. Enrollment management encompasses the systematic activities by which educational institutions control student enrollment. This includes student recruitment, financial aid, student support services, curriculum development and other academic areas that are believed to affect the enrollment and persistence of college students. (Berger and Lyon 2005; Hossler, Ziskin and Gross 2009) Colleges and universities have implemented enrollment management strategies to varying degrees and success. Retention research also expanded with the diversity of students that began enrolling in colleges and universities. Studies focused on specific demographic indicators such as “racial and ethnic backgrounds, first-generation college students, and non-traditionally aged students” (Berger and Lyon 2005, 23).

From 1990 to the present, there has been continued interest in retention studies. Emphasis has been placed on financial need, academics, student diversity and distance learning as elements of retention. Student retention is “fully entrenched as a major policy issue and a well-established professional realm” (Berger and Lyon 2005, 25) in the twenty-first century.

Defining and Measuring Student Retention

Retention is defined as “the ability of a particular college or university to successfully graduate the students that initially enroll at the institution” (Berger and Lyon 2005, 3). However, the various enrollment patterns of students combined with different measurement levels creates a more complex picture. Discussions of student retention are often framed around student
persistence, graduation rates, dropouts, and stopouts in addition to retention. This section explores the definition and measurement of student retention.

When focusing on the decisions of students to continue or to exit higher education, studies refer to student persistence; when focusing on institutional efforts and organizational effects the term retention is used (Mortenson 2005). The actual numbers used are the same; a ratio in which a particular cohort, or defined group of students, is observed and measurements are taken of “their progress and persistence behaviors” (Mortenson 2005, 32). The denominator is the initial enrollment pattern of the cohort set at a specific time (e.g. fall of the freshman year); the numerator is the enrollment pattern of the same cohort at any later time (e.g. fall of the second year). Graduation rates refer to the number of individuals in the initial cohort who actually complete a degree at a college or university. The current retention measurements used by the National Center for Education Statistics for the Integrated Postsecondary Education Data System (IPEDS), and most colleges and universities, are based on enrollment from the fall of the first year to the fall of the next year (Hagedorn 2005, 95). This is because the largest amount of student attrition is believed to occur during the first year. It is also during this time that retention programs are believed to have the most effect (Seidman 2005; Veenstra 2009); however, recent research is also beginning to focus on retention past the first year (Ishitani and DesJardins 2002; Nora, Barlow, and Crisp 2005).

There are two formulas used by IPEDS, one for less than four year colleges and one for four year colleges. The only difference is that for less than four year colleges, students finishing a program such as short-term certificates are counted as retained. The formulas are given by Hagedorn (2005, 97) as follows:

\[
\text{IDPS RR}_{\text{Less than 4-year}} = \frac{(\text{Number of students reenrolled in the following fall} + \text{Number of Students who have completed a program})}{(\text{Number of students in the fall cohort} - \text{Exclusions})} \times 100
\]
Most retention studies use this measurement when building their models of student retention (Kuh, Kinzie, Cruce, Shoup, and Gonyea 2006; Stillman 2009). Note that this is only a measure of one year and does not account for students who may leave “after the first year but before a degree is earned” (Hagedorn 2005, 95).

Retention is also measured on several levels. Hagedorn (2005) identifies four types of retention; institutional retention, system retention, retention within a major or discipline, and retention within the course. Each level has its own uses and measurement issues. Institutional retention is the “proportion of students who remain enrolled at the same institution from year to year” (Hagedorn 2005, 98) and is the most straightforward. System retention includes those students who remain within a university system versus a particular institution. System retention accounts for the phenomenon of student swirling defined as student enrollment in multiple institutions from matriculation to graduation (Mortenson 2005). For example a student may originally enroll at OSU then leave and later graduate from the University of Oregon, this student would not be counted as retained at OSU but would be retained within the Oregon University System. System retention rates tend to be higher than institutional rates because of student swirling. Some states have coordinating boards that track students who transfer within the state system; however, those students who transfer to institutions not governed by the coordinating board are generally not tracked. Currently only one national tracking organization exists, the National Student Loan Clearinghouse (Hagedorn 2005). It is a non-profit organization and member institutions are required to provide student enrollment data. However, not all higher education institutions are members. Retention within a major or discipline takes a more limited
scope. A student may be retained institutionally but be lost to a department or college within the larger institution. This may be of special interest in departments with difficulty recruiting and retaining students, especially women and people of color. Retention within the course is the smallest level of measurement and is useful for determining “which courses are not being completed even though the student may be retained at the university” (Hagedorn 2005, 99). This is another institutional level tool and is very hard to measure. For example “[t]he [Transfer and Retention of Urban Community College Students] TRUCCS Project documented large variation in course completion depending on the time of measurement” (Hagedorn 2005, 99). Using the first day of class as a marker results in higher course completion than waiting until after the add/drop period.

The term dropout is usually used as the opposite of retention and provides a dichotomous measure. However Astin states that the term is “imperfectly defined” (Astin quoted in Hagedorn 2005, 91). Students are considered to have dropped-out if they enrolled with the goal of completing a bachelor degree but did not. However, students who may be defined as a drop-out at one institution may in fact graduate at another and be retained in the system:

According to the National Center for Education Statistics 23.2 percent of all of the 1995-96 first time beginning students in a four year institution transferred to another institution by the end of the sixth year. This movement resulted in the six year retention rate of 55.3 percent in the first institution; when subsequent institutions were considered the retention rate rose to 62.7 percent. (Hagedorn 2005, 91)

Also students may leave college for a time only to reenroll at either the same or a different institution and achieve a degree later (stopping-out). The definition of the term dropout is further complicated by the negative connotations attached to the label. Not all students who leave college see themselves as failures and in fact view their college experience as positive. Bean argued that retention measures should consider students’ individual educational goals
(Bean as represented in Hagedorn 2005). A student would only be considered a dropout if they left college without achieving their educational goals.

There are a few key problems with the current definitions and measurement of retention. First the measurements do not include all students. “The formulas generally exclude part-time students, returning students, transfers and students who prematurely leave after the second year of enrollment” (Hagedorn 2005, 101). Also, by using a one year fall to fall measurement colleges are able to pad the numbers by enrolling those most likely to succeed (those with high ACT/SAT scores) in the fall while accepting less desirable students in later terms via rolling applications and acceptance. The formulas also do not catch students who are not seeking a degree but accruing credits or those in remedial courses.

Retention has proven difficult to measure and current measurement formulas only tell part of the tale. As important as the retention rate is, it does not explain why students leave college. We must also examine the factors of and the theories that influence student retention.

Factors of Student Retention

The factors affecting retention are many and complex, making it difficult to get a clear picture of student departure. Retention research tends to focus on the socioeconomic, demographic, pre-college, academic, and social factors of student retention (Bean 2005; Kuh, Kinzie, Cruce, Shoup, and Gonyea 2006; Lotokowski, Robbins and Noeth 2004; Nora et al. 2005; Stillman 2009; Tinto 1993). Bean and Metzner posit that the departure process is “influenced by one or more of the following variables: academic performance, intent to leave, previous performance and educational goals, and environmental variables” (Bean and Metzer as represented in Braxton and Hirschy 2005, 65). The most important variable will differ for
various subgroups of students. Tinto argues that the individual characteristics of students, such as family background and pre-college school experience, upon entering college “affects their initial commitment to the institution and to the goal of college graduation” (Braxton and Hirschy 2005, 67). This initial commitment in turn affects the student’s academic and social integration and engagement. The higher the levels of academic and social integration and engagement, the more likely a student is to be retained. Due to this complexity it is impossible for any one study or university to address all factors and issues of student retention.

Demographics

The most frequently examined demographic factors are gender, race, first generation status, and residency. The information on the effects of gender is contradictory. Some studies have found that persistence varies by gender with women being more likely to persist (Nora et al. 2005). Nora et al (2005) also draw on studies from DuBrock (1999) and Smith (1995) who found overall that female students are more likely to persist. However, other studies have concluded that gender has very little effect on year-to-year persistence, even though female students have a higher six year degree completion rate (e.g. Stillman 2009).

Race has been the focus of several studies on student retention (Carter 2006; Seidman 2007). Minority students are found to have a higher probability of leaving college than their non-minority counterparts (Carter 2006). Stillman (2009, 80) notes that many minority groups “place a higher value on orientation and social integration than do the white population.” This may lead to minority students feeling marginalized in the campus community. Pre-enrollment characteristics also play a part in minority student retention. Minority students tend to come from
lower socioeconomic backgrounds, have lower standardized test scores, and poor college preparation compared with non-minority students (Stillman 2009).

First generation college students are one of the least likely groups to persist in college (Thayer 2001). A student is considered first generation if neither parent completed a bachelor’s degree. Choy (2001), found that first-generation students (23%) were about twice as likely as those whose parents had bachelor’s degrees (10%) to leave after the first year. It is difficult for colleges to both attract and retain these students due to the many barriers these students face. They most likely come from a low-income family, have poor academic preparation and most likely have little knowledge of the college experience (e.g. application process, academic expectations, funding opportunities) (Thayer 2001; Choy 2001). These barriers create a situation where first-generation college students may have a difficult time being integrated into the college community and may feel marginalized.

Residence has also been shown to affect first to second year retention. In-state students were found to have a higher retention rate than out of state students in a University of Colorado Study in 1995 (Stillman 2009). Over the period of 1989 to 1995, in-state students have an 85.6% retention rate and 2.83 GPA average compared to 81.6% retention for out-of-state and a 2.77 average GPA (Stillman 2009).

Pre-college Characteristics

The two traditional pre-college predictors of student success and retention are standardized test scores and high school grade point average (HSGPA). Student HSGPA has been found to be a significant predictor of student persistence (Nora et al. 2005; Lotkowski et al. 2004; Stillman 2009). The effect of HSGPA on retention was found to be moderate by
Lotkowski et al. (2004). However, Stillman (2009) claims it is one of the best predictors for first year retention. Lotkowski et al. (2004) also found ACT scores to have a moderate effect, while Nora et al. (2005) report that students with higher SAT scores have lower risk of attrition.

Socioeconomic Factors

Many studies have concentrated on the effects of socioeconomic status on retention. Student family income has several impacts on enrollment and retention. First, students from low income backgrounds are often not as academically prepared for college as those with higher family incomes; also they are less likely to persist in general (Schuh 2005). Family income also determines the student’s eligibility for financial aid (Schuh 2005). The amount of time students must work to pay for tuition, living expenses or to augment financial aid and scholarships also has an impact on retention. Lotkowski, et al. (2004) found that the more hours a student must work, the less likely they are to be both academically successful and to persist in higher education.

