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Engagement Behaviors' Impact on Course Success and Persistence Rates of Community College Students

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Van Whaley

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Walden University
2016

Abstract

Engagement Behaviors' Impact on Course Success and Persistence Rates of Community

College Students

by

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Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

December 2016

Abstract

As enrollment in U.S. community colleges increased, both the percentage of students successfully completing courses and the percentage of students persisting to their second year decreased. This study focused on the problem of low student course success and persistence rates at a community college. The purpose of the study was to determine whether students who demonstrated engagement behavior by visiting a Center for Academic Success (CAS) either passed more courses, persisted more often, or both, than students who did not visit a CAS. Tinto's engagement theory was the theoretical framework as it postulated that students who interacted with school support services were more successful in college than students who did not. The study was a quantitative comparative design using archival data to evaluate if there were differences between students who visited a CAS and students who did not visit a CAS in terms of course success rates (percentage of courses passed) as well as persistence (continued enrollment) from Spring 2014 to Spring 2015. Group comparisons by independent samples *t* tests resulted in significantly higher course success ($p = .027$) among students who visited a CAS ($n = 2,059$) compared to students who did not visit a CAS ($n = 33,414$). There were no significant differences in the annual persistence rates between groups of students. The results guided the development of a training program for college employees to entice students to visit the CAS while the college leadership discusses other opportunities to increase persistence. The project may support social change by helping more students pass their courses, therefore benefitting the students, the college, and the community.

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Section 1: The Problem

The Local Problem

The College of Southern Nevada (CSN) is a large urban community college in Las Vegas, Nevada. The local problem is that many students at CSN are not earning passing grades and are dropping out. CSN students are not successful in about 30% of their courses (CSN, Institutional Research [CSN IR], 2012). Furthermore, over half of CSN students will not enroll in courses after their first year (CSN, Persistence Data Team, 2013). With each semester's enrollment of approximately 40,000 (CSN IR, 2011), this means that about 13,000 students who enroll at CSN will not be enrolled the following year. The effect of so many students earning failing grades and discontinuing enrollment is that CSN has a graduation rate of 9% (Nevada System of Higher Education [NSHE], 2011).

Rationale

The rationale for investigating this problem involved both a local need and nationwide concern for improving students' academic outcomes at community colleges.

Evidence of the Problem at the Local Level

CSN officials published information on the CSN website related to students' academic outcomes. Using official institutional data gives insight into these outcomes and establishes the study's applicability to the CSN setting. CSN grade distribution reports are available from the CSN's website for the last 6 years. These reports include enrollment numbers, enrollment status, and academic outcomes (CSN IR, 2012). While the exact data vary from semester to semester, typically each report includes information

on the entire student cohort and their enrollment data such as the number of courses attempted, final grades, and demographic breakdowns. The abundance of public data makes it possible to investigate grades and annual persistence rates of the entire CSN student population. Table 1 includes CSN total enrollment and persistence data, showing the number of students enrolled and the number of those who persisted (enrolled the following fall semester).

Table 1

CSN Enrollment and Persistence Rates

Entering semester	Enrollment	Persisted	Persistence rate
Fall 2010	44,088	18,278	41.5%
Fall 2011	38,787	17,300	44.6%
Fall 2012	37,696	16,477	43.7%
Fall 2013	36,629	16,526	45.1%

Note. Table data summarized from data released by Institutional Research department as a report entitled Whaley Data and delivered through secure intracompany e-mail (J. Bearce, personal communication, June 10, 2015).

Table 2 reports course success data: the total number of courses enrolled in by students, the number of courses passed at CSN, and the course success rates for select semesters.

Table 2

CSN Course Success Data

Semester	Attempted courses	Successful courses	Course success rate
Fall 2010	110,775	73,777	66.6%
Fall 2011	99,262	66,822	67.3%
Fall 2012	94,745	65,292	68.9%
Fall 2013	91,701	66,283	72.3%

Note. Table data summarized from data released by Institutional Research department (J. Bearce, personal communication, June 10, 2015).

As Tables 1 and 2 show, many students at CSN are not earning passing grades and are dropping out. As the above tables show, the persistence rate is consistently low with 45% or fewer students, and even though the course success rate has been increasing in the last four years, it has now only reached 72%.

CSN decision makers have attempted for some time to address the problem of students' low academic outcomes. A recent addition at CSN is an early alert system in which teachers can identify students at-risk of poor outcomes early in a semester (e.g., poor grades on the first two quizzes). The teacher can then direct these students to proper support systems. After reviewing data from several community colleges, Burns (2010) found students who engage support services are more likely to overcome at-risk factors and have successful outcomes than unsupported students. For example, students who completed a developmental reading course tended to have a higher semester-to-semester persistence rate than students who did not complete the course (Pinkerton, 2010). Similarly, Wolfle (2012) concluded success in developmental math courses is positively associated with year-to-year persistence. CSN's early alert system and various academic support services such as tutoring and the Science Resource Center are evidence that leaders at CSN have made efforts to improve academic outcomes by engaging students inside and outside of the classroom, which led me to believe they would support this study as an additional effort to improve student outcomes.

Evidence of the Problem from the Professional Literature

The problem of students earning poor grades and not persisting is not unique to CSN. Nationally, higher education enrollment increased by approximately 38% from 1999 to 2009 (Snyder & Dillow, 2011). This increased enrollment has accompanied a decrease in the percentage of students who complete a program at community colleges (Bound, Lovenheim, & Turner, 2010). With increased enrollment, colleges across the nation are dealing with the same issue of trying to improve student outcomes (McClenney, Marti, & Adkins, 2012). College leaders and even President Obama of the United States have brought attention to the problem of poor academic outcomes. The 2010 Presidential State of the Union Address highlighted the national focus on adult education. President Obama (2010) said, “One of the best antipoverty programs is a world-class education” (para. 49). President Obama (2009) also challenged America’s community colleges to graduate five million adult learners by 2020. The President’s emphasis on adult education as a path to better jobs has led to a nationwide review to determine what is happening on America’s community college campuses and what can be done to improve student outcomes.

The increase in college enrollment has been largely a response to the unstable job market (Handel, 2011). Handel (2011) said, “to gain necessary credentials, under- and unemployed workers have been flocking to community colleges” (p. 8). Unfortunately, this national increase in enrollment has been accompanied by a decrease in the percentage of community college students who complete their program (Bound et al., 2010). The increase in enrollment has stressed community college systems and faculty.

Community college students tend to have lower academic outcomes than students at 4-year colleges and universities (Kotamraju & Blackman, 2011). Many students enrolling in community colleges are academically unprepared and struggle to earn passing grades in their courses (Pinkerton, 2010). Underprepared students are likely to struggle in a course and fall short of their academic goals. Simply admitting more students into college does not guarantee an increase in the number of students who are successful.

Most adults enrolled at community colleges are commuter students, those who do not live on campus, and they spend less time on campus than students residing in student housing (Lonn, Teasley, & Krumm, 2010). Having limited time on campus restricts the amount of interaction commuters have with classmates, faculty, and extracurricular activities (Lonn et al., 2010). The reduced interaction limits commuter students' opportunities for engagement. Opportunities for students to interact with each other are important because the research indicated that engagement improves retention, and "retention is the key to success" (Baldwin, Bensimon, Dowd, & Kleiman, 2011, p. 83). Another factor that reduces interaction on community college campuses is the high percentage of students who are part-time students and working students (Lonn et al., 2010). Laird and Cruce (2009) found that students enrolled part-time have less interaction with classmates and school faculty and are significantly less likely to earn a college degree than full-time students. Community college students face many challenges, including academic workload, job demands, and family responsibilities. Community college leaders across America are implementing strategies to support students and encourage program completion. Increasing engagement between learners

and school resources positively influences the likelihood of students staying in school until graduation (Burns, 2010). Supporting student interactions with classmates, faculty, and school programs is a common theme in encouraging students to stay in school and earn passing grades to address the problem of poor academic outcomes at community colleges. This study provides stakeholders knowledge of community college student outcomes; specifically, this completed study added data regarding engagement behaviors' impact on course success and persistence rates at a large community college in Nevada.

The purpose of the study was to determine whether students who demonstrated engagement behavior by visiting Center for Academic Success (CAS) passed more courses, persisted more often, or both than students who did not visit a CAS.

Definitions

The following terms are used in this study:

Behaviorism: The study of observable behaviors performed by participants and the consequences of those behaviors (Ertmer & Newby, 2013).

Commuter student: Students who do not reside on campus but travel to and from the institution (Lonn et al., 2010).

Course success: CSN researchers define *course success* in a particular course as a student enrolling and completing a course with an average grade of 70% or higher, which is represented as a final grade of A, B, C, or P (CSN IR, 2012).

Course success rate: Researchers at CSN define course success as a student enrolling in a course and earning an A, B, C, or P during the same semester (CSN IR, 2012).

DNV group: Students enrolled at CSN during Spring 2014 but did not visit (DNV) a support service. An institutional researcher generated this group's data by subtracting the VSS group data from CSN's total enrollment data, and then e-mailed me the group totals (J. Bearce, personal communication, June 10, 2015).

Engaged/VSS group: The engaged group members visited a support service (VSS), thus demonstrating an engagement behavior. A CSN employee generated this list and then forwarded it to a CSN institutional researcher. Because this list included student names, this list was not released to me. An institutional researcher calculated the data for this group and then forwarded the group totals to me (J. Bearce, personal communication, June 10, 2015).

Engagement: Any interaction a student has with classmates, faculty, course materials, support services, or any school-related activity (Pike, Kuh, & McCormick, 2011).

Grades: Grades are calculated various ways depending on course content and format and recorded as either A, B, C, D, F, or P (Pass). Final grades for each course are totaled and reported on grade distribution reports (CSN IR, 2012).

Learning community: This approach to learning involves students working together to understand concepts and gain skills. It often includes group projects and taking multiple courses with the same group of learners (Day, 2004).

Persistence: *Persistence* is defined as a student continuing their enrollment at any Nevada Higher Education Institution from one fall semester through the following fall semester (NSHE, 2016).

Persistence rate: Annual persistence rates were defined as the percentage of students enrolling in a higher education program in Nevada the fall semester the year following their first fall semester (NSHE, 2016).

Significance

The findings of this study can be used to inform CSN decision makers if there is any influence created when students engage with each other, CSN programs, and/or their course content. Also, information in this study may aid students looking for behaviors that can increase their chances of academic success. Furthermore, the CSN faculty members might gain knowledge about the academic outcomes of CSN students who utilized support services. Another group who might find significance in this study includes CSN students who can use the study findings to compare their academic outcomes to other students. Finally, results from this investigation may help determine if the problem of poor levels of academic success could be addressed by changing student behaviors to increase engagement among learners, and between students, teachers, and college support systems.

Research Questions

The two research questions for this study were as follows:

RQ1: What is the difference in course success as measured by the percentage of passing grades between CSN students who exhibited engagement behavior and CSN students who did not?

*H*₀1: There is no significant difference in course success between CSN students who have demonstrated engagement behavior and students who did not in terms of course success rates at CSN.

*H*₁1: There is a significant difference between students who have demonstrated engagement behavior and students who did not exhibit engagement behavior in terms of course success rates at CSN.

RQ2: What is the difference in persistence as measured by the percentage of students enrolled the following year between CSN students who exhibited engagement behavior and CSN students who did not?

*H*₀2: There is no significant difference between students who have demonstrated engagement behavior and other students in terms of persistence rates at CSN.

*H*₁2: There is a significant difference between students who have demonstrated engagement behavior and other students in terms of persistence rates at CSN.

Review of the Literature

Reviewing the literature involved investigating academic studies of behaviorism, engagement, and academic outcomes of community college students. Creswell (2012) said that the literature review has two essential functions: informing the researcher to guide the methodology and documenting the need to study the problem. This study's literature review achieved both of these goals by helping me shape the research questions and identify the local gap in practice.

The most crucial component of the literature review was the Google Scholar™ search engine linked to the Walden University Library. I conducted searches through Google Scholar™ that revealed links to articles available for download. I also utilized the ERIC database and EBSCOhost to search the Education Research Complete Database. Specific search terms and Booleans included: *community college, course success, persistence, academic outcomes, behaviorism, engagement, Tinto, and academic success*. The majority of research articles informing this study were current; however, a few relevant seminal studies were also reviewed. To ensure the search reached saturation, I reviewed each article's reference list to locate any additional relevant literature. Also, I reviewed many verifiable Internet sources such as accrediting agencies, government, and specific school websites.

Behaviorism

There are many subschools of behaviorism, with varying emphasis on psychological reasoning, rewards, punishment, and motivation (Spence, 1948). In a seminal review of the multiple applications of behaviorism, Spence (1948) concluded that the central theme of all variations was the “observations of overt behavior of other organisms, other people” (p. 69). Six decades later, behaviorism was similarly defined as the observable behaviors performed by participants and the consequences of those behaviors (Ertmer & Newby, 2013). Behaviorism is a good fit to observe and categorize different student behaviors. With this framework, I was able to identify groups of students based on specific behaviors such as going to a resource center or meeting with a tutor.

Behavioral frameworks have allowed researchers to complete extensive studies. In a study of 165,921 first-time college students, Bahr (2009) used student behavioral patterns to identify clusters of students for comparison. Grouping students by behavior instead of demographic information increases the external validity (generalizability) of study results (Bahr, 2009). Bahr (2009) separated students into clusters based on courses and enrollment and then evaluated them for the predictive value of these behaviors. The behavioral framework allowed Bahr to assess data from a large population and compare results among groups of adult learners. Bahr's successful application of behaviorism framework inspired the methodology used in this study. The annual enrollment of approximately 44,000 students (CSN IR, 2010) at CSN provided a large enough study to follow procedures similar to Bahr's procedures. This study's setting and population size are appropriate for an investigation using a behavioral framework.

Behaviorism is an appropriate philosophy for teachers, administrators, and students at community colleges. Miranda (2009) suggested that behaviorism is an appropriate guiding philosophy at community colleges because of the high number of academically underprepared students. Miranda (2009) continued, stating that the structure provided by behaviorism is a viable path for success early in an academic career and fosters relationships among learners in community college classrooms. The behavioral framework applies to two community college elements: institutional practices and student behaviors (Kahu, 2013). Institutional practices include establishing meeting areas and governing campus organizations. The student behaviors in this study took place inside the classroom and throughout the CSN campus. The focus of this study was

not variations of engagement; it was to see if a relationship exists between engagement behaviors and academic outcomes.

Community college classrooms often have a high percentage of nontraditional students who are enrolled part-time, employed, or are more than 24 years old (Long & Kurlander, 2009). It is also common for community college students to take one or more developmental courses during their time at the community college (Pinkerton, 2010). Walter (2009) stated that developmental courses frequently have a behavioral education environment with criterion-referenced assessments. Behavioristic frameworks can help community college students overcome a lack of study skills or sufficient academic preparation (Miranda, 2009). For example, a key to behavioral-based education is classroom management by an authoritative teacher as a leader in a classroom providing oversight to learners (Freiberg & Lamb, 2009). Because community college students often start in developmental or prerequisite courses, “more educators should consider behaviorism as the foundation for educating the typical community college student” (Miranda, 2009, p. 34). Behaviorism is appropriate on the community college campus, inside the classroom, and in studies investigating community college student outcomes.

In addition to being appropriate as a guiding philosophy for community college faculty members, behaviorism is a common framework used by researchers evaluating the academic outcomes of community college students. The Community College Survey of Student Engagement (CCSSE) was a massive investigation into community college student experiences and outcomes administered by the Center for Community College Student Engagement (Center for Community College Student Engagement [CCCSE],

2012). This annual survey gathered data from nearly 444,000 for-credit students attending almost 700 institutions in 48 states (CCCSE, 2012). The CCSSE survey “focuses on educational practices and student behaviors associated with higher levels of learning, persistence, and [school program] completion” (CCCSE, 2012, p. 4). The CCSSE measures and defines student engagement as “how connected students are to college faculty and staff, other students, and their studies” (CCCSE, 2012, p. 4). The CCSSE is a behavioral-based survey of student engagement on community college campuses that has provided insight into contemporary adult learner experiences and has supported this study’s design.

One of the most challenging aspects of this research was identifying the dividing lines between the study groups. I overcame this challenge by utilizing a behavioral framework similar to that of the CCSSE (2012). Behaviorism is appropriate for research evaluating community college academic outcomes because the CCSSE spotlights the behaviors of community college faculty and students (McCormick & McClenney, 2012). The two focuses of the CCSSE are “institutional practices and student behaviors” (McCormick & McClenney, 2012, p. 319). Not only does the CCSSE focus on behaviors, it compares groups of students based upon their behaviors (McCormick & McClenney, 2012). Data from CCSSE provide campus decision makers the information they need to guide educational improvement (McCormick & McClenney, 2012). Behavioral frameworks allowed for categorical definitions of the study variables. For example, a researcher can accurately determine if a student continued enrollment in courses from one year to the next and classify that student as one who demonstrated

persistence or did not. Other observable behaviors include going to a resource center and meeting with a tutor. Using a behavioral framework and categorical variables allowed for the clear separation of study groups and should provide timely, accurate, and valuable insight into any relationship between students' behavior and their grades and likelihood of persistence.

Engagement

Engagement is defined as student interactions with classmates, curriculum, faculty, or other parts of the college experience (Pike et al., 2011). McClenney et al. (2012) used a similar definition of engagement as students' involvement, integration, and the quality of their collegiate experience. Some examples of engagement include a student asking a teacher questions during or after class, students talking about course content, and even involvement with campus clubs and organizations. While slight differences in definitions of engagement exist between researchers, the essence of engagement is a student's interactive behaviors.

Encouraging engagement is important because it can improve persistence (Wang, 2009). A study of 524 adult learners found that being involved in college activities outside the classroom curriculum significantly increased the chances of a student continuing enrollment from one year to the next (Wang, 2009). When a student drops out of school, there is a negative effect on the student, school, and community (Barbatis, 2010). Conversely, student persistence, or continuing in an academic program, is a proven method for a student to earn a degree or certification (Barbatis, 2010). While

there are many methods of engagement, the main two categories are engagement between school programs and students and engagement between two or more students.

School-student engagement. Many studies, such as Allman, Valentine, & Valentine (2012) and Scrivener and Coghlan (2011), reported a strong positive relationship between higher student outcomes and increased engagement between students and their school. Allman et al. (2012) found that when a student engaged institutional support services such as counseling or tutoring services, the student was more likely to stay in school and have passing grades. Scrivener and Coghlan (2011) reviewed data from six community colleges and found that enhanced student services increased student grades and persistence. Tinto (1997b) investigated school-student engagement and found that students involved in school programs build support networks and relationships with peers and college employees. There is evidence that a relationship exists between school-student engagement and student grades and persistence. In this study, I investigated the relationship between engagement and academic outcomes at CSN to discover whether the findings throughout the literature apply to adult learners who live and attend school in the Las Vegas area.

Student-student engagement. One way to improve academic outcomes is through programs and experiences that encourage students to work together on assignments (Nelson, Duncan, & Clarke, 2009). Increasing engagement among learners in a classroom led to improved grades in that course (Reyes, Brackett, Rivers, White, & Salovey, 2012). This study attempted to explore these vague conclusions as they applied to a specific school. Teaching styles can influence the amount of interaction and

engagement between learners. Teachers who actively and purposefully engage their students tend to have students with better outcomes compared to classrooms with less interpersonal engagement (Komarraju, Musulkin, & Bhattacharya, 2010). Institutional policies use different methods to encourage academic relationships among learners. One of the most popular student-student engagement methods involves learning communities.

Learning communities increase engagement. One way to increase engagement among students is through the creation of learning communities. Building learning communities takes concentrated efforts from schools and teachers to bring students together to work on shared tasks throughout their academic career (Pike et al., 2011). Learning community building strategies include sequencing courses over multiple semesters, linking two or more courses in the same semester through related curricula, or incorporating group projects, so students work together (Visher, Weiss, Weismann, Rudd, & Wathington, 2012). Learning communities and interlearner engagement also increase students' diversity of experiences (Pike et al., 2011). Pike et al. (2011) also found that participation in learning communities positively and significantly influenced student engagement with the subject matter and other learners. When students work together, they learn about the subject and their classmates.

Teachers' efforts to build learning communities have often included group assignments (Pike et al., 2011). These group assignments may include projects that take several weeks of cooperative effort. Group assignments are tools for building learning communities and are welcomed by many commuter students who often value activities with multiple learners interacting with each other (Lonn et al., 2010). This sentiment is

reflected in Tinto's (1997a) work with students in the late 20th century. Tinto found that students were more satisfied with their college experience when participating in a learning community. Classroom activities can aid learners in engaging classmates and curriculum, build learning communities, and become rewarding learning experiences. These group projects are cornerstones of learning communities and encouraging engagement among learners.

Student Outcomes

In addition to behaviorism and engagement, the third area of my literature review involved the academic outcomes of community college students. Community college decision makers across the nation are dealing with the same issues as those impacting CSN: recent changes in enrollment numbers and a desire to help more students succeed. United States community colleges' enrollment numbers have increased in the last decade as indicated by the data in Table 3. Table 3 includes data representing both 2 and 4-year public institutions because, as Marcus (2014) reported, many community colleges have expanded to offer baccalaureate degrees. There is a paucity of research about specific grades of community college students; however, there is evidence to suggest that community college students are not successful in many of their courses. Table 4 reports the national graduation rates at America's public institutions of higher learning.

Table 3

National Public Institution Enrollment

Semester	National enrollment
Fall 2010	15,143,000
Fall 2011	15,110,000
Fall 2012	15,078,000
Fall 2013	15,256,000

Note. Total nonduplicated headcount, rounded to thousands place, of students enrolled in a United States 2 and 4-year public institutions of higher education. This table includes actual data (2010, 2011) and estimates (2012, 2013) using available data (Hussar & Bailey, 2013).

Table 4

National Public 4-Year Institution Graduation Rates

Starting semester	Ending semester	Graduation rate
Fall 2002	Fall 2008	57.5%
Fall 2003	Fall 2009	58.1%
Fall 2004	Fall 2010	58.5%
Fall 2005	Fall 2011	58.8%
Fall 2006	Fall 2012	59.6%

Note. Graduation rates are calculated with a 6-year timeframe. Data from National Center of Education Statistics (2013a).

Variations in definitions used by researchers create conflict within the existing literature as well as problems in practice. Wolf-Wendel, Ward, and Kinzie (2009) completed an investigation into engagement and student outcomes and found that the “lack of common definitions and understandings can lead to unclear communication and, worse, sloppy scholarship and ineffective practice” (p. 407). It is important to be clear in defining the terms and traits measured. Mullin (2012a) pointed out the difficulty of this task because of the varying definitions created at the institutional level. Slight variances

in how different schools define terms can lead to irregularities in research. As an example, Reason (2009) pointed out that differences in definitions complicate the issues of persistence and retention. Reason summarized these terms very well: “schools retain, students persist” (p. 660). An example of this irregularity is the national data that report community college retention rates compared to individual schools that tend to report data as student persistence rates. Both of these statistics are representative of the percentage of students who continue their enrollment. However, they present different perspectives. Table 5 provides data relating the national retention rates, with data from all degree-granting public postsecondary schools.

Table 5

National Public Institution Retention Rates

Entering semester	Returning semester	Retention rate
Fall 2006	Fall 2007	70.4%
Fall 2007	Fall 2008	70.6%
Fall 2008	Fall 2009	70.5%
Fall 2009	Fall 2010	70.5%
Fall 2010	Fall 2011	70.2%
Fall 2011	Fall 2012	70.3%

Note. Data from National Center of Education Statistics (2013b) shows retention of first-time degree-seeking undergraduates at degree-granting postsecondary institutions.

These tables give insight into the student outcomes at community colleges across America. There is a large population of community college students, and many of them will not graduate from college. Millions of students enroll at community colleges and then have poor academic outcomes. With this study, I investigated the academic

outcomes of students at a large community college and added to the national discussion of helping students earn better grades and stay in school.

Implications

The implication of this doctoral study project relates to engagement and academic outcomes at CSN. Some findings suggest that student visits to support centers are a viable route to student success. The logical implication of these findings was to increase the number of students who visit support services at CSN.

Summary

Most community college decision makers, faculty, and students share a desire to improve academic outcomes. Increasing engagement is an important part of helping more students succeed in their courses and stay in school. Increasing engagement among learners and between learners and CSN may have a significant local impact on many students. After studying the Community College Survey of Student Engagement, McClenney et al. (2012) said, “the findings from 20 years of research on undergraduate education have been unequivocal: The more actively engaged students are . . . the more likely they are to learn, to stick with their studies, and to attain their academic goals” (p. 1). In this study, I investigated the connection McClenney et al. discussed, the relationship between student engagement and student outcomes, at a particular site.

After establishing that the problem of poor academic outcomes exists at CSN, my next step was investigating the factors influencing the problem. As discussed, behaviorism is appropriate at the community college level as a guiding philosophy and for investigating community college student outcomes. Before any corrective action can

be taken, a deeper investigation into the problem and local behaviors needed to be completed. The next section of this study, Section 2, details the methodology I used to investigate the relationship between engagement behaviors and academic outcomes at a community college. In Section 3, I discuss the project that I designed to apply the study findings, and in Section 4, I reflect on my experiences and learning throughout this process. Finally, the appendices contain the actual project and supporting documents.

Section 2: The Methodology

Research Design and Approach

The study was a quantitative comparative design using archival data to evaluate if there were differences between two groups of students. As shown throughout the literature review, several investigations into student behaviors, grades, persistence, and student success (Ashby, Sadera, & McNary, 2011; Oja, 2012; Wolfle, 2012) used a similar design. In this study, the independent variable was engagement behavior where students were separated into the two groups: those who did demonstrate engagement behavior and those who did not demonstrate engagement behavior. The dependent variables were course success rate (percentage of courses passed by group members) and annual persistence rate (percentage of group members enrolled the following year). As the problem of low course completion and low persistence at CSN recurred over the last few years, the comparison of the two groups' success would lead to an initial indication if engagement behavior can address the problem.

Setting and Grouping

Population

This study's population were the CSN students ($N = 35,473$) who were enrolled in one or more for-credit courses in the Spring 2014 semester. Students within this population enrolled in a variety of courses ranging from baccalaureate degree requirements to elective courses chosen for personal enrichment. Data from this entire population was used in the study. Some community college students enroll for personal enrichment or other reasons, and they do not intend to persist in an academic program

(Mullin, 2012b). As discussed in the limitations section, this inclusion skewed persistence rate calculations; however, CSN makes the same inclusion in data reported on their online data reports.

The Facts in Brief summary includes data on school enrollment, academic outcomes, student demographics, and select academic program information for the Fall 2013 semester, but data was not available for the Spring 2014 semester (CSN IR, 2014). Therefore, a study assumption is that the study population is similar to the population enrolled during the previous semester, Fall 2013. Table 6 summarizes data from this CSN publication.

Table 6

CSN Student Demographic Data

Category	CSN student data
Unduplicated Count	36,629 Students.
Enrollment Status	25% Full-time students. 75% Part-time students.
Age Ranges	5% Under age 18. 51% Between ages of 18 and 24. 24% Between ages of 25 and 34. 15% Between ages of 35 and 49. 5% Aged 50 and up.
Residency	93% Nevada resident.
Ethnicity	11% African American. 10% Asian. 38% Caucasian. 2% Hawaiian/Pacific Islander. 26% Hispanic 4% Multi-ethnic. 1% Native American. 8% Unknown.

Note. Data from CSN Fall 2013 semester as published in Facts in Brief (CSN IR, 2014) school brochure.

As shown in Table 6, the student population at CSN is diverse, and most students are part-time students with responsibilities outside of their academic activities.

Community colleges often have diverse populations, and about 70% of community college students in America are enrolled part-time (Complete College America, 2013).

Grouping Method and Sizes

The independent variable, engagement behavior, had two categories: visited or did not visit a resource center. To assign participants to the appropriate group, CSN employees from the Institutional Research department and various resource centers reviewed and organized data from archival records. They followed written instructions regarding this study's protocols. Data used to place students in the VSS group ($n = 2,059$) included sign-in sheets, appointment records, and other data that documented that a student visited a support service. The VSS group was also separated further into categories for each engagement behavior. All other CSN students were categorized in the did not visit (DNV) a support service group ($n = 33,414$). Figure 1 shows the grouping results used in this study. Figure 2 gives additional information about the VSS group, illustrating how many students within the VSS group performed each engagement behavior.

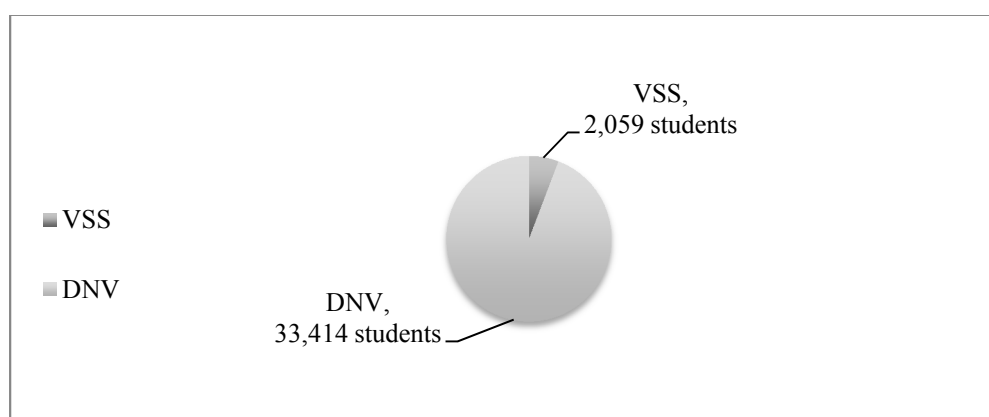


Figure 1. Population and group sizes. Data from Spring 2014 enrollment: the study population ($N = 35,473$ students), the visited support service (VSS, $n = 2,059$ students) group, and the did not visit (DNV, $n = 33,414$ students) group (J. Bearce, personal communication, June 10, 2015).