Financial Aid

The effects of student aid on persistence are often found to be positively correlated, that is, the more aid a student receives the more likely they are to persist. Desjardins, Ahlburg and McCall (2002) argue that it is important not only to examine the amount of aid but also the effects of the types of aid received. Although many studies differentiate between gift aid (monies that do not require repayment such as scholarships and grants) and loan aid, they often do not differentiate between need-based or merit-based aid or the types of loans provided and accepted. In this vein Desjardins, et al. (2002) conducted a longitudinal study of financial aid packaging
and persistence over seven years at the University of Minnesota, Minneapolis campus. Using a
hazard model they found that variations in all types of financial aid except grants were associated
with higher levels of persistence. Varying the level of grant aid was not a statistically significant
predictor of persistence, which is surprising since it is the “second largest source of federal
financial aid for college (Desjardins, et al. 2002, 669). Scholarships had the largest impact from
year to year. “Work/study had the next largest impact in the first two years of college, supporting
Tinto's argument that work/study helps integrate students into the institution (Desjardins, et al.
2002, 669). In later years campus employment has a more significant effect. Loans were found to
have less effect than earnings, but this may be because most of the loans in the study were
unsubsidized. The study found that financial aid has more than monetary value to students:

Thus we find that the ranking of the empirical impacts of different forms of financial aid
does not correspond closely to a ranking based on our rough estimates of the “cash
equivalent” of the different types of aid. We conclude that different types of aid represent
more than their apparent dollar value. They have psychosocial value in addition to cash
value and this characteristic seems to be important to students and affects retention.
(Desjardins, et al. 2002, 669)

Desjardins, et al. (2002) also examined the effects of having a financial aid package versus no
financial aid package and found that having a financial aid package is positively correlated with
persistence. This is not a surprising finding; however their work on the temporal effects of
different types of aid can inform institutions about how to create financial aid policies to increase
enrollment and persistence at different stages of matriculation.

The amount of educational expenses covered by aid is an important factor in student
retention. Not all students are eligible for or receive enough aid to cover all educational
expenses; what is left is termed unmet need. Bresciani and Carson (2002) examine the effects of
unmet need, gift aid, and student loans on undergraduate fall to fall persistence. The hypothesis
is that “the amount of unmet need must be met in order for the student to re-enroll” (Bresciani
and Carson 2002, 106). They also examined the impact of percentage of gift aid. The receipt of gift aid was found to be significant in predicting re-enrollment particularly for students who had no unmet need and received gift aid. Student loans were not found to be significant; there seems to be a possible connection between the amount of loan and likelihood to re-enroll as students with a loan greater than 75% persisted at a lower rate than those who had lower percentages of loan aid. Bresciani and Carson (2002) caution drawing conclusions due to the non-significance of the variable in the regression analysis.

The correlation between financial aid and student persistence can also be examined from the institution’s point of view. To date this type of research has only been done sporadically (Schuh 2000). Schuh (2000) evaluated the effects of non-need based scholarships on freshmen college choice and persistence at a Midwestern university. The findings show that the larger the aid amount the more likely the student is to persist. Schuh (2000) then went on to perform a cost-benefit analysis of providing non-need based scholarships. The revenue brought in by the use of the scholarships at various levels was compared to the expense per credit hour of the scholarships. The results showed that although larger scholarships increased retention they drastically reduced the economic benefit while the smaller loan amounts actually provided some economic benefit to the university. Schuh’s (2000) recommendations depended on the goals of the university; for example if the university wants to maintain a cohort of highly desirable students then larger awards may be an answer. However, if the goal is to increase net revenue for the university then smaller awards would be more appropriate. Schuh (2000) ultimately concludes that financial aid alone cannot solve the persistence puzzle.

The research on student loans has focused primarily on issues of access and inequality. For example Mumper and Vander Ark (1991) in their evaluation of the Stafford Loan Program
found that the loans were actually a deterrent to many low-income and minority individuals in seeking higher education because they see it as a very risky investment. He also emphasizes the barrier that repayment of large loans creates for low-income students.

Academic Factors

Students’ academic performance and integration into the academic campus community have been linked to student retention. Students’ first year cumulative GPA has been found to be a significant predictor of retention. Ishitani and Desjardins (2002) found that the higher a student’s first year cumulative GPA, the less likely they were to drop out. “[S]tudents with GPAs between 2.00 and 2.99 have 67 percent higher attrition rates than students with GPAs above 3.00” (Ishitani and Desjardins 2002, 18).

One way to increase the student integration into the academic community is through orientation programs (Seidman 2005; Veenstra 2009). Most orientation programs discussed in the literature include pre-term seminars or a seminar class during the first term of attendance; both have shown promise in increasing student retention (Hossler et al. 2009). No literature was found pertaining to discipline specific orientation courses, although there have been studies on remedial or developmental courses. Students who participate in developmental math programs, which act as a bridge for students who are not academically prepared for traditional mathematics college courses, have significantly reduced risks of leaving college (Lesik 2006).

Student Engagement

In line with Tinto (1993) there have been several studies examining student integration into the campus community. One research and evaluation tool has become the standard for this
type of research, the National Survey of Student Engagement (NSSE). Student engagement refers to the amount of time, energy, and effort students spend on their academic and related pursuits at colleges and universities. According to the NSSE (2011) website:

Student engagement represents two critical features of collegiate quality. The first is the amount of time and effort students put into their studies and other educationally purposeful activities. The second is how the institution deploys its resources and organizes the curriculum and other learning opportunities to get students to participate in activities that decades of research studies show are linked to student learning.

Student engagement as measured by the NSSE has been linked to student retention and success. Kuh, et al (2006, 1) found that engagement had “modest positive effects” on first year grades and persistence. Adding engagement measures, such as time spent on educationally relevant activities, added 13% explanatory power to their model of academic success measured by first year GPA. In terms of student retention, they found that students who were involved in educationally purposeful activities one standard deviation above the average had a probability of .91 of returning, whereas those involved at one standard deviation below had a probability of .85. Similar results were found in a 2007 study by Kuh, Cruce, Shoup, Kinzie and Gonyea with a different data set.

Other studies have examined the effects of factors on student engagement. For example, Willcoxson and Wynder (2010) investigated student intentions in relation to engagement in the form of finding classes interesting. They found that “students who have chosen a career-specific major are less likely to leave university before completing a degree” in their study of business majors at an Australian university (Willcoxon and Wydner 2010, 186). However, there were no significant correlations between intentions and interest in class. These findings are similar to those of Kreysa (2006) who found that having a declared major increased the likelihood of student persistence by 22 percent.
Increasing Student Retention

The literature suggests that the best way to increase student retention is through early interventions. The focus has been on the freshmen year experience and on enrollment management. If the institution can get incoming freshmen to engage in the campus community and provide appropriate support services to at-risk students the chance of student persistence increases. The burden of increasing student retention mostly falls upon the individual college or institution. Veenstra (2009) argues that to increase retention rates it is important to create effective student success programs. She notes that the cost of setting up and maintaining such a program is less that the cost of student attrition to the institution.

Seidman (2005) lays out a retention formula including early identification, early intervention, and continuous intervention. Early intervention is identifying students who may be unsuccessful in college. “Identification can take place at the time of application, through the thorough examination of academic records… [and] scores received on standardized tests” (Seidman 2005, 297). Early intervention is having academic and personal intervention programs available as early as possible in the student’s college career, possibly even while they are still in high school. Intensive intervention is providing programs that are strong enough to produce change and continuous intervention is students’ participation in the programs until change occurs. “In sum, the aim of the Seidman formula is to identify a student in need of assistance academically and/or socially as early as possible, assess student needs, prescribe interventions, and monitor, assess and adjust interventions where necessary” (Seidman 2005, 299).

Another way that colleges and universities can increase retention rates is through enrollment management. Most colleges and universities can be selective about the applicants they accept. Enrollment management is a way of controlling the student body composition.
Universities could, and many private universities do, only accept students with a high likelihood of persisting to graduation. However, with the increased importance of equal access to education and the mandate to land grant and state universities to increase enrollment of low-income and minority students other avenues such as those mentioned above must be put into place (Dennis 1998).

Although the onus is on the individual college or university to create and implement student support programs, often the financial backing exists in the form of federal and state grants. The most noteworthy student support network, TRiO, is a series of grant based programs funded under title IV of the Higher Education Act:

The Federal TRIO Programs (TRIO) are Federal outreach and student services programs designed to identify and provide services for individuals from disadvantaged backgrounds. TRIO includes seven programs targeted to serve and assist low-income individuals, first-generation college students, and individuals with disabilities to progress through the academic pipeline from middle school to post baccalaureate programs. (US Department of Education 2009)

So although universities must compete for the funds, much of the financial responsibility falls on the individual state (e.g. Oregon) and the federal government. This is also true in terms of Federal Financial Aid. Pell Grants, and Stafford Student Loans are subsidized by the federal government and studies consistently report increased enrollment as well as increased persistence when loans are available (e.g. Desjardins, et al. 2002). So the institutional cost of many support programs are partially offset by federal and state government funding.

Vincent Tinto’s Interactionalist Model of Individual Student Departure from Institutions of Higher Education

The model of individual student departure developed by Vincent Tinto (1993) has paradigmatic status in the field of student retention (Braxton, et al. 2004). Most retention
formulas are based, at least in part, on this model (Braxton, et al. 2004; Seidman 2005). The model is sociological in nature and based upon Van Gennep’s (1960) anthropological study of rites of passage and Durkheim’s (1951) study of suicide. Tinto (1993) maps out the longitudinal process of departure for individual students within an institution of higher education and provides institutional policy makers with a “guide for institutional actions to retain more students until degree completion” (Tinto 1993, 113). This model provides the framework for this project evaluating OSU’s current retention program as defined by this study.

The Roots of Individual Departure

Central to the understanding of Tinto’s (1993) model are what he terms the roots of individual student departure. These roots are common themes pertaining to the disposition of individuals entering higher education [individual], “the character of their interactional experience within the institution following entry [institutional], and to the external forces which sometimes influence their behavior within the institution [external]” (Tinto 1993, 37). These themes have explanatory power within Tinto’s (1993) model providing guidance on those interactions that are linked to student departure.

On the individual level, Tinto (1993, 38) describes intention and commitment as “important personal dispositions with which individuals” enter higher education. Both intention and commitment are influenced by pre-college characteristics and have a large impact on the way students perceive the interactions they experience post entry at an institution. Intentions represent the specific educational goals of an individual; including both the student’s educational goals and the student’s desire to achieve them at a particular institution. In general, Tinto (1993, 38) notes that “the higher the level of one’s educational or occupational goals, the greater the
likelihood of college completion” especially when those goals are part of a wider career goal. However, intentions are not always clear when a student enters a college or university, and it is expected incoming freshmen will likely alter their educational and career goals multiple times prior to graduation. Tinto (1993, 41) notes that indecision in major or career goals in the freshmen year are unlikely to lead to student attrition, but that “unresolved intentions over an extended period can lead to departure both from the institution and from the higher education enterprise as a whole.” It is also important to remember that students sometimes enter a college or university with the intention of transferring to another institution prior to degree completion. Some students do not originally get into the school of their choice and plan to reapply, are able to meet their educational goals without graduating, or taking courses to increase their skill level in a certain area that pertains to their current employment.

For Tinto (1993, 41) commitments represent a student’s “willingness to work toward the attainment of his/her goals” and are important to persistence in higher education. The importance of commitments is supported by recent NSSE (2011) research and is included as one of the two critical features of colligate quality measured by the NSSE instrument. There are two major forms of commitments, goal and institutional. Goal commitment refers to an individual’s “commitment to personal educational and occupational goals … [and] … specifies a willingness to work toward the attainment of those goals” (Tinto 1993, 43). Institutional commitment refers to an individual’s commitment to the school in which he/she is enrolled and specifies the degree to which one is willing to work to attain his/her goals within that institution. For example, a student may be predisposed to institutional commitment due to family tradition (alumni parents), or by the perceived effects from a particular institution on career goals and may stay despite difficulty. Students who have little institutional commitment but have high goal commitment
may transfer to another institution in such cases. Tinto (1993, 43) suggests that “[i]n either case, but especially the latter, the greater one’s commitments, the greater the likelihood of institutional persistence.” However, Tinto also notes that the quality of student effort is not merely an attribute of the individual and is at least somewhat “reflective of social and academic context” (Tinto 1993, 42). That is, as commitments are subject to change and are influenced, like intentions, by the interactions that individuals experience after entry to college.