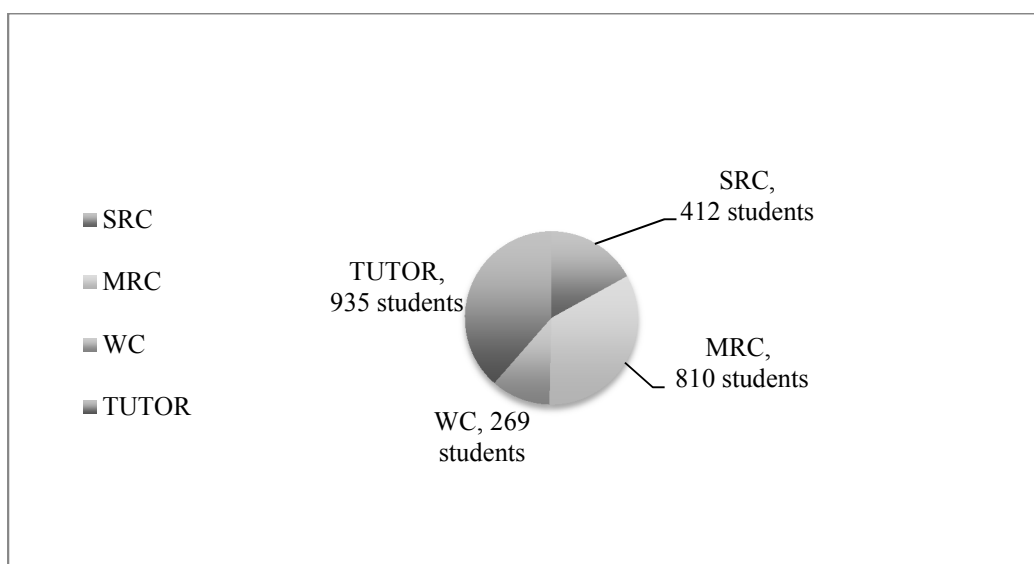


Figure 2. Subcategories within the visited support service (VSS) group. The visited support service group (VSS) consisted of 412 students who visited the Science Resource Center (SRC), 810 students who visited the Math Resource Center (MRC), 269 students who visited the Writing Center (WC), and 935 students who met with a tutor (TUTOR) during Spring 2014 semester (J. Bearce, personal communication, June 10, 2015). Combined, with duplicates removed, the VSS group consisted of 2,059 students who demonstrated an engagement behavior during the Spring 2014 semester (J. Bearce, personal communication, June 10, 2015).

Figures 1 and 2 show that the grouping method provided two large comparison groups. Grouping the VSS students together provided a large cohort to better balance the comparison between the two groups. However, by breaking the VSS group down to individual activities, I provided data relating to each support center in the study. Table 7 shows the grouping of students, codes used for each group, and the types of engagement involved with each behavior.

Table 7

Engagement Behaviors, Independent Variable (IV) Codes, and Group Codes

IV code	Behavior	Type of engagement
TUTOR	Went to one-on-one tutoring	School-Student, Student-Student, Learning Community
SRC	Visited Science Resource Center	School-Student, Student-Student, Learning Community
MRC	Visited Math Resource Center	School-Student, Student-Student, Learning Community
WC	Visited the Writing Center	School-Student, Student-Student, Learning Community
VSS	(Combining the four subcategories without duplicates)	Demonstrated an engagement behavior
DNV	Enrolled but did not visit a resource center or meet a tutor	No evidence of engagement

Note. The independent variable, demonstrating a student engagement behavior, includes interactions between students, and between a student and CSN faculty and/or programs. This table relates some specific engagement behaviors that have been documented; however, there are other engagement activities that take place at CSN. The grouping codes are visited a support service (VSS) and did not visit (DNV).

The two categories in this study are identified at the bottom of Table 7: VSS and DNV. Table 7 also shows the subcategories of the VSS group: students who met with a tutor and students who visited at least one resource center.

Instrumentation and Materials

The primary instrument used in this study was course grades assigned by instructors following standard CSN policies and rubrics. Instructors for each course recorded one of these grades: A, B, C, D, F, Pass, Incomplete, or Fail. Additionally, archival data either confirmed each participant's enrollment from year to year, or it showed no evidence of continued enrollment. I attended five meetings with the director of institutional research, the assigned institutional researcher, or the director of tutorial

services to refine the request for the exact data needed, and to ensure the applicability and validity of the data. I did not create any new survey or instrument for this study. The physical materials I needed for this study included a computer file with the requested sortable data in an electronic spreadsheet format. This computer file contained the data that made this study possible. All raw data will be kept secure and then destroyed after 5 years.

Scores in this study came from data I received from a CSN institutional research (CSN IR) employee. Specific data needed for each group included the number of students in the group, the number of students who were enrolled in any Nevada institution the following spring semester, the total number of courses each group of students enrolled in during the semester, and the number of courses with a final grade of A, B, C, or P. Each attempted course was accounted for by using group totals in the data collection, meaning a student could show success in one course and not show course success in another. These data were later used to calculate both the VSS group's and the DNV group's course success rate and annual persistence rates for the Spring 2014 semester.

After receiving the group totals from the CSN IR representative, I applied codes and arranged the scores for statistical analysis to answer the research questions. Codes relating to student engagement behaviors are included with the description of the independent variable in Table 7. Table 8 defines the codes relating to the dependent variables. Some CSN data translated directly from CSN IR data into study codes. For example, I applied the code CoAtpVSS, for the number of courses attempted by students

who visited a support service to the data I received from the institutional researcher at CSN. I used two codes for the calculations performed during the data analysis: CoSucRate (course success rate) and PerRate (persistence rate).

Table 8

Dependent Variable Codes

Variable code	Description
<u>Course success rate</u>	
CoAtp	Total number of courses attempted by students in the group.
CoSuc	Total number of courses successfully completed by students in the group, as indicated by a grade of A, B, C, or P.
CoSucRate	Calculated course success rate for the group. (CoSuc/CoAtp).
<u>Persistence rate</u>	
Enrol	Number of students in the group.
Persis	Number of students from Enrol group that enrolled at CSN or other Nevada institution the following spring semester.
PerRate	Calculated persistence rate for the group. (Persis/Enrol).

Note. These codes enabled the sorting of data within the VSS and the DNV group. The calculated data is the course success rate and persistence rate (CoSucRate and PerRate). The other codes were applied to data collected and verified by an institutional researcher at CSN.

The formula for coding was (variable code) + (group code). For example, the code I applied to the total number of courses attempted by students who visited any CSN support service was CoAtpVSS. Another example is the code for the number of courses passed by students who were enrolled but did not visit a support service, CoSucDNV. In addition to calculating results for the entire VSS group, I applied codes to each engagement behavior, as listed in Table 8. For example, the code I used for the number

of courses attempted by students who visited the Science Resource Center was CoAtpSRC.

Data Collection and Analysis

Data Collection Process

There were several procedural steps to complete before I could access nonpublic CSN data. Members of CSN's Institutional Review Board (IRB) would not accept a request for data until Walden University's IRB approved the proposal (approval number 01-08-15-0324639). I included documentation indicating that Walden IRB members had conditionally approved this study with the application to the CSN IRB. Additionally, I included a study summary and the names of CSN faculty members who would be involved with the study. After receiving CSN IRB approval to complete the study, I forwarded the e-mail to Walden's IRB to document the approval from the research site. I did not commence the data collection process until after complete and formal approval was granted from IRB officials at both schools.

A CSN institutional researcher, with the aid of a select few CSN faculty members, collected data for this study. I recruited CSN faculty members who are involved with each behavior and who had access to data identifying engaged students. The director of Tutoring Services/Resource Centers reviewed archival CSN records to generate lists of student identification numbers. The resource center director, or employees she supervised, created lists of engaged students. This CSN faculty member then forwarded this list of student ID numbers to the director of institutional research at CSN. The CSN IR director, or his staff, was able to access data using CSN IR software. Once the faculty

member submitted a list of engaged students, a CSN IR employee access transcripts for course data and generated totals for that certain list of students. The CSN researcher also collected data for the DNV group, students who were enrolled during the Spring 2014 semester but did not visit a support service.

The data released by the CSN IR representative did not contain any student identifiers, only totals for each group. All data transfers were completed via secure e-mail with security encryption. After receiving the data, my next step was adding the appropriate grouping, variable, and time codes to the data. With the group data organized, I was prepared to input the data in software and make comparisons between study groups.

Data Input

After collecting the raw data of student outcomes at CSN as a Microsoft Excel file, I transferred the data into computer files for the Statistical Package for the Social Sciences. Creswell (2012) wrote that inputting the data is an important step to ensuring the validity of a study. Each data set was double-checked to ensure accuracy while transferring data into the study file. Additionally, I inspected the study data for incomplete or missing data. There were no missing data; the CSN IR researcher supplied all data requested. The following data regarding the Spring 2014 semester were calculated or collected for each group: group size, number of these students enrolled in any Nevada institution the following spring semester, total number of courses enrolled in by group members, and the total number of courses passed by group members.

Operationalization of Variables

The use of clearly identified categorical variables adds validity to this study. Categorical data can be classified into many different scales of measurement (Lodico et al., 2010). All variables in this study are categorical and involve a nominal scale because variables separate students into distinct categories. The independent variable in this study was demonstrating engagement behavior at CSN. I used the independent variable to divide students into two categories: those who demonstrated an engagement behavior (VSS group) and those students who were enrolled but did not demonstrate one of the behaviors (DNV group). The dependent variables are course success and persistence rates.

Course Success Rate

Researchers at CSN define course success as a student enrolling in a course and earning an A, B, C, or P during the same semester (CSN IR, 2012). In other words, course success means earning a final grade of 70% or higher. A CSN faculty member assigns a grade for each course in which a student enrolled. That grade determines if the student is categorized as successful (70% or higher) or unsuccessful (69% or lower).

Calculating course success rate. According to a study by CSN's Course Completion Data Team (CSN CCDT, 2013), the following formula is used to calculate a cohort's success rate: $(\text{Success Rate}) = (\text{Total number of passing grades}) / (\text{Total number of grades})$. The results are reported as a two-digit percentage rounded to the tenths position. This study used this same formula to calculate course success rate for the VSS and DNV groups.

Data used to calculate course success rate. To calculate course success rates, data must reveal the total number of *courses* enrolled in for the semester and the number of those courses in which students earned a final letter grade of A, B, C, or P. These data were required for each group.

Persistence Rate

Persistence relates to a student's continued enrollment and is measured by researchers at CSN at two time intervals. Next-term persistence is the percentage of students who enroll at CSN during the spring semester immediately following their enrollment in the fall semester (CSN IR, 2010b). Persistence is also measured annually at CSN. The institutional definition of annual persistence rates is the percentage of students enrolling in a higher education program in Nevada the fall semester the year following their first fall semester (NSHE, 2016). I investigated CSN's annual persistence rate and determined the percentage of students who persisted from one year to the following year. All references in this study are to CSN student's annual persistence rates and not semester persistence rates. Because data collected involved the Spring 2014 semester, annual persistence rates were calculated as the percentage of students from the Spring 2014 semester enrolled during the Spring 2015 semester.

Calculating persistence rate. CSN has a dedicated Persistence Data Team (PDT) analyzing data for trends and outcomes of CSN students relating to student persistence. The PDT used this formula to calculate a group's annual persistence rate: $(\text{number of students retained} + \text{number of students who graduated}) / \text{number of students in cohort}$ (CSN PDT, 2013). The PDT reports results as a percentage rounded to the

tenths position. For example, 46.6% of all CSN students persisted in a pilot study using 2009-2010 data (CSN PDT, 2013). I used this same formula to calculate persistence rates for each study group.

Data used to calculate persistence rates. Data needed to calculate persistence rates included the total number of enrolled students, the number of students who continued their enrollment from the Spring 2014 to the Spring 2015 semesters and how many of those students earned a certificate or degree during the study's timeframe.

Explanation of Analyses

I used the Statistical Package for the Social Sciences (SPSS) to complete the descriptive and inferential analysis in this study. The descriptive analysis revealed information about each group and variable. Descriptive statistics reported the number of students in each group and details such as the number of courses attempted in a semester. I also used inferential analysis to compare groups in terms of course success and annual persistence rates. The significance level was set at .05, indicating there was a 5% chance or less of that the findings were due to chance (Creswell, 2012). Creswell (2012) reported this significance level is typical in academic research. I completed independent samples *t* tests to compare the data and evaluate for significant differences between the two groups. Independent samples *t* tests are appropriate to evaluate significance in differences between group averages (Triola, 2012). Results of these analyses were then applied to each research question.

Data Analysis Results

Table 9 includes data released by the director of the CSN Institutional Research department as a report entitled Whaley Data (J. Bearce, personal communication, June 10, 2015). Since this report is a personal communication, I included all data received from CSN in Table 9.

Table 9

Data Collected From CSN IR

Engagement behavior	Group size	Persisted	Courses attempted	Courses passed
Went to the SRC	412	238	1,112	870
Went to the MRC	810	424	2,324	1,794
Went to the WC	269	139	801	666
Met with a Tutor	935	495	2,570	1,891
VSS Group Total	2,059	1,092	5,750	4,428
DNV Group Total	33,414	14,336	83,054	58,812

Note. Table data summarized from data released by Institutional Research department (J. Bearce, personal communication, June 10, 2015). Codes include Science Resource Center (SRC), Math Resource Center (MRC), Writing Center (WC), visited support service (VSS), and did not visit (DNV).

To begin analyzing the data, I isolated the two main study groups: VSS and DNV. I rearranged the group totals and calculated group course success rates and annual persistence rates. By rearranging the data, I was able to address each research question.

Course Success Rates: Research Question 1

The first research question examines the course success rates of each group. The specific research question and hypotheses were:

RQ1: What is the difference in course success as measured by the percentage of passing grades between CSN students who exhibited engagement behavior and CSN students who did not?

H₀1: There is no significant difference in course success between CSN students who have demonstrated engagement behavior and students who did not in terms of course success rates at CSN.

H₁1: There is a significant difference between students who have demonstrated engagement behavior and students who did not exhibit engagement behavior in terms of course success rates at CSN.

Analysis of Course Success Rates

Every engagement behavior group in the study had a higher course success rate than the group of students who did not display one of these engagement behaviors. Comparing each group to the DNV group, the increased course success rate varies from + 2.8% (students who met with a tutor) to + 12.4% (students who went to the Writing Center). Combined, students in the VSS group were successful in 77% of their courses, compared to the approximately 71% course success rate of students in the DNV group. There were roughly 89,000 courses attempted by students in this study. Figure 3 displays the course success rates of study groups, while Table 10 shows the actual data. This large amount of data adds validity and applicability to this study.

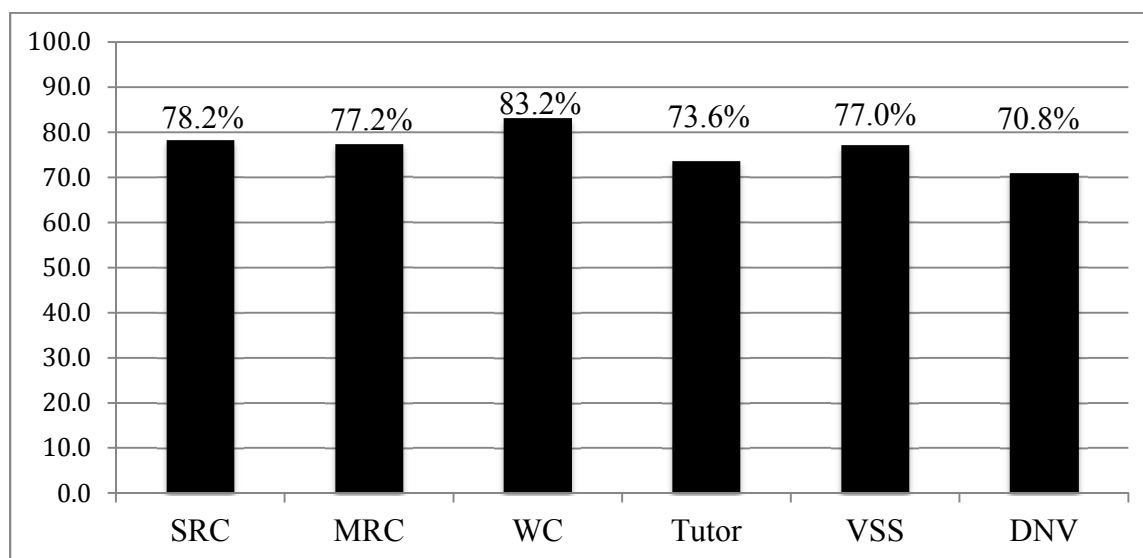


Figure 3. Course success rates. Course success rates are the percentages of courses passed by members of each group. Students who visited support service (VSS) passed 77.0% of courses and students who did not visit (DNV) a support service passed 70.8% of their courses (J. Bearce, personal communication, June 10, 2015).

Table 10

Course Success Rate Data and Calculations

Engagement behavior	Courses attempted	Courses passed	Course success rate
Students who went to the SRC	1,112	870	78.2%
Students who went to the MRC	2,324	1,794	77.2%
Students who went to the WC	801	666	83.2%
Students who met with a Tutor	2,570	1,891	73.6%
VSS group totals	5,750	4,428	77.0%
DNV – did not visit	83,054	58,812	70.8%

Note. Table data summarized from data released by Institutional Research department as a report entitled Whaley Data and delivered to me through secure intracompany e-mail (J. Bearce, personal communication, June 10, 2015). I calculated course success rates by dividing the number of courses passed by each group by the number of courses attempted by group members.

Results of RQ1

The results of the t tests indicate there are significant increases in the course success rates between the DNV group and four out of five other groups. While statistically not significant, the students who visited the Writing Center ($n = 269$) passed 83.2% of their courses compared to the DNV rate of 70.8%. The VSS group, those who met with a tutor, students who went to the Science Resource Center, and students who went to the Math Resource Center all passed a higher percentage of courses than the DNV group. Table 11 shows the results of the inferential analysis of RQ1.

Table 11

Independent Samples t tests Levels of Significance

	VSS	Tutor	SRC	MRC	WC
Course Success Rate	.027*	.012*	.032*	.027*	.051

Note. Table of significance levels (2-tailed) as the DNV group was compared to each other grouping. Results within a 95% confidence interval are indicated above*.

The results support the directional hypotheses: There is a significant difference between students who have demonstrated engagement behavior and other students in terms of course success rates at CSN.

Annual Persistence Rates: Research Question 2

I calculated annual persistence rates, meaning I tracked student enrollment from the Spring 2014 semester to the Spring 2015 semester. The second research question inquires:

RQ2: What is the difference in persistence as measured by the percentage of students enrolled the following year between CSN students who exhibited engagement behavior and CSN students who did not?

H_02 : There is no significant difference between students who have demonstrated engagement behavior and other students in terms of persistence rates at CSN.

H_12 : There is a significant difference between students who have demonstrated engagement behavior and other students in terms of persistence rates at CSN.

Analysis of Annual Persistence Rates

Every engagement behavior group had a numerically higher annual persistence rate than the group of students who did not display one of these engagement behaviors, however, inferential testing did not indicate these differences are significant. Combined, 53% of students in the VSS group persisted, compared to approximately 43% of the DNV group. When comparing each behavior to DNV group, the increased persistence rate varies from + 8.8% (Students who went to the Writing Center), to + 14.9% (students who went to the Science Resource Center). Figure 4 displays the annual persistence rates of study groups, while Table 12 shows the actual data.

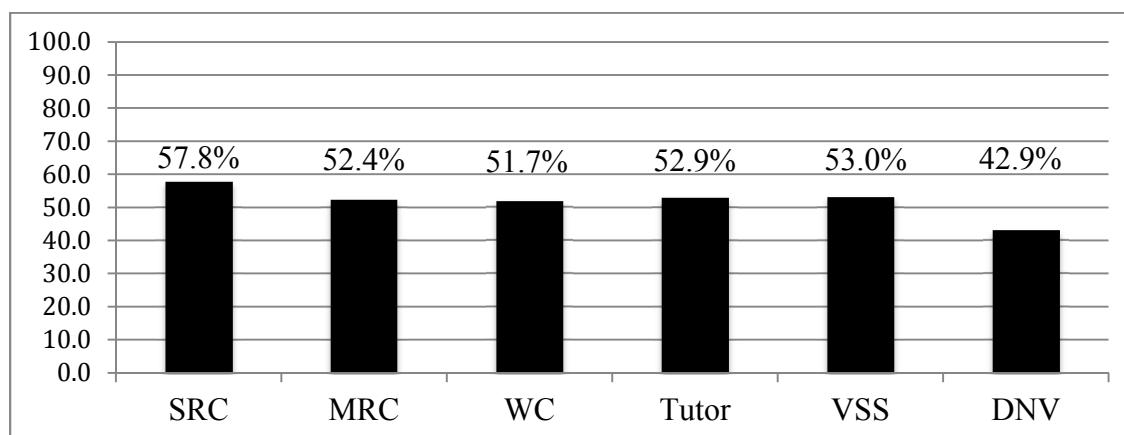


Figure 4. Annual persistence rates. Annual persistence rates for each subcategory, the visited support service (VSS, 53.0%) group, and the did not visit (DNV, 42.9%) group (J. Bearce, personal communication, June 10, 2015).

Table 12

Persistence Rates Data and Calculations

	Group size	Persisted	Persistence rate
Students who went to the SRC	412	238	57.8%
Students who went to the MRC	810	424	52.4%
Students who went to the WC	269	139	51.7%
Students who met with a tutor	935	495	53.0%
VSS group	2,059	1,092	53.0%
DNV group	33,414	14,336	42.9%

Note. I calculated annual persistence rates by dividing the number of students enrolled the following fall semester in each group by the number of group members. Data for group size and number of students who persisted provided by CSN IR (J. Bearce, personal communication, June 10, 2015).

While Figure 4 shows a higher persistence rate in all engaged groups, *t* tests did not calculate these as significant differences. The results of the inferential statistics are in

Table 13.

Table 13

Independent Samples t tests Levels of Significance

	VSS	Tutor	SRC	MRC	WC
Persistence Rate	.067	.066	.093	.063	.059

Note. Table of significance levels (2-tailed) as the DNV group was compared to each other grouping. Results within a 95% confidence interval are indicated above*.

Results of RQ2

Inferential results do not reject the null hypotheses, so evidence supports the statement that there are not significant differences between the persistence rates of those students who visit a support service and those who do not. These results do not provide a complete picture because the data shows that 53% of engaged students persisted while 42.9% of students in the DNV group persisted.

Summary of Results and Analysis

I compared the DNV group ($n = 33,414$) to the VSS group ($n = 2,059$) to evaluate for differences in course success and/or persistence rates. Additionally, I made comparisons of the course success and persistence rates between the DNV group and each subcategory of engagement behavior: Tutor ($n = 935$), SRC ($n = 412$), MRC ($n = 810$), and WC ($n = 269$). The results of independent samples t tests indicated a statistical significance in the difference in the course success rates between the students in the (VSS) group and the (DNV) group, $t(1) = 23.84, p = .027$. Additionally, four engaged groups showed significantly higher course success rates. Students who complete an engagement behavior at CSN pass significantly more courses at CSN. This supports

research question one's directional hypothesis: Students who visit an academic support center have significantly higher course rates compared to students who do not visit a support center.

Data relating to the persistence rates was more challenging to evaluate than that from the first research question. The DNV persistence rates were numerically lower than the VSS and all subcategories of engagement, but the *t* tests did not indicate there was significance to these differences. While the inferential testing did not indicate significant differences between the groups, a 10% higher persistence rate among engaged students seems to suggest that student engagement helps some students to persist. In sum, students who visited support services did pass a higher percentage of courses than students who did not visit a resource center. These results are not causative; there is no indication that the support service visit directly caused students to pass more courses or stay in school. Moore warned that a behavioral framework applied to a study is, "best regarded as useful descriptions of their observations of and interactions" (Conclusion, 2010). This framework allows for research to take place but makes it difficult to identify causal relationships. Students can succeed without formal academic support. However, the results do indicate that students who visit support services can pass their courses and continue their education.

Assumptions, Limitations, Scope, and Delimitations

Assumptions

The most substantial assumption I made during this study was assuming the grades reported by CSN instructors were assigned fairly and according to CSN's grading

policy and appropriate rubrics. Another assumption involved the work of recruited CSN faculty members assisting with the study; I assumed their work was accurate and complete. Regarding CSN students, I assumed the study's population of Spring 2014 enrollees was similar to the student cohort of other semesters. Additionally, I assumed that only a few students might have persisted and enrolled outside of my knowledge, such as students who moved out of the country.

Professional researchers within the Institutional Research department at CSN gathered most raw data for this study, and I assumed that their work is accurate and valid. Some study data came from public records. Public records are valuable tools but can also be a danger to validity. Public records such as school records are considered "factual information" (Creswell, 2012, p. 152) and are common types of quantitative measures for evaluating a sample or population. Creswell (2012) warned that public data are not always collected carefully, so the methods need to be reviewed for validity measures. The records that CSN publishes online contain the same data that the school reports to accrediting agencies (CSN IR, 2012). The large amount of data, tracking over 35,000 students and almost 90,000 attempted courses, is a powerful asset to the study; however, using data collected by someone else does expose the study findings to some degree of scrutiny.

Limitations

While every attempt was made to secure validity, there were potential limitations to this study. Some previous research has been criticized for its criteria used to classify students as engaged or nonengaged (McClenney et al., 2012). I could not go to a student

resource center to identify members of the engaged group because of the timeframe needed to calculate annual persistence rates. I needed the CSN faculty members to generate the lists of students who demonstrated engagement behaviors during previous semesters, but recruiting faculty added steps to the data collection process, substantial time to complete the data collection, and limitations to the study.

The data collected by CSN researchers and employees included all enrolled students and did not separate out students enrolled in nondegree-seeking courses. Some community college students attend courses for personal enrichment without a desire to persist beyond the length of one term (Mullin, 2012b). Including these students in the data collection skewed m persistence rate calculations.

Another limitation of this study involved the multiple factors that influence student outcomes besides engagement behaviors. Extraneous variables are factors that may influence student behaviors and provide other explanations for the study results (Creswell, 2012). Adult learners cite many reasons for being unsuccessful in a course including being academically unprepared for the workload, working too many hours, and financial demands (Lloyd & Eckhardt, 2010). Because this research involved quantitative data and historical records, it was not possible to account for all of the factors that were related to the student outcomes.

Additionally, student engagement includes many areas that are difficult to track. A student is engaged with his/her school and curriculum when he or she asks an instructor questions. There are also varying levels of engagement. Some students ask several questions during class while other students only ask questions occasionally. A

student is engaged with other students during study groups and informal discussions about classroom topics. These and other examples of engagement happen every day at CSN. Indeed, there are more engaged students than those selected in this study's engaged group. Because of this abundance of informal engagement, it is understood that the adult learners in the engaged group are not the only engaged students at CSN.

Finally, there was a limitation to the study created by not separating students by motivations for visiting a support service. It is possible that many "at-risk" students were led to student service visits by routes such as Student Success Programs and New Student Orientations. During the enrollment process, many students are identified as in need of academic support and receive additional academic success coaching. In other words, perhaps the VSS group members had been told to visit a support service while the DNV students were never instructed to visit a support service. This could create a skewed selection process because the VSS group could contain students with additional experiences not found within the DNV group.

Scope

The use of data from only one semester at CSN defined the study's scope. The director of institutional research suggested this focused timeframe to provide the data in a timely manner.

Delimitations

The delimitations of the study were that it only included students in one school enrolled at a specific time. Furthermore, the focus of this research was on specific

engagement behaviors and academic outcomes, noting that other variables outside this scope could account for differences in these academic outcomes.

Outcomes Within DNV Group

Many CSN students who did not visit a support service achieved academic success. The study's engagement behaviors provided the evidence used to classify students into either the visited support service (VSS) group or they did not visit (DNV) group. As discussed in Section 1, there are many other engagement behaviors that students do other than visiting an academic support center. This is why I named this group, "*did not visit*," rather than, "*not engaged*." There are probably students within the DNV group who were members of school clubs and organizations, studied and discussed curriculum with teachers and other students, and engaged classmates. I used this grouping method because it was an efficient way to categorize students. I avoided separating students and labeling one group of students as engaged and the other group as students not engaged.

Many students within the DNV group passed their courses and persisted at CSN. Table 10 shows that members of this group passed almost 59,000 courses in the Spring 2015 semester and 14,336 of these students persisted from Spring 2014 to Spring 2015. Many students are successful at CSN and never visit a support service or schedule an appointment with a tutor (S. Keller, personal communication, April 1, 2015). One could conclude that there are pathways to academic success that do not include formal academic support.

Ethical Considerations

I protected the participants and study setting from harm. An institutional researcher performed the grouping of students within the study. The data I received and analyzed did not have student names or identification numbers, so no adult learner was at risk of being publically identified during the study or reporting of findings. Some of the study's data came from public data, so there was not a need for informed consent for that portion of the study. Furthermore, all nonpublic data from CSN's Institutional Research department were group totals only so no informed consent was necessary for this data. Using group totals preserved student anonymity. There were no data about specific times the participants performed the behaviors so participants cannot be indirectly identified. For example, there were no data about students who visited the Science Resource Center on May 12, just totals for all students who visited that resource center during the spring semester. There were no known risks associated with this study. The expected benefits associated with participation are the improved understanding of the influence engagement behaviors have on academic outcomes.

During the completion of the doctoral study, I held dual roles as a researcher and CSN faculty member. I began teaching biology labs at CSN in January 2011 and continued to work there until May 2015. During this timeframe, I also worked on this capstone project. I taught an average of ten courses per year, each with an enrollment of about 22 students. I also worked up to seven hours per week with students in the Tutoring Center and Science Resource Center during the Fall 2014 and Spring 2015

semesters. I avoided researcher bias by creating a study design utilizing group data and not involving individual student results or records.

I also took additional measures to maintain the safety and integrity of study data and materials. I kept electronic data secure using computer files with password protection, as well as the laptop itself was password protected. I have not, nor will not, granted access to any data, researcher notes, or nonpublished materials, except to proper governing agencies. I secured all physical study materials in a lock box during and after the study was completed. At no point was the integrity of the study or confidentiality of the participants compromised. I will keep the data for 5 years and then properly destroy it.

Section 3: The Project

Introduction

This section describes in detail the project developed as a result of this study, with the actual project located in Appendix A. This section begins with a brief overview of the project, provides the specific project goals, and presents the rationale behind the project components. This project is based on the results of the study described in Sections 1 and 2. The project is an application of the study findings and an attempt to address the problem at the local level. The included literature review guided project development. Also, I created an implementation plan to complete the project and apply the study results.