At the institutional level, Tinto (1993) identifies four forms of student experience related to student departure: adjustment, difficulty, incongruence, and isolation. Each describes an important “interactional outcome arising from individual experiences within the institution” (Tinto 1993, 37). These outcomes also mirror the pre-college characteristics of the individual and the impact of external forces on the student’s college participation. These experiential outcomes support the explanatory power of Tinto’s model, that the experiences after college entry particularly those that are due to interactions with other members of the college community (student, faculty, staff) are “centrally related to further continuance in that institution” (Tinto 1993, 116).

Entrance into college requires that individuals adjust to a new social and intellectual environment. For Tinto (1993, 46) adjustment as a root of individual departure has two distinct sources: “it may result from the inability of individuals to separate themselves from past forms of association” or it may result from issues adjusting to the “new and often more challenging social and intellectual demands which college imposes upon students.” This includes issues of separation from family and acquiring the social skills necessary to navigate college life. For most traditional students the first year of college is often their first time away from home and their first step into the adult world. Most early departures (within the first six to eight weeks) are due
to adjustment and are temporary with students re-entering later or transfers to institutions closer to home. Intentions and commitments also play a role in adjustment. Students with high levels of intentions and commitments may persist even under difficult circumstances, while students with low intentions and commitments may depart at the first sign of difficulty.

Persistence in college is also related to academic performance and the need to meet minimum standards. Tinto uses the term difficulty to describe this issue. As mentioned in the literature review, academic performance is a factor of student retention with emphasis on first year grade point average (Ishitani and Desjardins 2002) and the availability of remedial classes (Lesik 2006). Also related are issues of social inequality with minority and first generation students often being less prepared for the rigors of college academics. However, Tinto (1993) notes that though academic difficulty may lead to academic dismissals, it is often not the sole cause of voluntary student departure. The lack of integration into the college community, both academically and socially, is more likely to lead to student departure than academic difficulty. Students who have satisfying interactions within the institution are more likely to persist than those who do not.

Lack of integration for Tinto arises from two sources: incongruence and isolation. Incongruence refers to “the mismatch or lack of fit between the needs, interests, and preferences of the individual and those of the institution” (Tinto 1993, 50). The important thing to note is that incongruence is the result of an individual’s “perceptions of not fitting into and/or being at odds with the social and intellectual fabric of institutional life” (Tinto 1993, 50) based upon their interactions with members of the institutional community. This can occur in both the academic and social systems of the university and can be expressed formally, though institutional policy, and informally via interactions in or out of the classroom with faculty, staff and students.
Academic incongruence can also occur when there is a mismatch between the “abilities, skills, and interests of the student and the demands placed upon that person by the academic system” (Tinto 1993, 51). As mentioned in the literature academic performance is a significant factor for student retention. However, Tinto notes that students may leave either because they are struggling academically or because they find the curriculum not challenging enough. Students may also find a lack of fit in their personal values or intellectual leanings and particularly in interactions with faculty. This may be especially true of a student’s perception of their peers and within residential settings. It is common, especially in dorm/roommate situations, for there to be some incongruence. However Tinto (1993, 53) notes that “when that perception leads the person to perceive him/herself as being substantially at odds with the dominant culture of the institution and /or with significant groups of faculty and student peers” departure may occur; although it will most likely result in a transfer rather than a total withdrawal from higher education.

The final institutional level of student departure is isolation. Tinto (1993, 55) defines isolation as the “absence of sufficient contact between the individual and other members of the social and academic communities of the college.” Of particular importance are interactions with faculty both in and outside of the classroom. Remoteness of faculty has been cited as instrumental in some student departure decisions (Tinto 1993). Although some isolation is expected during the transition and adjustment to college, it is only temporary for most students and most likely to occur early in the first year. Students who have difficulty making new friends or who respond to new situations by withdrawing tend to have greater difficulty as do those who find college a foreign social landscape. This is particularly true of minority students in largely white institutions. If isolation becomes lasting, it can be debilitating and often leads to early departure.
In addition to interactions within the institution, forces external to the institution also often influence student persistence. Tinto (1993, 62) notes that for students who have weak commitments “external communities may make the difference between persistence and departure.” However, these communities can be supportive of the student’s goals or oppose them. What often hinders persistence are “responsibilities individuals have in regard to associations with groups or communities external to the college” (Tinto 1993, 38). The most obvious examples are that of employment or family. In the case of employment, full-time work has a higher association with departure than part-time work. The employer’s view of higher education also plays a part, supportive employers are more likely to work with class schedules and allow some flexibility. Family obligations tend to affect female students more than male students (Tinto 1993).

Tinto (1993) also places finances, the ability to fund one’s education, as an external force on persistence. Finances affect persistence by determining what kind of institution a student can afford to attend, how long they can attend, and whether they have to seek employment while attending. However, Tinto (1993, 67) notes that citing financial problems as a reason for departure reflects students’ “weighing of benefits as well as of costs and as such mirrors the nature of the student’s academic and social experiences on campus.” Students who have rewarding college experiences and who see their education tied to future success will “continue to bear great financial burdens and accept considerable short term debt in order to complete a degree program” (Tinto 1993, 66). However, financial aid to low-income students can and does often increase persistence. Current literature supports effects of financial aid on persistence (e.g. DesJardins, et al. 2002).
These roots of institutional departure provide a series of causes influencing student departure. Tinto’s (1993, 83) model provides the “longitudinal process of interactions which gives rise to those causes and leads overtime to student departure.” The model shows how the factors of intention, commitment, adjustment, difficulty, congruence, isolation, obligations, finances, and learning all come to effect student departure from institutions of higher education.

Tinto’s Model of Student Departure

Tinto (1993) views an institution of higher education as another form of human community and the persistence or departure of a student within an institution depends upon their level of integration into the campus community. Drawing on insights from Van Gennep (1960) and Durkheim (1951), Tinto models how a student’s interactions within the structure of the institutional community influences the decision to persist or depart.

Tinto’s (1993) model (see Figure 1, p 27) is not a systems model of departure or intended to account for behavior after institutional departure. The focus of the model is explaining why and how some individuals depart their institution prior to degree completion focusing on the outcomes of interactions individuals have with other members of the campus community (students, staff, and faculty).
Figure 1: Tinto’s Model of Student Departure

(Adapted from: Tinto 1993, 114)
The explanatory power of this model as well as the usefulness is increased by an understanding of the roots of student departure. It is the roots (intentions, commitments, adjustment, difficulty, incongruence, isolation, obligations, and finances) that provide insight into the interactions that matter and the outcomes to be sought. An effective university wide retention program design would focus on encouraging institutional interactions in both the academic and social systems among college community members that address the roots of student departure in a way that creates positive (integrative) interactions. Tinto’s model provides the framework for evaluating OSU’s campus wide retention effort, in an attempt to answer the following questions:

1. Are the campus wide OSU retention program efforts designed to address the interactional needs identified by Tinto (1993) as central to increasing retention?

2. What additional retention efforts does the Tinto (1993) model suggest to ensure the effectiveness of OSU retention efforts?
Methodology

This work attempts an evaluation of the overall OSU retention effort. This analysis will not attempt to evaluate the effects of individual retention programs, but whether the combination of programs is theoretically sound using Vincent Tinto’s (1993) interactional model of student departure as a framework. Tinto’s model is the basis for most retention formulas (Braxton, et al. 2004; Seidman 2005) and provides a framework by which to evaluate an overall retention program. Due to the multiple causes of student departure, colleges and universities need multiple interventions to address them. It is also important that colleges coordinate their efforts in collaborative ways to ensure a campus-wide approach to student retention. However, most evaluations focus on the efforts and impact of only one intervention as opposed to the combined institutional effort. It is therefore possible that there are unidentified gaps in the overall effort that can only be identified via a broad theoretical evaluation. It is this broad evaluation that this effort attempts. Specifically the following questions will be addressed:

1. Are the campus wide OSU retention program efforts designed to address the interactional needs identified by Tinto (1993) as central to increasing retention?

2. What additional retention efforts does the Tinto (1993) model suggest to ensure the effectiveness of OSU retention efforts?

Data

There are many campus activities and programs that influence student retention from student housing and dining to campus clubs and student activities. However, increasing retention is not the main focus of most of these activities. For the purpose of this analysis only the programs that are purposefully designed and intended to increase student retention and that are
campus-wide are examined. In this way the evaluation is limited to those programs administered to the general student population. That is not to say that college or department level programs do not have impact or are not valuable; however they tend to focus narrowly and attrition from a college or department is not necessarily analogous to university attrition as students often change majors and move from one college/department to another without withdrawing from the university.

Information about OSU’s retention programs was gathered from multiple sources both primary (unstructured interviews) and secondary (program websites, brochures, grants and program descriptions). This mixture of sources is appropriate for an evaluation effort (Robson 2002). The OSU Associate Provost of Academic Success and Engagement was interviewed to identify the programs purposefully designed and intended to increase campus-wide student retention; the programs are listed in Figure 2. The campus-wide retention programs fall into two categories: general retention, meaning that they are available to all students, and targeted programs, meaning that students must meet some type of eligibility requirement to receive services.

Figure 2: OSU’s Campus-Wide Retention Programs

<table>
<thead>
<tr>
<th>General programs</th>
<th>Targeted programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>START</td>
<td>University Exploratory Studies Program (UESP)</td>
</tr>
<tr>
<td>CONNECT Week</td>
<td>Supplemental Instruction</td>
</tr>
<tr>
<td>U-Engage</td>
<td>September Scholars Bridge Program</td>
</tr>
<tr>
<td>Academic Coaching</td>
<td>Educational Opportunities Program (EOP)</td>
</tr>
<tr>
<td>Writing Center</td>
<td>College Assistance Migrant Program (CAMP)</td>
</tr>
<tr>
<td></td>
<td>Student Support Services (SSS)</td>
</tr>
<tr>
<td></td>
<td>The Office of Financial Aid and Scholarships</td>
</tr>
</tbody>
</table>

Initial information on each program was then gathered from the individual program’s website. In addition an official program description was requested from each program providing information on program design and purpose to address the research questions. Email
correspondence and unstructured interviews with OSU administrators and individual program personnel provided additional information and clarification. The exact sources for each program are provided in Appendix A.