Project Description

The project created to apply the study findings is a new training program, Supporting Our Students at CSN (SOS@CSN). The target audience for this project includes CSN faculty and support service staff (i.e., tutors, computer center assistants, and other positions often occupied by CSN students). This project was designed and developed as an effort to increase students' usage of support services at CSN. The research study that led to this project indicated that this increased usage could improve academic outcomes. The anticipated project outcome was to support the learning community at CSN by increasing interactions among students and between students and CSN support service employees. In addition to increasing engagement at CSN, this new training program also serves as a vehicle to encourage the increased use of existing support structures.

Just as a behavioral framework guided the research study, this framework aided the project development process. Brock (2010) studied several schools and concluded that changes in school policies and student behaviors have led to improvements in both course success and persistence rates. Behavioral frameworks involve specific behaviors that are observable (Knowles, Holton, & Swanson, 2012). The president of St. Petersburg College in Florida used a similar behavioral approach to address the problem when “far too few of our students were finishing their courses with a ‘C’ or better” (Law, 2014, p. 1). Using behavioral approaches helped more students earn passing grades and continue their enrollment at that school in Florida (Law, 2014). The behaviors encouraged in this project are visiting support services, meeting with tutors, and utilizing existing support services at CSN.

Learning Objectives

Learning objectives (LO) are specific statements of what is to be learned from a program (Dean, 2004). This program was created to have SOS@CSN attendees learn specific items and do specific things. Typically, LOs fall into three categories: behavioral, content, and problem-centered objectives (Dean, 2004). The LOs for SOS@CSN attendees fall into all three of these categories. As discussed in Appendix A, the LOs for SOS@CSN attendees are listed in Table 14.

Table 14

*SOS@CSN Learning Objectives*Behavioral learning objectives

1. Create a 90 second elevator pitch to explain why a student should visit a CAS.
2. Demonstrate the ability to refer CSN students to attend their first visit at a CAS.
3. Create a pirate-themed treasure map showing students how to locate a CAS.
4. Perform and support behaviors that encourage engagement among CSN students, between students and school programs, and between students and course content.

Content learning objectives

5. Know the location and operating hours of a CAS.
6. Understand most common pathways that lead to CSN students visiting a CAS for the first time.
7. Distinguish and explain the difference between walk-in support and CAS services that must be scheduled in advance.
8. Possess enough knowledge of various CAS centers to refer students to the best support service for them.

Problem-centered objectives

9. Increase first-time visits to CASs.
10. Increase the total number of student visits to CASs.

Note. CAS refers to a Center of Academic Success. CSN faculty and staff members should achieve these learning objectives by the end of their attendance at a SOS@CSN program.

I explain these LOs further in Appendix A. The grouping of LO categories is explained below. Each LO is referenced by their sequence in Table 14.

Behavioral Learning Objectives

Meeting behavioral LOs includes attendees demonstrating a specific and observable behavior. Writing and presenting an elevator pitch (LO1) is a very specific behavior. Additionally, practicing a referral dialogue (LO2) is also a behavioral-based objective. Talking to others is a standard behavior within adult learning. Creating a

pirate-themed map to CAS locations (LO3) is an interesting engagement activity in the SOS@CSN program. The least specific objective includes supporting and performing engagement activities among the CSN community (LO4). All of these objectives, (LO1–4), include observable behaviors. If the attendee completes these behaviors, or has the potential to complete them when appropriate, the LOs would be considered met.

Content Learning Objectives

Four of the LOs (LO5, 6, 7, 8) relate to attendees learning particular data from their SOS@CSN attendance. Learning the location and operating hours of CSN academic support centers (LO5) is a content-centered objective supported by handouts given to SOS@CSN attendees. Also, considerable program time is dedicated to helping attendees understand the common pathways for students to visit a CAS (LO6). Other program content that attendees should learn include the difference between walk-in and prescheduled support services (LO7). With several guest presenters and a tour of one or more CAS center, SOS@CSN attendees have ample opportunity to master knowledge of available CAS services so the attendee can best refer a student to the appropriate support service (LO8).

Problem-Centered Learning Objectives

Problem-centered objectives apply program content in hopes of solving a specific problem (Dean, 2004). Increasing the number of first-time student visits to a CAS (LO9) and increasing the total number of student visits to a CAS (LO10) are both problem-centered objectives. These two objectives (LO9, LO10) are my attempt to address the

problem that is the focus of this study: encouraging action that results in more CSN student success.

Project Support

My goal in producing this project was the creation of the script, PowerPoint, handouts, and all materials needed to present the three-day training program. The overarching goal of the project is to use the three-day training program to provide CSN faculty members with the resources necessary to guide students to the appropriate support services. If the faculty members are successful in this endeavor, the research that prompted this project indicates that both student success and student persistence should be enhanced. Establishing the budget and funding for the project is an important part of reaching these goals. Also, building the networks and gaining faculty support are necessary to complete this project. Establishing the proper support structures for this project was not only important in the project development stage, but might give the project the opportunity to grow into a significant portion of support services at CSN.

Budget and Funding

An important part of creating this project was addressing the costs of establishing a new training program and then completing the three-day program every year. The Student Support Services department already offers several one-hour training programs as well as an annual half-day training program for all CSN faculty members and staff members. The existing budget provides support for short training sessions, but this would have to be expanded for a three-day program. One option for the budget for this project would be to replace the numerous short training programs currently in existence

with this project. This option would not require any additional funding, only a realignment of resources within the existing budget. Additionally, this option would provide for continued support for this program to meet the goal of presenting this project every fall semester. While combining all existing training programs into one three-day class is an option, it is not the most likely route to project implementation.

A more challenging method of implementing this program would involve budgeting for this project in addition to all existing support services training programs. CSN's policy that faculty members and staff members must have annual training could be used to justify the creation of this new project. Most CSN faculty members are salaried employees. However, many employees in the Student Services department are hourly employees. This means that about half of the project attendees would have to be paid to attend the three-day sessions. To achieve this method of implementation, additional funding would have to be approved by the vice president of student services and provided by a redistribution of existing funding. The need for additional external funding was a common finding when an NSHE committee completed an intense review of several CSN programs (Office of Academic and Student Affairs, Nevada Board of Regents, 2011). The needs of additional funding and the restructuring of existing budgeting make it unlikely that this project will be implemented in its entirety.

Either option described above could ensure that this project is implemented at CSN. Specific needs for this project would include three-day access to a classroom, the equipment to present the PowerPoint presentation, and, most importantly, access to current employees who would be paid to attend the three-day session. Other costs of this

program might include providing drinks and snacks for attendees. Hopefully, the administrators will approve the needed funding because of their commitment to student success.

In addition to budgeting and funding information, the return on investment (ROI) is key to modern institutions. Community college leaders must consider the ROI, which relates to the financial and measurable results that are connected to a specific spending of resources (Mullin, 2010). The ROI for this project would involve both monetary and nonmonetary results. If implemented, this project could encourage more students to pass courses or stay enrolled longer at CSN. This would result in increased income for the school. Implementing this project could also result in returns that are harder to measure. If more students were successful, there could be increased standing within the community, more students might graduate and become leaders in local industry, and more families in the community could experience the positive impact of a college education (Barnes, 2014). There are ample indications that implementing this project could positively impact the CSN community.

Faculty and Administrative Associations

Building strong associations among CSN faculty members and administrators will be crucial to achieving the mission of funneling students into appropriate existing support services. Adding a new three-day training program to an institution with ample existing services is a complicated task. There are many obstacles to completing a program of this size, and the best way to overcome these difficulties is by incorporating the aid of school administrators, faculty members, and stakeholders (Caffarella, 2010). To accomplish

this, I collaborated with several key CSN administrators during the project-planning phase. For example, CSN's manager of tutorial services offered great insight into existing CSN procedures and ways to increase students' utilization of one-on-one tutoring and the walk-in tutoring services already in existence. In addition, CSN's director of institutional research informed the project development by explaining current data collection and analysis procedures at CSN. Several current CSN teachers shared experiences that also shaped the project development process. Building associations with CSN administrators and faculty members have been crucial to the project development process and will continue to be an important factor in the success of SOS@CSN. Using a cooperative approach, that is, utilizing input from various college administrators and drawing on stated institutional goals and missions, is important because it keeps new programs in alignment with the vision of college leaders (Nevarez & Wood, 2012). Supporting students is already an integral part of the CSN organization and learning community; this project provides a structured mechanism for this support to reach new levels.

Scholarly Rationale of Why the Project Genre was Chosen

As a genre, creating a project is a good fit because it applies the study findings to the problem being investigated. Project-based learning can be an effective way to transfer knowledge gained into applied knowledge (Ntombela, 2015). It is usual for studies into academic outcomes to culminate with presentations to school boards or decision makers (Lodico et al., 2010). Another alternative product from the study could involve expanding the study findings into a comparison of CSN results with other large

community colleges. These and other options would have been an appropriate next step to concluding this study. After reviewing all options, I selected the project genre because it is the best way to apply the study findings in a way that could produce immediate action to address the local problem.

Scholarly Rationale of how the Project Addresses the Problem

The creation of a new training program is an appropriate way to address the problems investigated in this study. The content of this project fits the problem of poor academic outcomes at CSN because it incorporates results from the study and provides a logical solution. Completing problem-based research and relating the findings to the program development is an effective way to make sure there is congruency between the action being taken and the problem being addressed (Ellis & Levy, 2008). Both the study findings and the literature suggest that specific behaviors are related to higher course success and annual persistence rates. According to the study, involvement in certain engagement behaviors improves the likelihood of earning a passing course grade, staying in school from one year to the next, or both. The project takes these findings and applies them to encourage specific student behaviors that may help more CSN students succeed.

Project Related Literature Review

While the project is a direct result of this study's findings, project design and development was also an informed process, relying on a mixture of peer-reviewed and regulatory publications. For example, the study indicated that students should engage with other students socially and to specifically discuss classroom material. Creating these student-student interactions is a behavior to be encouraged, so literature was reviewed to

investigate ways other scholars have successfully influenced student behaviors. Establishing a new training program is a large undertaking and the literature review provided valuable tools to learn from other successful projects.

The procedures of this literature review were similar to those discussed in Sections 1 and 2. The primary research tool was Google Scholar searches linked to the Walden University account. This method provided current research and helped identify which articles could be accessed. Specific search terms and Booleans included: *project genre, academic outcomes, academic success, student support, and training programs*. To ensure I reached saturation during the literature review, reference lists from each article read were reviewed for additional research. The literature review process was crucial because it informed the project development.

Study Findings and Project Concept

As discussed in Section 2, this study's findings that engagement behaviors can affect academic outcomes are a common model in adult education. The American Association of Community Colleges (AACC) is an organization that investigates academic outcomes. Findings from the AACC indicated that the problem of poor grades and low persistence is being addressed at many community colleges across America (AACC, 2012). Another AACC (2014) study indicated that many community college students are engaged in various "highly effective" (para. 1) programs such as new student orientation, student success courses, or learning community activities. Tinto (2004) suggested that institutional support systems are vital during the first year of a student's career. To that end, many programs at colleges and universities attempt to build

engagement into the student's experiences during that period (Tinto). There is ample evidence of a relationship between engagement programs and academic outcomes. This study, research from colleges across America, and common practices all suggest engagement is important for student success; thus, supporting the creation of a project that applies the findings.

Problem Guiding Project Content

Other large community colleges have implemented behavioral-based programs in attempts to increase engagement and student success. The Achieving the Dream (ATD) program includes "a network of more than 200 community colleges . . . optimizes to promote and support student success" (Harrill, Lawton, & Fabianke, 2015, p. 11). Lessons learned from these ATD institutions include the need for planning and a long-term vision. While one large community college organization attempted to redefine its direction, it was reported, "at times it has felt like the colleges are building the plane while moving down the runway" (Harrill et al., 2015, p. 13). While it took substantial efforts by faculty members and decision makers at this community college, the result was measurable improvements in student course success and persistence (Harrill et al., 2015). CSN is an ATD institution, and CSN employees are in the process of collecting student data to measure course success, persistence rates, and program completion rates for students (CSN Student Success, March 2014). This data will be helpful as CSN progresses from the first step of the ATD process, quantitative data collection, to the next step of applying programs to increase student success measures (Barnes, 2014). The

widespread use of behavioral frameworks in community colleges supports this program content and development.

Guiding Project Development

The project development process aligned with other efforts to address the local problem. During the fall 2015 semester, CSN employees distributed paper copies of two public letters from the NSHE Board of Regents regarding a change in the Chairman of the Board position. I could not locate these two letters on NSHE websites; however, Western Nevada College shared the outgoing statement on its school blog (Page, 2015). The letters from the outgoing chairman of the board (Page, 2015) and incoming president (Trachok, 2015) both express a commitment to adult learning in Nevada. A Regents Community College Committee was formed to “more closely align our workforce training with our business community” (Trachok, July 6, 2015, para. 3). The Chairman also reported efforts to support, “the critical mission of our community colleges to build and expand a skilled and creative workforce” (Trachok, July 6, 2015, para. 8). The importance of these actions is shown in efforts by the previous board chairman as well who wrote a need of, “providing the state with an improved, more stable, and well-educated workforce” (Page, 2015, para. 2). Since CSN has provided adult education in Las Vegas for over 40 years, and with CSN being the largest school in the state, the relationship between CSN student success and the Las Vegas and Nevada economy is well established.

There is also evidence of the need for student support services. The main goal of the NSHE aligned with the project development process because, “the System’s

collective goal is student success” (Trachok, July 6, 2015, para. 8). The application of study findings within this study’s project is in direct alignment with the Board of Regents’ collective desire to increase student success. This alignment was also guided by cooperation from a CSN Tutorial Services Manager who earned an Excellence Award from the National Institute of Staff and Organizational Development (CSN, 2014). This local stakeholder helped ensure the project contents were in alignment with the local problem. In addition, the project is in alignment with the CSN president’s desire to “help all students get the services they need” (K. Richards, personal communication, February 2, 2015). This project’s development was guided by ample evidence that student support services are vital to student success at CSN.

Behavioral Framework and Project Content

The content of the project was aligned with the behavioral framework since this was the guiding frame for the study. There are several engaging behaviors encouraged by the presenter and project created to apply the study findings. The icebreaker of the three-day training program includes having the attendees physically active and moving around the room. Attendees are instructed to meet someone on the other side of the presentation room and shake hands, an observable behavior. While exact definitions have varied over the last 80 years, behaviorism has always relied on observable behaviors and objective data (Moore, 2011). Another behavior encouraged by the project content is engaging other people by completing a group assignment. Having students work in groups is a behavior that has been shown to be associated with increased engagement within a classroom (Samson, 2015). The project activities also include attendees

completing surveys about perceived behaviors, then providing results to the attendees about common student behaviors that could be encouraged. Even the slideshow content was designed to be engaging, with various slide transitions and multimedia that encourages the attendees to mentally engage with the training program. The behavioral framework provided continuity as the study was designed, completed, and the findings applied.

Project Implementation

Implementing the project would be a massive undertaking for any school, but one that could be worth the effort. This section describes the substantial amount of groundwork completed while designing the project. Gaining acceptance by the decision makers within governing bodies was another task shaped by the literature. Reviewing the literature also guided the budgeting and support structure process of the new training program. In addition to summarizing these steps, this section provides an implementation plan and a reasonable timetable for the enactment of the new training program at CSN.

Needed Resources, Existing Support, and Potential Barriers

There are many resources needed to create and complete a new training program. Physical materials needed include a meeting place such as a conference room with appropriate seating, a projector, and modern computer equipment. Other materials will include printed materials for handouts and record keeping. Each day of the training program should have refreshments, so there needs to be a budget for coffee, pastries, and water. While securing resources is difficult in the modern era of tight budgets, it is not the only potential barrier to success.

The research study that prompted this project clearly indicated that utilizing existing CSN structures is key to improving student success. For this reason, establishing the SOS@CSN training program could become a valuable asset to CSN. A strong argument for CSN leaders to implement this program is that it involves guiding CSN students to existing support services that may help them succeed in school. This integration of services also creates a barrier to implementing this project. One could argue that CSN does not need a new training program to funnel students into existing organizations. To avoid this issue, consulting with stakeholders will be an integral part of the project development and implementation. While guiding students into existing services is an important goal, the heart of this program is increasing engagement among CSN students as well as between these students and CSN support services.

Implementation Plan and Timetable

The most important part of implementing the project is gaining approval from CSN administrators to become a new training program. The training program will take place before each fall semester, during CSN's weeklong faculty training event called Convocation. It is hoped that approval from CSN administrators will be granted at the same time as Walden administrators accept completion of this Capstone. If so, implementation could begin the following fall. In addition to the first time the project is completed, attention is needed to ensure the training program becomes part of the annual training at CSN. Harrill et al. (2015) wrote, "one of the greatest challenges to engagement is initiative fatigue" (p. 11), meaning the program starts strong but soon fades away and eventually is canceled. This training program is designed to be repeated

in future academic years, and the program content is intended to be modified as needed to ensure alignment between the training program content and the goal of increasing engagement behaviors and student success.

Roles and Responsibilities of Others and Myself

My primary role is researcher and project developer. My responsibilities will end after Walden University representatives approve my final Capstone Project and award me the title Doctor of Education. My responsibilities will not include presenting SOS@CSN to CSN faculty, nor am I responsible for CSN administrator's acceptance of the training program. Presenting the training program will be the duties of a full-time employee of CSN. My responsibilities are to develop the procedures, guidelines, and structure for a successful new program, but I will not be involved beyond presenting the idea to CSN decision makers.

The full-time CSN employee responsible for completing this program will most likely be a support service employee who reports to the director of Student Services or the vice president of Student Affairs at CSN. This employee would also be responsible for the operations, continuing budgeting and financial concerns, and nurturing relationships with CSN faculty members, administrators, and student support services personnel. This employee would also update the SOS@CSN content to keep the program fresh and applicable. I will provide an e-mail address so the CSN employee can contact me for support during the first year of SOS@CSN. Another important responsibility of the employee is ensuring all governing and regulatory guidelines are followed to maintain status with CSN.

Inclusion of Key Stakeholders

There are two important stakeholder groups who will be impacted by this project: CSN employees and CSN students. Both of these stakeholder groups were involved in the planning and operation of this project. Stakeholders who are also employees include staff members, faculty members, and administrators (Noel & Earwicker, 2015). For CSN administrators, this new project may provide factual, data-driven evidence of improved academic outcomes. It is common for school leaders to seek data to demonstrate effectiveness to school boards, governing agencies, and to acquire outside funding (Witt & Kieffer, 2013). Implementing this program and tracking the impact could provide evidence that CSN is making progress toward increasing student success and secure funding for this and other CSN programs. CSN's reputation could also benefit by becoming a more successful organization because the school could become known as an exemplary institution with support organizations that increase student success.

CSN students are the other key stakeholders in this project and my inspiration for creating it. It is the CSN commuter student whose future is on the line. These students have dreams of success and a better life through higher education. These students are the most important stakeholders in creating a new program because they are the ones who could benefit the most.

Project Evaluation Plan

Establishing a new training program is a daunting undertaking, but perhaps even more important is making sure the program stays on task of achieving LOs. Evaluations are useful ways to assess outcomes and determine if changes are needed (Caffarella,

2010; Creswell, 2012; Suskie, 2010). Included in this project is an evaluation plan to make sure that the training program achieves its LOs regarding attendees acquiring new knowledge, skills, and behaviors. It is also a goal that the project of this study becomes a valuable annual training program within the CSN community. There is also an evaluation plan to evaluate the project as complete. Project completeness involves two reference points, with comparisons to a complete capstone study and as a complete training program to CSN decision makers. In other words, study contents must meet the needs of a CSN presenter and meet the standards established by Walden University requirements.

Project as Complete Training Program at CSN

As noted, the project portion of this research includes the planning and development of a new training program called SOS@CSN. As such, CSN leaders will evaluate the project for completeness as a training program. In essence, a well-designed training program is evidence that the research project is complete. Evaluating this project as complete involved comparing the physical items (PowerPoint presentation, text, presenter's guide, handouts, surveys, and supplies for group activities) with the items needed to effectively present the project. To measure the project's completeness as a training program, SOS@CSN attendees will be use surveys to answer if they achieved the LOs by the end of the three-day training program. I copied the materials in the appendices onto a flash drive. I delivered these files to CSN's associate vice president for Academic Success, whom I had met with throughout the research study process. This

flash drive included everything needed for a CSN employee to present the three-day training program, SOS@CSN. The CSN stakeholder accepted the project as complete.

The LOs in Table 14 will be utilized in an outcome-based evaluation. Data for this evaluation come from attendee input. As described in Appendix A, attendees complete surveys and give oral feedback at the end of each SOS@CSN training program. The SOS@CSN Attendee Survey is included as Appendix B. This survey is an in-depth questionnaire that records attendees' opinions and perceptions by their response on Likert scales. Likert scales provide quantitative data because the person indicates his/her agreement with a statement by marking somewhere on a 5-point scale, representing a range of opinions (Lodico et al., 2010). In the survey, each LOs is represented with a statement and attendees respond by indicating from 1 (strongly disagree) to 5 (strongly agree). Responses of 5 mean the attendee fully met the LO. There is an hour of program time dedicated to evaluating if attendees meet the LOs. Outcome-based evaluations compare results with predetermined criterion or program success indicators (Caffarella, 2010). Specific success indicators within this project will be associated with meeting the program's LOs. Any needed changes to the training program's organization, content, or procedures will be guided by the program evaluations, attendee input, and after presenter reflection.

Project as Complete Walden University Capstone

Another measure of this study's completeness will evaluate the project against specific academic program requirements. Attention was given to ensure the project aligned with requirements for Walden University's Doctor of Education doctoral study.

The current checklist and rubric requirements guided the content of the training program. For example, the three-day scheduling is in direct alignment with the Walden University (n.d.) EdD Quantitative Doctoral Project Study Checklist. Walden University employees will use rubrics, checklists, and academic standards to evaluate this study as complete. I have attempted to meet all of the requirements and consider the project complete at the time of submission; however, it is Walden University employees who will evaluate the project contents regarding its completeness.

Project Implications

The project detailed in Appendix A has great potential to become a catalyst for positive social change. The Social Change Impact Report (Walden University, 2013, p. 2) summarized this idea as, “positive social change refers to involvement in activities that improve the lives of individuals and communities.” Applying this definition, there are significant social change possibilities associated with this project. Thousands of adult learners and their families living throughout the Las Vegas area could benefit from improving student’s academic outcomes. CSN is the largest adult education institution in Nevada (CSN n.d.a). Completing college work is rewarding and helps students grow as individuals. College graduates tend to make more money than those who start and do not complete a college program. In fact, CSN’s (2012) research into the local impact shows that a “student will earn nearly \$500,000 more over his or her lifetime than with only a high-school diploma” (p. 8). Improving student outcomes is also beneficial to CSN, bringing increased revenue and reputation. In addition to the students and the school, the project and this study may be useful for growth in a larger context.

Possible Implications for Social Change

This project has significant social change implications. The heart of the American Dream is building a better life; education plays a key role in realizing this dream. This dream aligns with the mission statement that CSN “creates opportunities and changes lives . . . that enrich our diverse community” (CSN, n.d.b). If successful in positively impacting academic outcomes at CSN, then the school and students both benefit. If students succeed in their courses, stay in school, and graduate they have a higher chance of finding a job in the Las Vegas area (CSN, 2012). This new program could become an integral component of CSN’s community, and positively impact thousands of adult learners. As an organization, CSN is dedicated to helping students, which helps the students’ families and social circles. If successful, the project that emerged from this study can have a positive effect and bring social change to a large number of people.

Local Project Importance

The goals driving the project creation are to improve outcomes by increasing engagement at CSN. Students should become more aware of support services and increase utilization to perhaps increase their likelihood of course success and persistence. The project encourages interaction between students and faculty members and between students and support services; including academic advising, enrollment and registration services, financial aid, tutoring, and personal and career counseling. The findings of this project study could also positively impact the local community by aiding in adult student persistence. This persistence could increase the chance of adult student graduation,

thereby providing the community with better skilled, employable citizens. Since most CSN students live in the local area (CSN IR, 2014), they are likely to seek local employment.

Project Importance in the Larger Context

The success of this project is important to CSN, its students, and the Las Vegas area. There is a relationship between students and the local area. The Las Vegas area economy receives about \$87 million annually from CSN operations (CSN, n.d.c). Included in this amount, there is over \$4 million in expenditures generated by nonlocal students, so this is revenue that would be missed by the Las Vegas economy without CSN (CSN, n.d.c). CSN has a history of training for local business and industry as indicated by the estimated 5.7 million CSN credits earned in local workplaces during the last 30 years (CSN, n.d.c). This program could help more students graduate, resulting in an educated Las Vegas community. Because CSN is the largest adult education institution in the state, (CSN IR, 2014) this work may help many students, and their families, find a better life in Las Vegas area. There is little doubt that CSN students influence the Las Vegas economy, and that means that when a CSN student succeeds, the local community also succeeds.

Project Conclusion

This section described the product of this research. This project is a new training program, and is included as Appendix A. The purpose of the project is to apply the study findings and attempt to address the problem at the research site. The project was founded in the local setting with the aid of stakeholders, and was developed after an intense

literature review. It is hoped that the project will have a significant impact locally, and be a catalyst of positive change for local students and their families. The following section is more informal than Sections 1,2, and 3, because it includes personal reflections about lessons learned during this process.

Section 4: Reflections and Conclusions

Introduction

This section contains reflections and personal observations regarding the project study experience. These reflective sections are written in a more personal tone than other sections of this study. While a scholarly voice is needed to address project strengths and weaknesses; answering the question, “What did I learn as a scholar?” requires personal reflection and subjective writing skills. Several headings are presented as questions in this section because they involve thoughts during personal reflection to answer specific questions. Evaluating the overall importance of this study requires both subjective and objective analysis. To begin, I look at the strengths and limitations of the project. Next, I analyze what I learned about scholarship, project development, and project evaluations. Additionally, I reflect upon knowledge gained as a scholar, practitioner, and project developer. Finally, this section concludes with a review of the key message of the work.

Discussion of Project Strengths and Limitations in Addressing the Problem

One of the major strengths of this project is its study-based design, which addressed a specific local problem. The study of academic outcomes at CSN pointed out behaviors that are associated with student success, and the project was designed to apply those findings. Unfortunately, sometimes projects are changed during the developmental phase so much that they lose applicability to the original problem (Spaulding, 2008). The applicability of this project gives it significant strength because of the potential to increase engagement experiences of CSN students resulting in more academic success.

A potential limitation to the project involves the perceptions of CSN administrators. It is possible that there will be a lack of support because those in charge of existing student services could feel that creating a new program is unwarranted. It is conceivable that current CSN administrators could see this proposed program as an indication that current student services are not effective. Providing additional evidence and explaining the value of the proposed program is often helpful in persuading decision makers to implement a program (Murphy et al., 2009). Securing the support of administrators is key to implementing this program. The study results demonstrated a local need; hence, there is value to this program. It is crucial that current CSN resources and personnel become supportive of the creation of this program.

The chief weakness of the project is its breadth. The idea of creating a new program with enough size and influence to shift results for an entire school is a formidable goal. The enormity of the project would require a significant investment of school money and resources. Very few institutions are willing to invest in an unproven idea. The girth of the project might even necessitate creating a new job in an education industry facing shrinking budgets. Additionally, it would be difficult to obtain funding for an unproven project. While the project has promise, it is doubtful that any institution would implement this program in its entirety.

Recommendations for Ways to Address the Problem Differently

As noted, there is little chance CSN decision makers will implement the SOS@CSN project as written. What is more likely to happen is that some of the ideas within this project will continue to be applied across community college campuses. The

problem of poor academic outcomes will be addressed by more traditional institutional approaches to staff development such as presentation sessions and annual training programs. Administrators at the research site are actively seeking solutions to improving student outcomes and have seen an increase in the number of students utilizing support services (S. Keller, personal communication, August 5, 2014). One example of a new initiative is the Don't Cancel That Class (DCTC) program created by employees in CSN's Student Services department (CSN Student Services, 2014). When faculty members are going to be absent, instead of canceling the class, teachers are encouraged to let a Student Services representative present a DCTC session. The DCTC program includes showing students the location of support services that apply to specific courses (CSN Student Services, 2014). For example, employees could introduce students taking science courses to science tutors or take students for a tour of the Science Center. The DCTC program contains components similar to the SOS@CSN program, but the DCTC does not involve any faculty training component. In fact, the DCTC program is presented to courses when the faculty member is absent. This research and project also help meet CSN leaders' need to gain data demonstrating the current factors influencing CSN students. CSN's Institutional Research department can add this study to their semester, annual, and longitudinal research investigating the problem of poor academic outcomes. Since CSN leaders are taking steps to address the problem of poor student outcomes, this capstone could provide them with useful data and methods.

Discussion of Analysis on What Was Learned About Process

In this section, I attempt to answer questions about what I learned during this capstone project study experience. I reflect on personal experiences as a researcher, project developer, and leader. I capture some of the insights and lessons I learned about research, project management, and creating change within an institution. I conclude with introspective reflection about changes I would make to the project if I were to do this again. This process was a guided reflection, so the questions I pondered are used as section headings.

“What Did You Learn About Research?”

This experience has helped me to appreciate the tremendous effort required throughout the research process. There is nothing easy about research. There is a massive amount of effort behind even the most basic research. As a student, I have analyzed over 100 peer-reviewed studies and evaluated them for accuracy and validity. While I appreciated the scholarly effort, I did not appreciate the amount of energy behind each of the studies. The most striking observation I made during my experience as an academic researcher was the amount of effort and hard work required for any project.

Perhaps more importantly, I learned to synthesize research. While earning other degrees, I learned to review a research article and pull out specific components such as research questions, variables, and results. During the Walden Doctor of Education program, and especially while completing this study and the ensuing project, I learned to combine ideas and components from different research studies. Organizing writings from different sources into a new idea is an advanced research skill that is important to

expanding the knowledge about research topics (Merriam, 2009). The work on this capstone project provided ample opportunity to develop the skill of synthesizing research and applying the results to a problem.

“What Did You Learn About Planning and Design?”

Planning a project of any size is challenging. The larger the project and the more people involved, the more difficult it is to manage. Having multiple perspectives helps diversify a project’s content; however, including multiple personalities also adds potential conflict to the planning process (Torres, Howard-Hamilton, & Cooper, 2003). Another benefit to including multiple perspectives during project development is that the resulting training program might help attendees develop critical thinking skills to best apply the program’s content. Critical thinking involves questioning common assumptions and traditional methods (Brookfield, 2010). During the planning and design phases of this project, I experienced critical thinking by asking, “How else could I design SOS@CSN, besides the current methods?” During the design phase, I had many meetings with stakeholders. Each discussion helped me focus the program to address the problem, and also helped me to grow as a program designer. The capstone process has improved my program design skills and encouraged me to meet with many practitioners in the adult education field.