**Analysis**

The data were examined using a content analysis methodology (Robson 2002). The interactions that Tinto’s (1993) model, informed by the roots of student departure, identify as central to increasing retention were operationalized (Robson 2002) and used to create an evaluation code book (Table 1). The retention program documents, websites, and unstructured interviews were used to identify program activities (events, workshops, and services) as well as how the program provided for longitudinal interactions (when services were available and how often the program contacted students) as the recording units (Robson 2002). The identified program activities were coded using the operationalized interactions from Tinto’s (1993) model, informed by the roots of student departure, and were recorded in Table 2, the Retention Program Coding Summary (see page 66) (Robson 2002) The codes *institutional academic system* and *institutional social system* are the combined counts of all other academic and social codes (e.g. academic adjustment, social isolation). The longitudinal codes are dichotomous, and do not represent counts.
<table>
<thead>
<tr>
<th>Primary</th>
<th>Secondary</th>
<th>Definition</th>
<th>Examples of activities coded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Intentions</td>
<td></td>
<td>The educational goals of the individual</td>
<td>goal setting</td>
</tr>
<tr>
<td>Individual Commitments</td>
<td></td>
<td>The degree to which an individual is willing to work.</td>
<td>program contracts/agreements</td>
</tr>
<tr>
<td>Goals</td>
<td></td>
<td>The degree to which an individual is willing to work to meet their</td>
<td>program contracts/agreements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>educational and occupational goals</td>
<td></td>
</tr>
<tr>
<td>Institution</td>
<td></td>
<td>The degree to which an individual is willing to work to meet their</td>
<td>program contracts/agreements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>goals at the institution in which they are enrolled.</td>
<td></td>
</tr>
<tr>
<td>Institutional Academic System</td>
<td></td>
<td>The aspect of the university that concerns itself, with the formal</td>
<td>Tutoring, developmental classes, advising, coaching</td>
</tr>
<tr>
<td></td>
<td></td>
<td>education of students.</td>
<td></td>
</tr>
<tr>
<td>Institutional Social System</td>
<td></td>
<td>The aspect of the university that is made up of recurring sets of</td>
<td>Social events, building community</td>
</tr>
<tr>
<td></td>
<td></td>
<td>interactions among students, faculty, and staff that take place outside</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>the formal academic domain of the college.</td>
<td></td>
</tr>
<tr>
<td>Adjustment</td>
<td></td>
<td>The need to separate from past forms of association and adjust to the</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>new and often more challenging domains of college</td>
<td></td>
</tr>
<tr>
<td>Academic</td>
<td></td>
<td>Learning the formal policies and informal expectations regarding</td>
<td>Orientation, explain policy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>educational activates</td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td></td>
<td>Learning to navigate the formal and informal aspects of day to day</td>
<td>Living in the dorms,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>college life.</td>
<td></td>
</tr>
<tr>
<td>Academic Difficulty</td>
<td></td>
<td>The student’s effort and ability to meet the standards set formally by</td>
<td>Tutoring, skill building, developmental classes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the college in terms of GPA and the effort and ability to meet faculty</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>standards of class preparation and participation.</td>
<td></td>
</tr>
<tr>
<td>Incongruence</td>
<td></td>
<td>Lack of institutional fit</td>
<td>academic assessment, academic advising</td>
</tr>
<tr>
<td>Academic</td>
<td></td>
<td>Student skill mismatches with coursework requirements, can also</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>arise from ideological difference with class materials or faculty views.</td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td></td>
<td>Perceived differences in values and/or intellectual orientation with the</td>
<td>cement their identity, build community</td>
</tr>
<tr>
<td></td>
<td></td>
<td>larger campus community.</td>
<td></td>
</tr>
<tr>
<td>Isolation</td>
<td></td>
<td>A lack of interaction between the individual and other members of the</td>
<td>cohort bonding experiences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>campus community.</td>
<td></td>
</tr>
<tr>
<td>Academic</td>
<td></td>
<td>A lack of interaction with faculty/staff/students or a lack of</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>participation (not attending class, labs, etc.)</td>
<td>cohort bonding experiences</td>
</tr>
<tr>
<td>Social</td>
<td></td>
<td>A lack of interaction with other students in formal or informal social</td>
<td>Social events</td>
</tr>
<tr>
<td></td>
<td></td>
<td>settings. An inability to find a place to fit in.</td>
<td></td>
</tr>
</tbody>
</table>
Table 1: Continued

<table>
<thead>
<tr>
<th>External Factors</th>
<th>Those things that Tinto (1993) places outside the institution in his model.</th>
<th>Health, family involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obligations</td>
<td>These are activities that pull the student away from participation in the campus community: family, work, past associations.</td>
<td></td>
</tr>
<tr>
<td>Finances</td>
<td>The student’s ability to finance his/her education</td>
<td>Financial literacy, financial assistance</td>
</tr>
<tr>
<td>Longitudinal Interactions</td>
<td>The longitudinal nature of retention efforts measured as attempted or required contact.</td>
<td></td>
</tr>
<tr>
<td>One time</td>
<td>The program offers/attempt/requires none or limited contact with the student outside of a specific event.</td>
<td>None or limited follow up mentioned.</td>
</tr>
<tr>
<td>First Year</td>
<td>The program offers/attempt/requires multiple contacts concentrating in the freshmen year.</td>
<td>Services through the first year</td>
</tr>
<tr>
<td>Limited</td>
<td>The program offers/attempt/requires contacts only within the context of a specific activity.</td>
<td></td>
</tr>
<tr>
<td>College Career</td>
<td>The program offers/attempt/requires contacts throughout the college career.</td>
<td>Services during their time at OSU</td>
</tr>
</tbody>
</table>
Findings

As mentioned earlier this work attempts an evaluation of the overall university retention effort. In order to do this each retention program must be coded and that data summarized to determine if the combination of programs is theoretically sound using Vincent Tinto’s (1993) interactional model of student departure as a framework. This section will provide coded descriptions of the individual OSU retention programs, and then use the summary of those data to address the research questions:

1. Are the campus wide OSU retention program efforts designed to address the interactional needs identified by Tinto (1993) as central to increasing retention?

2. What additional retention efforts does the Tinto (1993) model suggest to ensure the effectiveness of OSU retention efforts?

OSU’s Retention Program

The campus wide retention programs fall into two categories: general retention and targeted programs. START, CONNECT Week, U-Engage, Academic Coaching, and the Writing Center are general retention programs, meaning that they are available to all students. Supplemental Instruction, The September Scholars Bridge Program, Educational Opportunities Program, the College Assistance Migrant Program, Student Support Services and The Office of Financial Aid and Scholarships are targeted programs, meaning that students must meet some type of eligibility requirement to receive services. Coded descriptions of each program follow and a summary of the coding for all programs is in Table 2, page 67.
START

START is administered by the OSU New Student Programs and Family Outreach (NSPFO) office and is the “new student orientation, advising, and registration program” (New Student Programs and Family Outreach [NSPFO] 2011d) for undergraduate students admitted each fall. START is the first of the three steps in the “three step commitment to orienting new students to the OSU community” (NSPFO 2011c). There are START sessions offered throughout the summer for first year students and transfer students. Students unable to attend an on-campus START session also have the option of attending START @ CONNECT (NSPFO 2011d) which provides an abbreviated program. There is also the option of START on the ROAD (NSPFO 2011e) for first year and transfer students in Alaska, California or Hawaii, which also provides an abbreviated program. START attendance is not mandatory for all new students (K. Winter, pers. com., November 2011).

The START program design address students’ interactional needs in terms of academic and social adjustment, academic incongruence, social isolation, external obligations, and finances. The START program focuses on the academic and social aspects of the university (see Table 2, page 67).

Four START activities were coded for academic adjustment:

• Student Session providing information on the baccalaureate core requirements during the Student Session and Small Group Sessions (K. Winter, pers. com., November, 2011).

• Academic Presentations provide information on the major requirements and expectations (K. Winter, pers. com., November, 2011).
• Sessions for specific program participants such as the Honors College or Student Support Services provide additional information for those students are also listed in the START schedule (NSPFO 2011h).

• Workshops on Technology at OSU provide an “overview of technology resources available to OSU students” (NSPFO 2011h).

Two START activities were coded for social adjustment:

• Housing and co-op tours allows students to see where they will be living and get an idea of what day-to-day life will be like.

• Fraternity and Sorority workshops where students are introduced to the idea of being involved in the Greek system (NSPFO 2011h).

Two START activities were coded for academic incongruence:

• Math placement testing is required of all new first-year students and of any transfer students who have not completed a college level math course (Math 111, 112) as stated on the “Transfer Student Math Placement Test Instructions” webpage (NSPFO 2011f).

• Academic advising ensures that students register for the classes they need.

One START activity was coded for social incongruence:

• Social incongruence is addressed via the information fair, where the Program Director notes students can begin to feel like “I belong here” or “I can see myself doing this” (K. Winter, pers. com., November 2011).

One START activity was coded for social isolation:

• Social isolation is addressed via the Start Recreation Night where students have a chance to “get to know each other and build social connections” (K. Winter, pers. com., November 2011).
One START activity was coded for external obligations:

- Two special sessions provide parents with information sessions on-campus resources. Parents also attend presentations with their students.

Four START activities were coded for finances:

- The workshop on affordable text books for both parents and students (NSPFO 2011h).
- Parent session on financial aid and scholarships (NSPFO 2011h).
- Financial Aid/Student Accounts Q&A Session for both parents and students (NSPFO 2011h).
- “Investing in your education” workshop address financial concerns for both parents and students (NSPFO 2011h).

START does not provide for long term interactions with students. The Program Director noted that students receive one follow up phone call from the New Student Program and Family Outreach office to answer any questions they may have (K. Winters, pers. com., November, 2011). There is no further contact related to START. This is coded as a one-time contact.

CONNECT Week

CONNECT Week is administered by the OSU New Student Programs and Family Outreach (NSPFO) office and is “the second step in the three step orientation commitment to new students” (NSPFO 2011a). The “CONNECT Week” (NSPFO 2011c) website states that “[d]uring CONNECT Week new students transition into OSU’s community.” According to the “NSPFO Orientation, retention and family program descriptions (NSPFO 2011c) state that over 150 activities are planned, most of them are organized by other departments and scheduled with NSPFO, as noted by the NSPFO Director (K. Winter pers. com. November, 2011). There are five
activities that are coordinated by NSPFO: The NEW Student Walk, New Student Picnic, Introduction to the Corvallis Community, Late Night at Fred Meyer, and the Day of Service (K. Winter, pers. com., November, 2011). The full schedule for CONNECT is only listed on-line. Participation in CONNECT Week activities is not mandatory for students in general, according to the NSPFO Director (K. Winter, pers. com., November, 2011).

The CONNECT Week program design address students’ interactional needs in terms of academic difficulty, academic and social adjustment, social incongruence, as well as academic and social isolation. CONNECT Week happens over the course of one week but does not extend beyond that, so does not provide long-term interactions with students. The CONNECT week program focuses on the academic and social aspects of the university. Not all events coded are listed due to the amount of separate events, examples are provided. (See Table 2, page 67)

Thirty-four CONNECT Week activities were coded for academic adjustment:

- The New Student Walk and Convocation were described by the NSFPO Program Director as a way to officially bring students into the Campus community and provide them with an academic challenge and introduce them to OSU traditions (K. Winter, pers. com., November, 2011).
- New Student Picnic, where students can socialize and participate in a carnival made up of campus organization information booths. The NSFPO Program Director noted that students enjoy the carnival and that many campus organizations participate (K. Winter, pers. com., November, 2011).

Fourteen CONNECT Week activities were coded for social adjustment:

- Workshops and open houses available, such as Home away from Home (NSPFO 2011b) where students can learn about multicultural centers on campus and how to get involved.
• The Day of Service also addresses social adjustment by getting students involved in the wider Corvallis community (NSPFO 2011b).

Two CONNECT Week activities were coded for academic difficulty:

• Pre-math review sessions help students review material (NSPFO 2011b).

Six CONNECT Week activities were coded for social incongruence:

• Connecting to OSU for Non-Traditional Students (NSPFO 2011b).
• Hawai’i & Polynesian Students and Families Aloha Reception (NSPFO 2011b).
• Pride Center Slumber Party (NSPFO 2011b).