“How Would You Approach this Project Differently if You Were to Do it Again?”

If I were to do this project again, I would have a slightly different approach. This does not mean that this version of the study and project are invalid. It indicates that I gained knowledge from the experience. I would modify my project development based

on what I learned because the experience transformed my thinking. Transformational learning involves life lessons and the value of experience (Merriam, Caffarella, & Baumgartner, 2007). Upon reflection, given the opportunity to start over, I would attempt to make this a cooperative venture with stakeholders at CSN as early as possible. Making this a cooperative project by working with CSN's Institutional Research and other departments earlier in the process would likely make the study proceed smoother. As I worked with CSN employees late in this project, I realized they could have shaped the project in the design phase, avoiding delays later. In addition, incorporating CSN resources throughout the process could have removed some of the stress and pressure I felt during the experience. Repeating this process, I would change my approach from being a lone scholar collecting data from an institution to one of a team leader working with employees and stakeholders at the institution.

Analysis of What Was Learned About Myself

Continuing the reflection process, I now consider what I learned about myself as a scholar, practitioner, and project developer. Again I use questions as headings to guide the reader through this self-analysis.

“What Did You Learn About Yourself as a Scholar During the Project Planning?”

This experience suggested that I am a capable scholar. While I recognize that I am still a student-practitioner, I now believe I am capable of completing complex tasks. I am sure that my abilities will increase as I continue to work in the education field, but I am already a skilled researcher. I completed all course work in the Doctor of Education program with straight A's, and I was eager to test my “book knowledge.” Walden

University's (2014) website describes a capstone project as "demonstrating your mastery of the competencies addressed in your program" (para. 3). Completing my capstone gave me confidence to move forward, confidence in my abilities, and assurance that I can design and complete a substantial project within adult education.

“What Did You Learn About Yourself as a Practitioner During the Project Planning?”

The main thing I learned about myself as a practitioner and a project planner is the ability to identify and limit personal bias. Controlling personal bias can be difficult, and I must be aware of personal perceptions especially when I am passionate about the research topic. Creswell (2012) reported that researchers should report known personal bias and relationships that may influence the work to avoid damaging a study's validity. There are other things I learned about myself during this process that will have practical application as I continue my professional journey and become a practitioner. Foremost, I have learned to maintain self-discipline and integrity within my work. Honesty and integrity are important aspects of my life both personally and professionally. These traits will continue to be foremost in my research and any professional undertakings.

This experience has allowed me to demonstrate my flexibility as a practitioner. The final study and project are both different from their original concept. For example, the study was shaped by the data I could access thus my study became more restrictive than I originally imagined. I had to reshape the guiding questions to fit the data I could access. The project I developed is also different from the original idea because the project development was guided by the study findings. These changes were a natural

evolution of an idea as it progressed from concept to design; yet, I had to make a conscious effort to ensure the original idea was improved upon and not lost. My flexibility allowed me to fine-tune the research and the project while still achieving my original goal of addressing student outcomes at CSN.

“What Surprised You as You Developed the Project?”

This was my first experience as a solo project developer. While there are changes I will make in my future projects, I consider this project a success. A strong project leader is crucial for developing, designing, and implementing any project. As a project developer, I have utilized negotiating skills to balance the needs of a project with those of the people and institution involved. I was surprised at my ability to transfer my skills and knowledge as a business owner into the role of project developer. While I am not saying completing the capstone was easy, I am proud of my ability to rise to a challenge and complete this significant task. Developing and practicing my skills as a project developer has prepared me to step beyond my student status and I am ready to enter a professional role in adult education.

Reflection on the Importance of the Work and What was Learned

There are two baselines upon which to measure the importance of this work: its value to the academic conversation and its value to my development. My capstone project will most likely make a minimal impact on the real-world situations. While accurate and valuable, my capstone project will be categorized with thousands of other academic studies completed by students earning a doctoral degree. Even though I spent two years completing this project, most likely, future students looking for sources to cite

in their writings will scan my writings. Compared to seminal research studies, my capstone project has little weight. The actual importance of this capstone project is its demonstration of my ability to move forward into the professional world of academia. This capstone is the evidence that I am an expert, capable of completing professional education-related projects.

Implications, Applications, and Directions for Future Research

All of my future research will be influenced by my experiences completing my capstone study project. My future projects will be more joint ventures now that I appreciate the value of cooperative effort. I will keep in mind that different people can view the same issue from different perspectives, and multiple vantage points are needed throughout the design, implementation, and refining of studies and projects. I am still passionate about helping community college students as I conclude this project, and I now have a better understanding of the complexity of the issue.

The implication from my research is that there are action steps that can help students succeed. CSN can continue to support student success with tutoring services, academic centers, and by providing engagement opportunities. Students can take proactive steps to find ways to engage other students and their school experience. This study provides evidence that changes in student behaviors might improve academic outcomes. This implies that there are ways to help students. Struggling students can be inspired with the message, “Do not give up, help is available.”

Conclusion and Summary

The key message from this experience is that improvements are possible, yet positive change comes from effort and the commitment of several parties. I have developed skills needed to be a successful leader at an academic institution. I am capable of reviewing issues from multiple perspectives and working with others to find a solution. Community college student academic outcome is a complex issue, with many variables. Studying complex issues requires tremendous effort and expense, and frequently only provides minimal insights. Nevertheless, the complex nature of student success should not keep researchers away; the importance of the issue dictates continued effort into helping more students succeed.

The personal conclusions I have made include confidence in my abilities and newly found skills. I have grown as a student, researcher, project developer, and as a person. This experience will shape future endeavors to help adults learn. I have seen the effort required to identify problems, investigate options, and apply the knowledge gained. The lessons I learned have helped me prepare for a career in adult education. Because of this, I confidentially conclude that this capstone process has successfully helped me grow from a student to a practitioner.

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Appendix A: Project

Supporting Our Students at CSN (SOS@CSN)

Introduction

CSN faculty members and staff do a great job of supporting those students who visit existing Centers of Academic Success (CAS).

Program Purpose

The purpose of this program is to teach CSN faculty members and staff members how to increase the number of students who visit support services.

Learning Objectives

After attending and participating in the SOS@CSN program, attendees should be able to complete the following learning objectives:

Behavioral learning objectives

1. Create a 90 second elevator pitch to explain why a student should visit a Center of Academic Support (CAS).
2. Demonstrate the ability to refer students to attend their first visit at a CAS.
3. Create a pirate-themed treasure map showing students how to locate CASs.
4. Perform and support behaviors that encourage engagement among students, between students and school programs, and between students and course content.

Content learning objectives

5. Know the location and operating hours of a CAS.
6. Understand common pathways that lead to CSN students visiting a CAS for the first time.
7. Distinguish and explain the difference between walk-in support and CAS services that must be scheduled in advance.
8. Possess enough knowledge of various CASs to refer students to the best support service for them.

Problem-centered objectives

9. Increase first-time visits to CASs.
10. Increase total number of student visits to CASs.

Note. CSN faculty and staff members should achieve these learning objectives by the end of their attendance at an SOS@CSN program.

Annual Program

This training program will be held before the start of each fall semester, as part of CSN's annual Convocation Week.

Program Schedule

Monday	8am-12pm	1pm-5pm	Optional Q&A 5pm-5:30pm
Tuesday	8am-12pm	1pm-5pm	Optional Q&A 5pm-5:30pm
Wednesday	8am-12pm	1pm-5pm	Optional Q&A 5pm-5:30pm

Intended Audience

The intended audience for this program is CSN employees and students who can have a positive effect on students and their academic outcomes. A sample audience includes 25 people with the following demographics:

- 8 Full-time lecture instructors from various for-credit courses.
- 8 Adjunct instructors from various labs and for-credit courses.
- 5 Tutors or resource center employees, 4 of which are current students.
- 2 CSN employees who work within a CSN support service area.
- 2 CSN full-time students who have utilized a support service.

Attendee Activities

- Attendee self-introduction.
- Role-play a referral.
- “How do you pick a restaurant?”
- Make a CSN Treasure Map
- CAS Fieldtrip.
- Write and perform an Elevator Pitch.
- Small group discussions followed by a large group discussion.
- Information Contact Exchange (ICE time).
- Evaluation survey for attendees at end.

Project Materials

- Contents to be added to a slideshow presentation.
- Presenter’s guide.
- Handouts:
 - Summary of study data, findings, and implications.
 - Sample Elevator Pitch.
- SOS@CSN Attendee Surveys.

Prior to Starting Presentation

- Before the presentation, the presenter should insert their contact information onto the second slide of the presentation. This information will be used during the introduction.
- Additionally, add presenter’s name, title/position, and CSN email information to the slide used on Wednesday at 1:00pm.

- Make arrangements for attendees to visit a nearby CAS on Wednesday morning.
- Prior to the SOS@CSN presentation, the presenter needs to arrange to have an employee from each CAS participate in SOS@CSN to describe the center, courses supported, materials used, and share a personal story.
- Gather the current operating hours of each Center of Academic Success. This information could be accessed through various CSN websites.
- Additionally, it would be good to have an employee familiar with the classroom presentation to present the idea of Don't Cancel That Class to SOS@CSN attendees.
- The presenter should gather copies of most current campus map to distribute to attendees; they will use these to create their pirate treasure map. Also, insert a picture of the campus map into Tuesday's presentation slides.
- Finally, the presenter should create a pirate treasure map using a campus map. Mark each CAS with an X. You can add details such as a palm tree, treasure chests, Jolly Roger (skull and crossed bones) flags, ships in the parking lot, and more. Be creative. Take a picture of your map and insert it into Tuesday's presentation slides.

Presenter's Guide and Timeline

The following section includes text for a slideshow presentation, instructor notes, and a presenter's guide. This guide is not intended to be a word-for-word script because that could limit a presenter's ability to complete an engaging program. It is expected that each presenter will insert his or her personal flavor into the presentation. This program is designed to guide presenters, not limit them.

Formatting Information

SLIDE – This is information to be placed on a slide; it is information that program attendees will see.

Presenter Note: This information is for notes to guide the presenter.

- “Scripted” words are tabbed over. These are things the presenter says.
- Also tabbed over are items to be completed at specific times during the program.
- Slides that relate to the associated research have additional information taken directly from the author's work. The presenter should have a printed copy of the research study (Whaley, 2016) during the presentation.

Supporting Our Students at CSN (SOS@CSN)

Monday 8am – 8:50am Welcome and Introductions

SLIDE - Supporting Our Students at CSN (SOS@CSN)

Presenter Note:

- “Hello and good morning. Welcome to Supporting Our Students at CSN!”
- Take roll.

Most attendees will have registered in advance, so the presenter will have an expected roster of attendees. There may also be a few attendees who did not preregister. Pass around sheet so pre-registered attendees can sign by their name and unregistered attendees can add their name to the list.

The presenter should gather email addresses for all attendees. This contact information will allow the presenter to send copies of all handouts, and this will provide a way for the presenter to follow up with all attendees.

Attendees will be eligible to earn 24-hours of employee training credit for attending the entire program. Many jobs at CSN, including most of the full-time positions, require annual training as a condition of continued employment.

SLIDE- Presenter(s) names and contact information

Presenter name

Presenter title / department **Add information prior to presentation.**

Presenter email

Presenter cell phone number

Presenter Note:

Make sure you have updated this slide prior to each presentation.

Introduce yourself and explain why you are an expert on this topic.

- Say out loud your name and contact information, “in case you need to reach me over the next three days.”
- If you have access to email on your phone, then attendees can use your email to contact you and to send questions that arise during the three days.
- Presenter, giving out your cell phone and other contact information is optional. You are not required to share personal information.

- Introduce any support service employee that is assisting with the presentation.

The presenter should share two or three personal stories of student success, perhaps working as a tutor, or seeing an increase in a cohort's success. This is an opportunity for the presenter to put some "personal flavor" into the presentation.

In addition to establishing the presenter as an expert, this activity sets the stage for attendees' self-introduction. Use examples that may spark a memory with attendees that they will hopefully share with the group.

SLIDE – Supporting Our Students at College of Southern Nevada
SOS@CSN

Presenter Note:

- This program is called Supporting Our Students at College of Southern Nevada. It is written as SOS@CSN.

SLIDE – Program Overview

We do a great job of supporting CSN students who engage available services. This training program attempts to increase the number of students who take advantage of our existing services.

Presenter Note:

Share the overview with attendees and stress that this program succeeds because our current services work to help students succeed.

- If we get more students to engage the existing support services, then we can help more students working to achieve success. You probably already know this from your experiences with our students. This program uses evidence to show the positive effect of what we do here at CSN.

SLIDE – Learning Objectives

There are three categories of learning objectives:
Behavioral, Content, and Problem-Orientated

After attending and participating in the SOS@CSN program, attendees should be able to complete the following learning objectives:

Presenter Note:

Read aloud each of the learning objectives. It is important to discuss each objective and make the expectations clear because at the conclusion, attendees will evaluate themselves to determine if these objectives have been met.

Learning objectives 9 and 10 cannot be measured during the training program; however, these are important goals of the training program.

These learning objectives, and evaluating if they have been achieved, are discussed in detail during the last day of the program. Further information about the learning objectives and evaluation plan can also be found in Section 3.

SLIDE –

Behavioral learning objectives

1. Create a 90 second elevator pitch to explain why a student should visit a Center of Academic Success (CAS).
 2. Demonstrate the ability to refer CSN students to attend their first visit at a CAS.
 3. Create a pirate-themed treasure map showing students how to locate CAS.
 4. Perform and support behaviors that encourage engagement among CSN students, between students and school programs, and between students and course content.
-

Presenter Note:

- Read the learning objectives aloud and ensure attendees have no related questions.

Each LO group may need further explanation. Here is additional information from Section 3 (Whaley, 2016) about the behavioral learning objectives.

Behavioral Learning Objectives

Meeting behavioral learning objectives includes attendees demonstrating specific and observable behaviors. Writing and presenting an elevator pitch (LO1) is a very specific behavior. Additionally, practicing a referral dialogue (LO2) is also a behavioral based objective. Talking to others is a standard behavior within adult learning. Creating a pirate-themed map to CAS locations (LO3) is an interesting engagement activity within the SOS@CSN program. The least specific objective includes supporting and performing engagement activities among the CSN community (LO4). All of these objectives, (LO1 – 4), include observable behaviors. If the attendee performs these behaviors, or has the potential to perform the behavior when appropriate, the learning objective would be considered met.

SLIDE -

Content learning objectives

5. Know the locations and operating hours of CAS.
 6. Understand most common pathways that lead to CSN students visiting a CAS for the first time.
 7. Distinguish and explain the difference between walk-in support and CAS services that must be scheduled in advance.
-

-
8. Possess enough knowledge of various CAS centers to refer students to the best support service for them.
-

Presenter Note:

- Read the learning objectives aloud and ensure attendees have no related questions.

Here is additional information from Section 3 (Whaley, 2016) about the content learning objectives.

Content Learning Objectives

Four of the learning objectives (LO5, 6, 7, 8) relate to attendees learning specific data from their SOS@CSN attendance. Learning the location and operating hours CSN academic support centers (LO5) is a content-centered objective that is supported by handouts given to SOS@CSN attendees. Also, considerable program time is dedicated to helping attendees understanding the common pathways for students to visit a CAS (LO6). Other program content that attendees should learn includes the difference between walk-in and prescheduled support services (LO7). With several guest presenters and a tour of one or more CAS center, SOS@CSN attendees have ample opportunity to master knowledge of available CAS services so the attendee can best refer a student to the appropriate support service (LO8).