Six CONNECT Week activities were coded for academic isolation:

• Biology New Student Luncheon, where students have the chance to meet faculty and staff (NSPFO 2011b).
• CONNECT to Health Professions, where students have the chance to meet faculty and staff (NSPFO 2011b).

Twenty-nine CONNECT Week activities were coded for Social isolation:

• New Student Picnic, where students can socialize and participate in a carnival made up of campus organization information booths (K. Winter, pers. com., November, 2011).
• Late Night at Fred Meyer was mentioned by the NSPFO Director a successful social event, and has received feedback that the best part about the event was meeting other students (K. Winter, pers. com., November, 2011).

CONNECT does not provide for long term longitudinal interactions with or among students, therefore it is coded as one-time.
U-Engage

U-Engage is a series of 2 credit courses administered by New Student Programs & Family Outreach “designed to help students investigate an academic area of interest, as well as learn more about OSU” (NSPFO 2011c). It is “the third step in the three step orientation commitment to new students” (NSPFO 2011c). The courses vary in topic by year and are listed on the U-Engage website. The NSFPO Director clarified that faculty choose the topics for the courses they teach each year, however all the classes have a set of shared learning outcomes (K.Winter, pers. com. November, 2011). These learning outcomes were provided by the U-Engage coordinator (R. Sterner, pers. com. November, 2011) via email:

- Engage in inquiry (including developing a research question; collecting, analyzing and synthesizing information, understanding citations, etc.);
- Reflect on education activities to make meaning of learning experiences, learn collaboratively in a classroom setting;
- Practice critical analysis and consider diverse perspectives, identify campus resources;
- And understand the shape and purpose of an OSU education.

U-Engage courses are only offered fall term and are not mandatory for students. Due to the changing course availability the current available classes have been coded for interactional impact, as well as the overall learning objectives.

U-Engage program goals and design address students’ interactional needs in terms of individual intentions, academic adjustment, finances, and provides for longitudinal interactions during the first year. The U-Engage program focuses on the academic aspect of the university (see Table 2, page 67).

Two fall 2011 U-Engage courses were coded for individual intentions:

- “I like to read and write and talk, but will that get me a job?” where the focus is on “a pathway to a major and a career” (NSPFO 2011g).
- “What’s the Key to Success” (NSPFO 2011b) with a focus on identifying interests.
One U-Engage activity was coded for academic adjustment:

- U-Engage provides 36 courses. NSPFO program description states that “This class focuses on what it means to be a college student at a research university” (NSPFO 2011c). The shared learning outcomes state that a student completing a U-Engage course should be able to “Identify Campus Resources” and “Understand the shape and purpose of an OSU Education” (R. Sterner, pers. com. November, 2011). In addition the course “The Study of you: Investigating the Contemporary College Student” (NSPFO 2011b) focuses on learning “about the transition to college and avenues for involvement, technology and social media use among faculty and students, and intellectual, moral, and identity development within the context” of the OSU campus community (NSPFO 2011b).

One fall 2011 U-Engage course was coded for finances:

- “Money Matters” ((NSPFO 2011b) is designed to “develop your knowledge about money matters and build skills to navigate through your OSU finances and your personal finances” (NSPFO 2011b).

U-Engage provides for interactions during the fall term of the first year only. U-Engage is coded as first year.

Academic Coaching

The Academic Coaching (AC) program is administered by the Academic Success Center (Academic Success Center 2011b), and “provides one-on-one peer support for students wanting assistance with time management and study strategies” (Academic Success Center 2011b). The coaching is provided by undergraduate and graduate students who have undergone “intensive
initial training, are required to attend weekly staff meetings” (Academic Success Center 2011b). Academic Coaching is available to all students at any time in their college career.

The Academic Coaching program goals and design address students’ interactional needs in terms of individual intentions, academic adjustment, and provides opportunities for longitudinal interactions throughout the college career. The Academic Coaching program focuses on the academic system of the university (see Table 2, page 67).

Two Academic Coaching activities were coded for individual intentions:

- Academic coaches help students with goal setting. One goal of the program is that “[s]tudents will be able to articulate the best practices of goal setting and apply to their academic and life planning” (Academic Success Center 2011b).
- Academic coaches assist students in “defining and developing study strategies and action plans to ensure academic success” (Academic Success Center 2011b).

Three Academic Coaching activities were coded for academic adjustment:

- Academic coaches assist students in understanding OSU policies. One of the responsibilities of the coaches as outlined in the “Academic Coaching for Academic Success” brochure is that coaches are to “[i]nterpret and provide rationale for institutional policies and requirements” (Academic Success Center 2011a).
- Academic coaches inform students of “campus resources and special services available to them” (Academic Success Center 2011a).
- It is a goal for the students receiving academic coaching to “develop the capacity to seek appropriate assistance from advisors, faculty, and other campus professionals” (Academic Success Center 2011b).
Three Academic Coaching activities were coded for academic difficulty:

- Academic coaches assist students in developing time management, note taking, reading, test preparation, test taking, and project planning skills “and [m]aximize study effectiveness” (Academic Success Center 2011b).

- Academic Coaches can help monitor student progress toward educational goals (Academic Success Center 2011b)

- Study Tips are also available on the Academic Success Center website (Academic Success Center 2011e).

The Academic Coaching program provides the opportunity for longitudinal interactions throughout the college career as services are available to students at all levels. The “students are welcome to schedule weekly appointments if they feel they will benefit from frequent check-ins and goal setting” (Academic Success Center 2011b), but it is up to the students to request this (M. Dempsey, pers. com., November, 2011).

University Exploratory Studies Program

The University Exploratory Studies Program (UESP) program is administered by the Academic Success Center (University Exploratory Studies Program [UESP] 2011e), and provides an academic home for students who have not chosen an academic major. The program provides academic support, similar to an academic department, to “assure that … students are making satisfactory progress toward a degree” by focusing on the baccalaureate core (UESP 2011e). The number of students constantly fluctuates, but during fall UESP has approximately 1000 students (UESP 2011e).
UESP program goals and design address students’ interactional needs regarding individual intentions, academic and social adjustment, academic isolation, and provides for longitudinal interactions. The UESP program focuses on the academic system of the university (see Table 2, page 67).

Three UESP activities were coded for individual intentions:

- UESP advisors provide “assistance with choosing a major” (UESP 2011d).
- UESP advisors assist students with “assessing career goals in relation to interests, skills and values” (Academic Success Center 2011i).
- UESP students are encouraged to take ALS 114: Career Decision Making, a two credit course “designed to help student gain a better understanding of their interests, values, and abilities as they relate to the world of work” (UESP 2011b).

Two UESP activities were coded for academic adjustment:

- Academic coaches help students understand OSU’s academic policies and regulations (UESP 2011e; Academic Success Center 2011i).
- Academic coaches assist students with “web registration and scheduling issues” (UESP 2011d).

One UESP activity was coded for social adjustment:

- The UESP (2011e) General Info states that advisors may discuss “life skills and life issues” during sessions.

Two UESP activities were coded for academic isolation:

- UESP provides an academic home for students with no major, providing them with a contact point (UESP 2011a).
• Program students meet with a UESP advisor once per term while participating in the program (UESP 2011c).

UESP provides for long-term longitudinal interactions by requiring program students to meet with an UESP advisor once per term while participating in the program (UESP 2011c). While there is no limit on the amount of time a student can spend in UESP, “the average number of terms it takes a student to decide [a major] is three terms” (UESP 2011a) so it is coded as first year.

Supplemental Instruction

The Supplemental Instruction (SI) program is administered by the Academic Success Center (Academic Success Center 2011h). Supplemental Instruction provides small group tutoring to students taking high-risk courses at OSU. The supported courses include: Art 101, Math 111, Math 112, Math 241, Math 245, Math 251, Math 252, Math 254, Psychology 201, and Zoology 331. The availability varies by term. (Academic Success Center 2011h) The Supplemental Instruction program expects to serve approximately 1,500 students in 2010-2011 (Academic Success Center 2011c).

The Supplemental Instruction program design address students’ interactional needs regarding academic difficulty and academic isolation. Supplemental Instruction provides for longitudinal interactions over the course of one term. The Supplemental Instruction program focuses on the academic system of the university (see Table 2, page 67).
Two Supplemental Instruction activities were coded for academic difficulty:

- Study tables with trained tutors who help students “develop study strategies for note taking, graphic organization, questioning techniques, vocabulary acquisition, and test preparation” while reviewing course material (Academic Success Center 2011h).

- Three hour midterm review sessions that assist students in preparing for midterms by reviewing course material (Academic Success Center 2011d).

One Supplemental Instruction activity was coded for Academic Isolation:

- The study tables, which consist of 4 to 6 students in the same course, meet weekly for one hour throughout the term. This provides an “[o]pportunity [for students] to become actively involved with [their] classmates” outside of the classroom (Academic Success Center 2011g).

The Supplemental instruction program provides for longitudinal interactions (once per week) over the course of one term in which students are enrolled in a eligible course.

The Writing Center

The Writing Center program is administered by the Academic Success Center (Academic Success Center 2011j) and “offers free help with any writing task at any stage of the writing process and is open to all OSU students, as well as to staff, faculty, and members of the Corvallis community” (The Writing Center 2011b). The Writing Center is also available to students in a web based format via the Online Writing Lab where students can submit writing projects and receive feedback on-line (The Writing Center 2011a).

The Writing Center design and goals address students’ interactional needs regarding academic difficulty and academic isolation and provides opportunities for longitudinal
interactions throughout the college career. The Writing Center program focuses on the academic system of the university (see Table 2, page 67).

One Writing Center activity was coded for academic difficulty:

- Writing assistants working with students on writing issues such as grammar, flow, and revision (G. Romantsova, pers. com., November, 2011).

The Writing Center provides opportunities for longitudinal interactions as services are available to students at any level. Graduate students have the option to schedule on-going appointments with writing assistants to work on thesis projects (G. Romantsova, pers. com., November, 2011).

September Scholars Bridge Program

The September Scholars Bridge program is administered by the Academic Success Center (Academic Success Center 2011f). The program works with students who are first generation, low-income, rurally isolated students and students with low high school GPAs (Creighton 2010). The program offers 80 eligible new students “the opportunity to earn college credit and to experience what academic life and studying feels like prior to fall term” (Academic Success Center 2011f). Participating students come to campus two weeks prior to the beginning of fall term and participate in the bridge program for eleven days with a cohort of 20 other students. The program includes a two credit Academic Learning Center (ALS) transition course, nightly study tables and social activities. In addition students participate in a fall transition program including a two credit ALS transition course, optional study tables and academic counseling.
The September Scholars Bridge program goals and design address students’ interactional needs regarding goal and institutional commitment, academic difficulty, academic and social adjustment, academic and social isolation, and provides for longitudinal interactions throughout the first year and beyond. The September Scholars Bridge program focuses on the academic and social systems of the university (see Table 2, page 67).

One September Scholars Bridge program activity was coded for goal and institutional commitment:

- The program requires an agreement that student participants sign, agreeing to participate fully in the program at OSU.

Two September Scholars Bridge program activities were coded for academic adjustment:

- The two ALS transition courses (Bridge and fall) focusing on the exploration of OSU, learning about university expectations, and exploring campus resources (C. Creighton, pers. com., November, 2011; Creighton 2010; Academic Success Center 2011f).

One September Scholars Bridge Program activity was coded for social adjustment:

- The experience of arriving on campus two weeks before other students to live in a residence hall with peers immediately prior to fall term (Creighton 2010). This allows students to become familiar with campus and with dorm life.

Three September Scholars Bridge Program activities were coded for academic difficulty:

- The fall ALS Transition course where students learn “academic skills & strategies [and] develop test-taking techniques.”

- The students have access to optional study tables.

- Students can get assistance with forming study groups from the program.
Two September Scholars Bridge Program activities were coded for academic isolation:

- The bridge program provides cohort bonding experiences.
- The program allows students to meet faculty, advisors, and other campus resources in a more personal setting before school starts via program bridge activities.

Two September Scholars Bridge Program activities were coded for social isolation:

- Through forming cohorts in which “[s]cholars meet 19 other students in the cohort so they’ll have friends and people they know long before school starts” (Academic Success Center 2011f).
- The program provides social activities for the scholars during the Bridge program and reunion activities throughout the first year.

The program provides for longitudinal interactions by having regular meetings with an academic counselor throughout fall term. The program also provides ongoing interactions via reunion activities and on-going support from the program-coordinator on an as-needed basis throughout their time at OSU (Creighton 2010).

Educational Opportunities Program

The Educational Opportunities Program (EOP) is an OSU created and funded program that works with “students of color, students with disabilities, students who are single parents, low income students, students who have been rurally isolated, veterans, older- than-average (25+), or first generation” students (Educational Opportunities Program [EOP] 2011e). The EOP program works with over 700 students during the academic year and has the following goals as part of their mission statement (Nishihara, pers. com., November, 2011):

1. Acclimate students to university culture.
2. Enhance each student’s academic performance.
3. Develop each student’s professional and personal growth.
4. Assist in developing a sense of belonging and a strong connection to the University.
5. Enhance collaborative relationships with partner departments.

EOP’s program goals and design address students’ interactional needs regarding individual intentions, goal commitment, institutional commitments, academic adjustment, academic difficulty, academic and social incongruence, academic and social isolation, finances, and longitudinally over the college career. EOP’s activities focus primarily on the academic system of the university; however there are two activities that also focus on the social system (see Table 2, page 67).

Two EOP activities were coded for individual intentions:

- EOP Assists with Admissions web page states that the program provides assistance with “decisions about matching academic majors to career goals” (EOP 2011d).
- Advisors can arrange for students to “talk with current students about their lives and plans” (EOP 2011d). The EOP Director notes the importance of these activities due to the background of many students the program works with, particularly first generation students who cannot rely on their parents to guide them through the admissions process.

One EOP activity was coded for goal and institutional commitment:

- The program requires students to sign a Student and Staff Responsibility Agreement, which outlines the responsibilities of the student and academic counselor and in which the student is agreeing to participate in EOP as a program at OSU (EOP 2011h).

Two EOP activities were coded for academic adjustment:

- Program advisors answer questions regarding the application process, which is a formal aspect of the academic system.
• EOP offers advising with an EOP counselor trained “to guide students through the hoops and barriers which exist in college” (EOP 2011a). It is also one of the goals of the program to “acclimate students to university culture” and familiarize student with university policy (Nishihara, pers. com., November, 2011).

Two EOP activities were coded for academic incongruence:

• EOP students are required to take math and writing placement tests, which reduce the chance of skill mismatch in course work.

• Students work with an academic counselor to choose the appropriate classes. According to the EOP Director, students are only allowed to register for the class they tested into, as opposed to skipping to a higher level course (Nishihara, pers. com., November, 2011).

Two EOP activities were coded for academic difficulty:

• The program offers classes to help “review or fill in gaps in math, reading and writing” (EOP 2011b) and the goal is to “make sure that each student’s skills are strong enough to compete in OSU courses that require more math, reading, or writing” (EOP 2011c).

• The EOP program offers free tutoring to program participants.

Two EOP activities were coded for academic and social isolation and social incongruence:

• The EOP New Student Retreat that occurs the Friday before classes start allows students to “get to know a few people” and allow many of them to “walk into their first classes and see a few familiar and friendly faces” (EOP 2011g). The Program Director noted that students attending the EOP New Student Retreat meet program staff, faculty members, and of course other students and that the goal is to “cement their identity as EOP students”(Nishihara pers. com., November 2011).
• EOP holds an Honor Roll Celebration each term, honoring successful students and providing further social interaction throughout the school year for those that attend. These social engagements, as noted by the Program Director, are part of the program’s effort to make attending a large university a “smaller experience for our students” (Nishihara, pers. com., November, 2011).

Three EOP activities were coded for finances:

• The program provides “assistance in locating financial resources” (EOP 2011e).
• EOP provides two competitive program scholarships: The OSU Alumni Educational Opportunities Award- $2,000 and the Jennings/Coe Family Scholarship -$1,500 (EOP 2011f).
• EOP provides a listing of other grants/scholarships to students each year (EOP 2011f).

EOP has a longitudinal approach in that students are required to see an academic advisor, according to the Student and Staff Responsibility Agreement (EOP 2011h), “every two weeks during [the student’s] first term in EOP.” The Program Director stated that these meetings are planned out in advance and different subjects are discussed at each meeting regarding university policy and academic planning (Nishihara, pers. com., November 2011). Academic advising is also available to students through graduation, and sometimes beyond (EOP 2011a).

College Assistance Migrant Program

The College Assistance Migrant Program (CAMP) program is funded through the US Migrant Education Department via competitive five year grants. The program is designed to support students who were previously migrant/seasonal agricultural workers or their children.

The OSU CAMP program has the following goals published on their website (CAMP 2011b):

Goal 1: To support the success of migrant and seasonal farm worker students by helping them to enroll in and complete their first year of college. Goal 2. To increase the persistence for CAMP students during their second year in college and achievement of postsecondary degree.

The CAMP program provides 35 qualifying students with academic, personal and financial resources during their first year, including a Summer Orientation Program. Those students who qualify for CAMP also qualify for EOP so the two programs work together to provide students with services. To receive CAMP services students must meet the federally mandated criteria listed on the website (CAMP 2011d):

Be a permanent resident or citizen; Must be eligible for OSU admissions and enter OSU as a first year student; Be from a migrant/seasonal farm worker background (including crop, dairy, poultry or livestock production, the cultivation or harvesting of trees, or work on a fish farm). Either the student or his/her parents must have worked at least 75 days in the past 24 months OR have been eligible to participate in Chapter 1, Title 1 Migrant Education Program OR you attended the High school Equivalency Program (HEP) within the last 12 months and have completed a GED OR the WIA of 1998 program; Each student accepted into the program must enroll full time for at least 12 credit hours each term, maintain good academic standing, and participate in advising, tutoring, mentoring, and social/cultural events as specified in the CAMP contract.

CAMP program goals and design address students’ interactional needs regarding individual intentions, goal and institutional commitment, academic difficulty, academic and social adjustment, academic and social incongruence, academic and social isolation, external obligations, finances, and provides for longitudinal interactions throughout the college career. The CAMP program focuses on the academic and social aspects of the university as well as external factors (see Table 2, page 67).
Three CAMP activities were coded for individual intentions:

- “Oregon State University-CAMP” (Weir 2009, 3) lays out plans for “providing high school visits, parent information nights, financial aid workshops, and college fair events.”
- There are follow up contacts with students, families and high school counselors. This outreach work is important as many migrant families and students may not see college as a possibility.
- The impact on individual intentions continues during spring of the first year, when the required CAMP Orientation Course focuses on “career orientation, job search skills, and transitioning from CAMP to other support services” (Weir 2009, 13).

One CAMP activity was coded for goal and institutional commitments:

- The grant mentions a student contract, which would impact individual commitment to goals and the institution, in that they are agreeing to meet the requirements of the program and participate in the program at OSU.

The CAMP program addresses individual intentions both before and during college. This fits in with Tinto’s framework as individual intentions are always evolving.

Two CAMP activities were coded for academic adjustment:

- The grant notes that “OSU CAMP will work with individual students and with the OSU Admissions Office to ensure students receive all the necessary support to be admitted to college” (Weir 2009, 3).
- The CAMP Scholar Intern program is a “partnership between UHDS [University Housing and Dining Services] and CAMP” (CAMP 2011a). The program is “designed to mentor and cultivate our young leaders and strengthen their understanding of university and professional life.” (CAMP 2011a) The student interns work in: “a variety of
capacities throughout UHDS including Social Media Research and Use, Student Leadership Paradigm Exploration, Facilities Project Management, Dining Promotion and Nutrition and Wellness Research and Education” (CAMP 2011a).

Two CAMP activities were coded for social adjustment:

- The Summer Orientation Program in which students come to campus two weeks prior to the start of school and participate in activities to get to know campus and their fellow CAMP students.
- The Peer Mentor Program’s main goal is to increase student retention (CAMP 2011c). According to the Peer Mentor Program webpage, “the Peer Mentors play an integral role in helping students adjust socially and academically to college life” (CAMP 2011c, 1). The grant notes that peer mentors and students are required to meet bimonthly and to participate in CAMP activities (Weir 2009).

Four CAMP activities were coded for academic difficulty (Weir 2009):

- The program provides free tutoring to program participants.
- Supplemental instruction is available to CAMP participants.
- The program helps students utilize on-campus academic resources.
- CAMP students are able to enroll in smaller classes through the EOP program, allowing for more personal attention.

Two CAMP activities were coded for academic incongruence (Weir 2009):

- CAMP requires students to participate in the START Bilingue program to assess academic placement.
- Students work with an academic advisor to register for the appropriate classes.
Two CAMP activities were coded for social incongruence (Weir 2009):

- The cohort bonding activities experienced in the Summer Orientation Program.
- The required Fall CAMP orientation course, which focuses on cohort building, providing students with connections to others with similar backgrounds, experiences and values.

Two CAMP activities were coded for academic isolation:

- CAMP student participation in “events where Latino faculty will be invited to meet CAMP students and develop strong relationships” (Weir 2009, 5).
- The requirement of the CAMP orientation course each term ensures that students interact with program staff regularly.

Two CAMP activities were coded for social isolation:

- The Summer Orientation Program discussed earlier addresses social isolation via meeting and interacting with other CAMP students prior to the start of the school year.
- The CAMP Peer Mentor program addresses social isolation, since the peers and students are required to meet bi-monthly, and it is the explicit goal of the peer mentor to assist in the student’s social transition.

Two CAMP activities were coded for external obligations:

- Health concerns are included as external obligations because poor health often limits participation in the campus community. CAMP provides financial assistance to help cover healthcare costs. The OSU CAMP program has a contract with All Family Vision Care, a local optometrist office, to provide a discount for CAMP students and funds to help pay for needed vision aids. Financial assistance is only available to first year students. (Andrade, pers. com., August 2011; Weir 2009)
• CAMP also addresses external obligations by working to involve the student’s family in the first year experience. According to the grant, CAMP invites the parents of “CAMP participants to visit the OSU campus at three events throughout the first year, helping to ease their children’s transition to college” (Weir 2009, 5). One of these events is the CAMP Recognition Ceremony held each spring where the students’ achievements are celebrated and the families’ support is recognized. As mentioned in the literature review family support and involvement can be very important to student success and retention.

Three CAMP activities were coded for finances:

• The program holds bi-lingual financial aid workshop and providing assistance in applying for financial aid (Weir 2009).

• The CAMP required orientation course during winter term is focused on applying for scholarships (Weir 2009).

• The Camp program provides direct financial assistance including supplemental tuition aid of up to $1300 to reduce loan dependence, a quarterly $300 allowance for books and supplies, and a monthly stipend of $100 for the freshmen academic year. (Andrade, pers. com., August, 2011; Weir 2009)

The CAMP program is a first year program, only providing services to students through the first year of college. However, as part of the program CAMP students are integrated “seamlessly into either EOP or SSS” (Weir 2009, 11) where they will continue to have access to services throughout their academic careers. Prior CAMP students are also involved in CAMP as Peer Mentors.
Student Support Services

Student Support Services (SSS) is a federally funded TRiO program. The “TRiO Student Support Services” (Student Support Services [SSS] 2011e) webpage states the mission is “to provide opportunities for academic development, assisting student with basic college requirements and overall help to eligible participants graduate with the grades and skills necessary for success.” The goal of SSS is to “increase the college retention and graduation rates of its participants and help students make the transition from one level of higher education to the next” (SSS 2011c) with a specific objective stated in the SSS Grant that “76% of the participants in the program will be retained from year to year” (OSU n.d., 14). The program serves 175 students with 15 incoming students participating in the SSS Summer Bridge program each year (OSU n.d).

To receive SSS services students must meet federally mandated qualification criteria. The qualifications are listed on the “Eligibility and Applying for SSS” (SSS 2011a) webpage:

1. A first generation college student (neither of whose parent earned a four-year college degree)
2. An individual whose household meet federally established low-income guidelines. An individual with a physical or learning disability with documentation emphasizes a possible further academic need.

SSS program goals and design address students’ interactional needs in terms of individual intention, academic and social adjustment, academic and social incongruence, academic difficulty, academic and social isolation, external obligations, finances, and provides for longitudinal interactions throughout the college career. The SSS program focuses on the academic and social aspects of the university (see Table 2, page 67).
Two SSS activities were coded for individual intentions:

- Through “[a]dvising sessions before the beginning of the students first term will begin the process of academic goal setting.” At mid-term advising sessions advisors may “reassess goals for the term” (OSU n.d., 27).
- SSS addresses individual intentions by providing graduate school information to students providing them with options beyond the baccalaureate (SSS 2011b).

Three SSS activities were coded for academic adjustment:

- The Peer Mentor Program; the SSS Services & Benefits webpage state that “Peer mentors provide a leadership perspective on how to navigate the campus” (SSS 2011b). The SSS Grant (OSU n.d., 35) specifically notes that mentors for high-risk students provide a “structure for these students while they develop their own understanding of what it will take for them to be successful in college” by checking in with them on homework progress and exam preparation.
- The SSS office “assists participants in maneuvering through the university system” (SSS 2011b).
- Students who participate in the SSS Summer Bridge program, which occurs two weeks prior to the start of the term, will participate in “fun activities … that serve to acclimate students to college life” (SSS 2011d).

Two SSS activities were coded for finances SSS addresses social adjustment:

- During the SSS Summer Bridge program students “live in the dorms and eat in the dining halls for that week at no charge” allowing them to see what day-to-day life will be like (SSS 2011d).
The program also provides “fun activities … that serve to acclimate students to college life” (SSS 2011d).

Five SSS activities were coded for academic difficulty:

- Tutors are available to program participants for free, and the student may continue using the same tutor throughout the academic term.
- Students have access to developmental math courses as well as “access to courses thought through the Educational Opportunities Program in English Composition and Introduction to Expository Writing” (OSU n.d., 7).
- Academic progress is monitored by SSS Advisors and if needed SSS Advisors will develop an action plan for improving progress” (OSU n.d., 27).
- As part of academic monitoring SSS Advisors assist students in developing the skill to “adequately judge their status in a course” (OSU n.d, 15).
- Academic monitoring continues throughout the college career and is described in the SSS Grant (OSU n.d., 28): “At the start of their junior year all SSS participants will have a graduation audit with both their departmental and SSS advisor.” Again, “[a]t the start of their senior year all SSS participants will have a final graduation audit with both their departmental and SSS advisor (OSU n.d., 29).

Assisting students in meeting academic expectations is an objective of the program: “76% of all enrolled participants served by the SSS project will meet the performance levels required to stay in good academic standing at the grantee institution” (OSU n.d, 14).
One SSS activity was coded for academic incongruence:

- “A comprehensive assessment and advising system which will help ensure that a student is taking a set of courses each term which will assure optimal progress toward degree” (OSU n.d., 14).

Two SSS activities were coded for social incongruence:

- SSS provides a “variety of social and cultural events designed to build community and foster an appreciation of and awareness of diversity” (SSS 2011b, 1)
- SSS encourages ethnic students “to become active in the ethnic groups on campus” (OSU n.d., 9).

Five SSS activities were coded for academic isolation:

- Mandatory meetings with academic advisors: “Academic advisors … will meet with their students a minimum of five times during each 10-week academic term… [allowing] advisors to develop a significant personal relationship with the students” (OSU n.d, 6).
- The ability to have the same tutor throughout the academic term.
- The weekly informal meetings with program mentors.
- According to the SSS Grant “[t]he EOP/SSS/CAMP Computer Lab will be located on the same floor as SSS Staff offices so that staff members can develop relationships with program students outside the advising office” addressing academic isolation (OSU n.d., 26).
- Students who participate in the SSS Summer Bridge program “visit departments on campus” (SSS 2011d) and receive an “introduction to faculty and staff” (OSU n.d., 9).

One SSS activity was coded for social isolation:

- The mentoring program requires weekly informal meetings (OSU n.d).
One SSS activity was coded for external obligations:

- SSS Advisors are “available outside of regularly scheduled meeting times to assist students with other concerns such as personal situations, cultural and ethnic identity problems, housing and roommate problems, or emergency financial concerns” (OSU n.d., 28). SSS Advisors also make referrals to other campus/social services as needed (OSU n.d.).

Three SSS activities were coded for finances:

- Providing financial literacy counseling to “improve the financial literacy and economic literacy of program participants, with a focus being participant financial planning for post-secondary education” (OSU n.d.).

- SSS Advisors “assist the students in filling out the Free Application for Federal Student Aid (FAFSA) before the deadline for the following year” (OSU n.d., 29).

- SSS informs students of available OSU scholarships.

SSS provides for longitudinal interactions throughout the college career, though the most intense focus is in the freshman and sophomore years. “The assigned [SSS] advisor will remain with the advisee until graduation, although participants are able to change to a different advisor upon request” (OSU n.d., 27).

Office of Financial Aid and Scholarships

The OSU Office of Financial Aid and Scholarships (Financial Aid) provides financial aid to students by locally administering the federal and state loan and grant programs, federal work-study program, as well as OSU institutional scholarships. The mission of Financial Aid is to “assist student throughout their college career with financial resources to access Oregon State
University” (Office of Financial Aid and Scholarships [Financial Aid] 2011a) In order to receive aid students must be eligible (K. Peterson, pers. com., February, 2011) and meet federal, state, and institutionally mandated criteria. Each loan, grant and scholarship has its own set of criteria, which are available on the Financial Aid website. The Financial Aid office will process approximately 40,000 applications for federal aid this year, resulting in approximately 19,000 students receiving some form of federal financial aid to assist with education expenses (D. Severs, pers. com., November, 2011).

Financial Aid program goals and design address students’ interactional needs in terms of individual intentions, institutional commitment, academic adjustment, finances, and provides for longitudinal interactions throughout the college career. The Financial Aid program focuses primarily on external forces (see Table 2, page 67).

One Financial aid activity was coded for individual intentions:

- Financial aid staff participates in high school presentations where the Federal Application for Student Aid and financing of education are discussed (D. Severs, pers. com., November, 2011).

Two Financial aid activities were coded for academic adjustment:

- Maintaining the Office of Financial Aid and Scholarships website, where students can access information about aid programs, scholarships, and the policies governing those programs.

- Academic adjustment is also addressed via the University Scholars Program, which works with the recipients of OSU institutional scholarships. The program “provides leadership and service opportunities to assist students to become familiar with the campus community, its resources and activities” (Financial Aid 2011b) The scholars are made
aware of opportunities with the University Scholars Association, a student run organization, and of community service opportunities on campus via email and the USP listserv, which scholars are required to subscribe to (B. Wessel, pers. com., November, 2011).

One Financial Aid activity was coded for academic and social isolation:

- The University Scholars Program holds an orientation event every fall term where the scholars are brought together with faculty so that they can “meet faculty in a casual environment” and they can “meet other scholars and make friends and connections” (B. Wessel, pers. com., November, 2011). It should be noted that the activities addressing academic and social isolation provided by Financial Aid only involve a small number of students approximately 3,000. The office provides direct services to, approximately 40,000 students.

Five Financial aid activities were coded for finances:

- Processing and dispersing aid via the federal, state, and institutional aid programs, such as the Stafford Direct Loan and work-study programs. Of particular note the OSU institutional scholarships are renewable for up to four years.

- Financial Aid office works with institutional scholarship recipients and notifies them by email “of their progress at the end of each term and at the end of the academic year to confirm scholarship renewal status for the following year” (Financial Aid 2011b).

- Financial Aid monitors all students’ academic progress on a term by term basis and notifies students if they are in danger of losing aid.

- Financial Aid advisors are available to assist students with financial problem solving and financial aid questions (D. Severs, pers. com., November, 2011).
• Finances are also addressed via workshops put on by the Financial Aid office on applying for scholarships, financial literacy and financing education (D. Severs, pers. com., November, 2011) as well as the Financial Aid presentations at START.

The Financial Aid office works with students throughout their college career providing longitudinal interactions.

The coding summary of the individual OSU retention programs is provided in Table 2, the number of activities for each program that address interactions that Tinto’s (1993) model, informed by the roots of student departure, identifies as central to increasing retention were recorded. The codes *institutional academic system* and *institutional social system* are the combined counts of all other *academic* and *social* codes (e.g. academic adjustment, social isolation). The longitudinal codes are dichotomous, and do not represent counts. The overall results are discussed in the next section.
Table 2: OSU Retention Program Coding Summary

<table>
<thead>
<tr>
<th>Programs Codes</th>
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<th>SI</th>
<th>Writing Center</th>
<th>SEPT Scholars</th>
<th>EOP</th>
<th>CAMP</th>
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Discussion/Conclusion

The individual OSU campus-wide retention programs were examined using a content analysis methodology (Robson 2002), with codes based upon Tinto’s (1993) interactional model of student departure (Table 1, page 32). The model uses the process of longitudinal interactions between individual students and other campus community members (staff, faculty, students) to explain the process of student departure. The explanatory power of this model as well as the usefulness was increased by understanding and utilizing the roots of student departure. It is the roots (intentions, commitments, adjustment, difficulty, incongruence, isolation, obligations, and finances) that provide insight into the interactions that matter and the outcomes to be sought. An effective university wide retention effort would focus on encouraging institutional interactions in both the academic and social systems among college community members that address the roots of student departure in a way that creates positive (integrative) interactions in a longitudinal fashion.

The summary coding of the individual OSU campus-wide retention programs (Table 2, page 67) reveals that the campus wide OSU retention program effort is designed to address the interactional needs identified by Tinto (1993) as central to increasing retention. The individual retention programs, when combined, provide at least two activities that address each of the roots of student departure. However, upon closer inspection it becomes clear that many of these activities are not available to all students, particularly those that provide for long term interactions, which are paramount in Tinto’s model. The issue is further clouded by the fact that none of the retention programs are mandatory for students, making it difficult to assess overall impact. It is also clear from the coding descriptions that the campus-wide retention effort is collaborative. For example, SSS and CAMP students have access to EOP classes and tutors. The
SSS, CAMP and EOP students also share a computer lab (OSU n.d.). Also CAMP students are integrated into either SSS or EOP at the end of their freshmen year. The overall patterns of addressing the roots of student departure will now be discussed, gaps identified and additional efforts suggested.

In the overall university retention effort most (82) retention activities are focused on the academic system, the aspect of the university that concerns itself with the formal education of students. This is not surprising given that the purpose of a university is to educate students. The social system of the university that is made up of recurring sets of interactions among students, faculty, and staff that take place outside the formal academic domain of the college, are not really in the purview of many of the retention programs discussed although eight (START, CONNECT Week, UESP, SEPT Scholars, EOP, CAMP, SSS, Financial Aid) of the programs do have activities that were coded as part of the social system.

Of the general retention programs only two, Academic Coaching and the Writing Center, provide the opportunity for longitudinal interactions throughout the college career, and it is the longitudinal nature of interactions that is particularly important in Tinto’s (1993) model. It is only through longitudinal interactions that students can be integrated into the college community. Those programs that address specific target populations (September Scholars, EOP, CAMP, and SSS) do provide for longitudinal interactions via requiring regular meetings with students over the course of their academic career and are coded as college career under longitudinal interactions.

Only three programs (START, CAMP, and SSS) address external obligations, those activities that pull the student away from participation in the campus community. Of those two (CAMP, SSS) are targeted programs and not available to all students and START does not
provide longitudinal interactions for students. Participation in the campus community is an essential aspect of Tinto’s model, students who do not participate are unlikely to be integrated, and therefore it may be in the interest of the university to address external obligations. It may be that there are programs on campus that address external obligations, but are not included in this study because they are not identified as retention programs.

Only three programs (EOP, CAMP, September Scholars) appear to address institutional commitments and goals. Within Tinto’s (1993) model institutional commitments are increased by positive interactions between institutional actors (staff/faculty/students) and the individual student. This methodology did not account for interactions being positive (integrative) or negative (mal-integrative) only that the programs activities provide the opportunity for interactions affecting the roots of student departure and possibly increasing the likelihood of retention. Therefore, it could be that all of the interactions coded could affect institutional commitment, however only one activity was recognized with this coding method as having a direct impact, the use of contracts or agreements. The findings regarding institutional commitment are misleading. There are likely many more activities that in reality affect institutional commitment. The same can be concluded for individual commitment to goals.

Six programs (START, U-Engage, EOP, CAMP, SSS and Financial Aid) address the financial concerns of students. It is primarily the Financial Aid office’s role on campus to assist students with financial concerns (D. Severs, pers. com., November, 2011). Although financial concerns are not given as much importance as academic or social interactions, the literature suggests that it is indeed an important factor in student retention, particularly for low income students (Bresciani and Carson 2002; Desjardins et al. 2002; Schuh 2000). The campus-wide
retention efforts do provide for longitudinal interactions addressing financial concerns to all students.

When examining the patterns concerning longitudinal interactions, two of the programs (START, CONNECT) are coded as one time, meaning that the programs offer/attempt/require none or limited contact with the student outside of a specific event and do not encourage longitudinal interactions. Four of the programs (U-Engage, UESP, September Scholars, and CAMP) are coded as first year, meaning that they offer/attempt/require multiple contacts concentrating in the freshmen year. One program (Supplemental Instruction) is code as limited, meaning that the program offers/attempts/requires contacts only within the context of a specific activity. Seven programs (Academic Coaching, Writing Center, September Scholars, EOP, CAMP, SSS and Financial Aid) are coded as college career, meaning that they offer/attempt/require contacts throughout the college career. September Scholars and CAMP are coded as both first year and campus career because both programs focus the majority of their services in the freshmen year, but continue to monitor and contact students throughout their college career. Tinto’s (1993) model focuses on the longitudinal nature of interactions between students and other members of the campus community. In the case of the OSU campus wide retention effort, half of the programs place most of their focus on the freshmen year. This strategy has been suggested in the literature (Seidman 2005; Veenstra 2009). Also most of the programs that provide for longitudinal interactions are also targeted programs. Only two of the programs (U-Engage, Academic Coaching) are open to all students, and U-Engage only provides for interactions in the fall term of the freshmen year. There is currently no way to monitor if students follow through on connections or apply skills developed in the non-targeted programs. For example there is no way to know if a student follows through on connections made with
campus clubs or services at START or CONNECT Week. Tinto’s model would suggest that further contacts with students participating in non-targeted retention programs may be useful in assisting with student integration into the campus community.

This analysis set out to advance the study of student retention by examining the OSU university efforts as a whole versus evaluating individual retention programs. The focus was not to evaluate the effects of individual retention programs, but whether the combination of programs is theoretically sound using Vincent Tinto’s (1993) interactional model of student departure as a framework in an attempt to identify possible gaps in the overall effort. The results lead us to the following answers to our research questions:

*Are the campus wide OSU retention program efforts designed to address the interactional needs identified by Tinto (1993) as central to increasing retention?*

The campus wide OSU retention program efforts are designed to address the interactional needs identified by Tinto (1993) as central to increasing retention. The individual retention programs, when combined, provide at least two activities that address each of the roots of student departure. However, upon closer inspection it becomes clear that many of these activities are not available to all students, particularly those that provide for long term interactions, which is paramount in Tinto’s model.

*What additional retention efforts does the Tinto (1993) model suggest to ensure the effectiveness of OSU retention efforts?*

Tinto’s (1993) model suggests the following to ensure the effectiveness of OSU retention efforts:
• It may be in the interest of the university to address external obligations, since participation in the campus community is an essential aspect of Tinto’s model. Currently only three programs address external obligations. External obligations include family, work, and other commitments that pull students away from participating in the campus community. Providing assistance with childcare or providing opportunities for further parental involvement throughout the school year are possible activities. It may be that there are programs on campus that address external obligations, but are not included in this study.

• Tinto’s model would suggest that further contacts with students participating in non-targeted retention programs may be useful in assisting with student integration into the campus community. For example contacting START and CONNECT participants to follow up and ensure that they are making connections within the campus community.

• The focus of Tinto’s model on the importance of longitudinal interactions, particularly positive interactions leading to integration, would suggest that it may be in the interest of the university to make some form of orientation mandatory, START or CONNECT Week for example. This would ensure that students receive some form of official orientation to the campus community.

Project Limitations

There are two important limitations in this work that need to be addressed. First, by limiting the evaluation to the campus-wide retention programs identified by the OSU Associate Provost of Academic Success and Engagement, there are many university efforts that are not included. Many of these efforts, those of the University Housing and Dining Services via
Residence Assistants for example, are likely to address the interactional needs identified by Tinto (1993) as central to increasing retention as well. Therefore this project only captures part of the true overall university effort. Second, Tinto’s (1993) model may also produce limitations in that it was created with primarily traditional college students in mind and was published over 20 years ago. The composition of the higher education student body has changed dramatically in the last 20 years. Non-traditional students make up more of the student body partially due to the economic depression beginning in 2008. It is unclear if this model holds as true for non-traditional students. The increase in social media technology (Facebook, Twitter, etc.) has changed the ways in which students’ connect and engage in communities. This change in communications and engagement may affect students’ adjustment to the college community. This is not directly accounted for in Tinto’s (1993) model and was not addressed in this project.

Suggestions for Further Research

There are several ways to further understand the impact of OSU’s campus wide retention effort. A survey of students who have left to find out their reasons for leaving and what if any participation they had in retention efforts could be conducted. Such a survey would provide direct information on the student experience. Also an analysis of how extensively students participate in the retention efforts as well as how many students receive services from multiple retention programs could provide insight into the reach of the overall impact. At this point it is difficult to know the true breadth of services any one student receives or has access to. In addition identifying the university programs and activities not included in this project, that impact student retention could give a more complete picture of the overall university effort.
References


———. 2011b “ASC Coaching Program.” Provided by the Academic Success Center Director. Program description.


Creighton, Clare. 2010. “September Scholars Bridge Program.” Provided by the September Scholars Program Coordinator. Program description.


———. 2011h. “Student and Staff Responsibility Agreement.” Provided by the Educational Opportunities Program Director. Program document.


———. n.d. “Oregon State University- CAMP.” Provided by the College Assistance Migrant Program Director.


Appendix A
## Data Sources for OSU Retention Programs

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<th>Title</th>
<th>Source</th>
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### Data Sources for OSU Retention Programs, continued

<table>
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<tr>
<th>Academic Coaching</th>
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<tr>
<td><strong>Program description</strong></td>
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<td><strong>Program brochure</strong></td>
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<td><strong>Webpage</strong></td>
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<td><strong>University Exploratory Studies Program</strong></td>
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<td><strong>Program description</strong></td>
<td>UESP General Info, January 2011</td>
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<td><strong>Program brochure</strong></td>
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<td><strong>Student handbook</strong></td>
<td>UESP Advising Handbook</td>
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<td><strong>Webpage</strong></td>
<td>The UESP option at OSU</td>
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<td><strong>Program description</strong></td>
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<td><strong>Webpage</strong></td>
<td>What is Supplemental Instruction?</td>
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<td>Registration for Midterm Review</td>
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<td>The Online Writing Lab</td>
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<td><strong>Unstructured interview</strong></td>
<td>English Language Learning Coordinator</td>
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<td><strong>September Scholars Bridge Program</strong></td>
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<tr>
<td><strong>Program description</strong></td>
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<td><strong>Webpage</strong></td>
<td>What is the September Scholars Bridge Program?</td>
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<td>**Unstructured interview &amp; email</td>
<td>September Scholars Bridge Program Coordinator</td>
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<td><strong>correspondence</strong></td>
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<th>Source Type</th>
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<td><strong>Equal Opportunities Program (EOP)</strong>&lt;br&gt;<strong>Mission and goals</strong>&lt;br&gt;Program brochure</td>
<td>EOP program mission and goals provided by the EOP Program Director&lt;br&gt; Educational Opportunities Program-2009-10 provided by the EOP Program Director</td>
<td>Unstructured interview conducted November, 2011</td>
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<td><strong>Participant agreement</strong>&lt;br&gt;Webpage</td>
<td>EOP Student and Staff Responsibility Agreement provided by the EOP Program Director&lt;br&gt; EOP at a Glance <a href="http://oregonstate.edu/dept/eop/">http://oregonstate.edu/dept/eop/</a></td>
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<td><strong>College Assistance Migrant Program</strong>&lt;br&gt;Funded grant document&lt;br&gt;Webpage</td>
<td>Oregon State University- CAMP Provided by the CAMP Director&lt;br&gt; Home <a href="http://oregonstate.edu/dept/camp/">http://oregonstate.edu/dept/camp/</a></td>
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<td><strong>Webpage</strong>&lt;br&gt;Webpage</td>
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<td><strong>Student Support Services (SSS)</strong>&lt;br&gt;Funded grant document&lt;br&gt;Webpage</td>
<td>Oregon State University Student Support Services* Provided by the SSS Director&lt;br&gt; TRiO Student Support Services <a href="http://oregonstate.edu/dept/sss/">http://oregonstate.edu/dept/sss/</a></td>
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