SLIDE –

Problem-centered objectives

9. Increase first-time visits to CASs.
10. Increase total number of student visits to CASs.
-

Presenter Note:

- Read the learning objectives aloud and ensure attendees have no related questions.

Here is additional information from Section 3 (Whaley, 2016) about the problem-centered learning objectives.

Problem-centered Learning Objectives

Problem-centered objectives apply program content in hopes of solving a specific problem (Dean, 2004). Increasing the number of first-time student visits to a CAS (LO9), and increasing the total number of student visits to a CAS (LO10) are both problem-centered objectives. These two objectives (LO9, LO10) are the researcher's ultimate attempt to address the problem that is the focus of this study: Action that results in more CSN student success.

SLIDE – Icebreaker Activity Attendee Self-Introductions
Please share your name and answer one of the following prompts.

Presenter Note:

- Ask attendees to please introduce themselves and answer one of the following prompts.

SLIDE -

Tell us about a time while you were a student that you received support that had a positive impact on you.

Tell us about the time you had such a wonderful experience with a student that you told someone else about it.

Have you seen a student have an “a-ha!” moment?

Have you ever listened to a learner sharing his/her experiences and frustrations?

Presenter Note:

- Each attendee introduces him or herself and shares a moment of helping a student reach a goal.

SLIDE – Break time! Be back in 10 minutes.

Presenter Note:

- We will take our first 10-minute break now. Over the next 3 days, we will typically take a break every hour. There will be times that we take a break early, and there may be times when we extend a session a few minutes to avoid interrupting the program’s flow. Of course you can leave the room anytime that you need to. Hopefully, this break schedule will allow you ample time for breaks to grab a snack, use the restroom, or use your cell phone outside. Let us take a break and meet back here in 10 minutes.

Monday 9am – 11:50am Opening Lecture

SLIDE- Introduction to the researcher, the research, and the results.

Presenter Note:

- Tell attendees that there will be two 10-minute breaks during this session, timed as close to 50-minute intervals as possible without interrupting the flow of the presentation.

SLIDE – Recent research into CSN student outcomes by Dr. Van Whaley, DC, EdD (ABD).

Bio Prof Has Heart

From CSN Blog post on January 30, 2015, by Richard Lake
 MHTTP://BLOG.CSN.EDU/NEWSROOM/?P=514

Presenter Note:

- Introduce attendees to the researcher to add value and local applicability to this project.
- Completed by Dr. Van Whaley, DC, EdD (ABD at this time). Dr. Van was a biology instructor here for 5 years, and he also worked with students in the Tutoring Center and the Science Center.
- He was a Chiropractor in Las Vegas from 2002-2014 with 30,000 patient visits.
- He worked to earn his Doctor of Education (EdD) degree. Dr. Van created this program and completed the study that inspired it. The research study and the SOS@CSN program were components of his capstone project.
- CSN Blog post about Dr. Van is an interesting read. The article, Bio Prof has Heart (Lake, 2015), captures Dr. Van's passion for helping students.
- Dr. Van had such an engaging teaching style that an article was written about him.

SLIDE -

“Doc Vegas, whose real name is Vance Whaley. He’s been teaching at the College of Southern Nevada for four years now. You can tell he loves his job.”

“He’s already a doctor; he’s been a chiropractor for 12 years. But he wants more. He wants to be an educator. You can tell that when you watch him in class.”

“He’s excited about it, this cool tip he’s passed along to his class. That’s how you can tell he loves what he’s doing.”

Presenter Note:

- Discuss the quotes on the slide.
- Dr. Van was passionate about helping students. He observed that students that engaged the curriculum, especially those that went to resource centers, seemed to do better in his Biology 223 and Biology 224 classes.

SLIDE - About the research.

- Engagement Behaviors’ Impact on Course Success and Persistence Rates of Community College Students (Whaley, 2016).

- Research completed in 2016, tracking over 35,000 CSN students. This study is current (2014-2015 data) and is relevant to problems that our students will be facing this semester.
- Dr. Van saw that most of the students who visited the resource centers were doing better in his class than students who did not get help. He wondered if this was true in other classes.
- This research was completed with the assistance of Dr. John Bearce, Director of Institutional Research, and Dr. Shellie Keller, Associate Vice President for Academic Success. And with the approval of the Institutional Review Boards of both the College of Southern Nevada and Walden University.

Presenter Note:

- Discuss the title and overview of the research.
- This research was inspired by one vision but made possible with the help of others. Make sure to name Dr. Bearce because of his help with data collection and Dr. Keller who aided throughout the process.

SLIDE - Definition of the Problem: Thousands of students at CSN are not earning passing grades and are dropping out of school.

Students are not successful in about 30% of attempted courses.

About half of CSN students do not persist to the second year.

Graduation Rate at CSN is about 10%.

Presenter Note:

- The problem is that thousands of students at CSN are not earning passing grades and are dropping out of school. CSN students are not successful in about 30% of their courses (CSN Institutional Research, 2012). Furthermore, approximately 35% of CSN students will not enroll in classes after their first year (Nevada System of Higher Education, 2012).
- With an annual enrollment of approximately 40,000, this means that approximately 23,000 students who enroll at CSN will not be enrolled the following year. The effect of so many students earning poor grades and discontinuing enrollment is that CSN has a graduation rate of nine percent (CSN Institutional Research, 2014).

SLIDE – Dr. Van worked to answer two research questions (RQ):

RQ1: What is the difference in course success as measured by the percentage of passing grades between CSN students who exhibited engagement behavior and CSN students who did not?

RQ2: What is the difference in persistence as measured by the percentage of students enrolled the following year between CSN students who exhibited engagement behavior and CSN students who did not?

Presenter Note:

- Discuss each research question.
- “There are two measures here; course success and persistence.”
- Dr. Van’s study gathered information about student success at both semester and yearly intervals using two indicators of student success: pass rates for classes and annual persistence rates.

SLIDE – CSN Key Data

CSN Enrollment 38,000 students per semester

About 30,000 UNSUCCESSFUL courses

More than one-third of CSN students do not persist from year to year.

Presenter Note:

- Stress these three key facts that are listed on the slide. The actual data are on the following slides but do not let the details overshadow the key data.

SLIDE -

CSN Enrollment and Persistence Rates

Entering semester	Enrollment	Persisted	Persistence rate
Fall 2010	44,088	18,278	41.5%
Fall 2011	38,787	17,300	44.6%
Fall 2012	37,696	16,477	43.7%
Fall 2013	36,629	16,526	45.1%

Note. Table data summarized from data released by Institutional Research Department as a report entitled Whaley Data and delivered through secure intracompany e-mail (J. Bearce, personal communication, June 10, 2015).

Presenter Note:

- It varies, but CSN has an enrollment of about 38,000 students per semester.
- CSN student persistence rate is about 44%.

SLIDE –

CSN Course Success Data

Semester	Attempted courses	Successful courses	Course success rate
Fall 2010	110,775	73,777	66.6%
Fall 2011	99,262	66,822	67.3%
Fall 2012	94,745	65,292	68.9%
Fall 2013	91,701	66,283	72.3%

Note. Table data summarized from data released by Institutional Research Department (J. Bearce, personal communication, June 10, 2015).

Presenter Note:

- CSN student course success rate is about 67%.
- Students do not successfully pass about 1/3 of all courses in which they enroll.

SLIDE – Each semester there are approximately 38,000 students enrolled at CSN, and these students do not pass about 30,000 courses. More than one-third of CSN students do not continue their education from one year to the next.

Presenter Note:

- Tables 1 and 2 clearly demonstrate the powerful evidence of the local problem, a large number of adult learners are unsuccessful at CSN. Each semester there are approximately 38,000 students enrolled at CSN, and these students do not pass about 30,000 courses. About one-third of CSN students do not continue their education from one year to the next.

SLIDE –Course success rates and persistence rates are the study’s dependent variables.

- Class pass rates, called course success rates, are a measure of student success in each course in which they enroll.
- Annual persistence rates are the percentage of students who enroll from one year to the next.

Presenter Note:

- This study has two dependent variables, meaning things that change between groups of students.

- This success rate varies greatly among courses. These success rates indicate that every semester students attempt approximately 30,000 courses in which they do not successfully earn a passing grade (CSN IR, 2012)
- Institutions in Nevada calculate persistence rate as the percentage of first-time, full-time freshman returning for their second year of enrollment in any Nevada higher education institution (NSHE, 2011).

SLIDE - Study behaviors and design.

Engagement: Any interaction a student has with classmates, faculty, course materials, support services, or any school-related activity (Pike, Kuh, & McCormick, 2011).

Specific engagement behaviors: Going to one-on-one tutoring or visiting the Science Resource Center, Math Resource Center, or Writing Center.

Presenter Note:

- This research study looked for examples of student engagement at CSN.
- The specific behaviors for demonstrating engagement were going to one-on-one tutoring or visiting one of the academic resource centers.

SLIDE – Data Collected

Lists were generated of all students who demonstrated an engagement behavior during Spring 2014: students who met with a tutor, went to the Science Resource Center, went to the Math Resource Center, or went to the Writing Center.

The CSN researcher also collected data for students who were enrolled during the Spring 2014 semester but did not visit a support service.

Presenter Note:

- Data collection steps:
- The Resource Center Director, or employees she supervised, created four lists of students who demonstrated an engagement behavior during Spring 2014: students who met with a tutor, went to the Science Resource Center, went to the Math Resource Center, or went to the Writing Center.
- This CSN faculty member then forwarded these lists of student ID numbers to the Director of Institutional Research (IR) at CSN.
- Once the faculty member submitted a list of engaged students, a CSN IR employee generated totals for that specific list of students. In addition to keeping the lists separate, an engaged group was formed by combining student ID numbers from all support sub-groups.

- The IR representative ensured there were no student identifiers, only group totals in the data released to the researcher.
- The CSN researcher also collected data for students who were enrolled during the Spring 2014 semester but did not visit a support service.

SLIDE – Dr. Van used descriptive and inferential analysis to test if students who demonstrated different behaviors had different academic outcomes.

Presenter Note:

- Data analysis
- The researcher utilized the Statistical Package for the Social Sciences (SPSS) to complete the descriptive and inferential analysis in this study. The descriptive analysis revealed information about each group and variable. Descriptive statistics reported the number of students in each group and details such as the number of courses attempted in a semester. The researcher used inferential analysis to compare groups, testing if students who demonstrated different behaviors had different academic outcomes.

SLIDE - In this study, Dr. Van compared groups of CSN's students in terms of course success and annual persistence rates. The significance level was set at .05, indicating there was a 5% chance any findings were due to chance (Creswell, 2012).

Presenter Note:

- Creswell (2012) reported this significance level is typical in academic research involving group comparisons.

SLIDE – Dr. Van completed independent samples *t* tests to compare the data and evaluate for significant differences between the two groups.

Presenter Note:

- Independent samples *t* tests are appropriate to evaluate significance in differences between group averages (Triola, 2012). The analysis resulted in a confidence interval that indicated if there was a significant difference between the group's dependent variables: course success rates and persistence rates.

SLIDE – This study's population included students enrolled at CSN during the Spring 2014 semester.

Presenter Note:

- The population of this study was CSN students enrolled for for-credit courses during Spring 2014 semester.
- This population is referred to as the study's cohort.

SLIDE – The population ($N = 35,473$ students) was divided into two groups:

DNV group ($n = 2,059$): Students enrolled at CSN during Spring 2014 but did not visit (DNV) a support service.

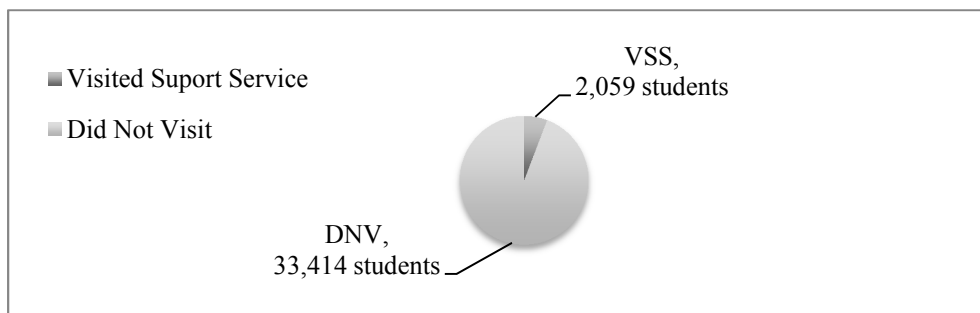
Engaged/VSS group ($n = 33,414$): Students who visited a support service (VSS) and demonstrated an engagement behavior during Spring 2014.

Presenter Note:

- The VSS group members were identified by sign-in sheets, appointment logs, and other archival data. These students either met with a tutor or visited any resource center at least one time.

SLIDE –

Population and Group Sizes

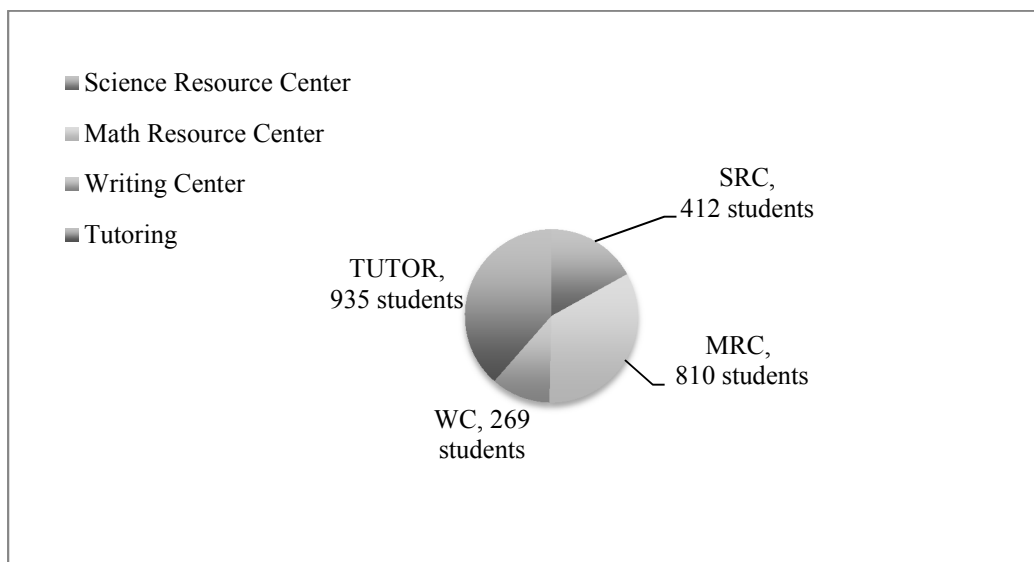


Presenter Note:

- Figure 1. Data from Spring 2014 enrollment: the study population ($N = 35,473$ students), the Visited Support Service (VSS, $n = 2,059$ students) group, and the Did Not Visit (DNV, $n = 33,414$ students) group (CSN IR, 2015).

SLIDE –

Subcategories Within Visited Support Service (VSS) Group



Presenter Note:

- Figure 2. The Visited Support Service Group (VSS) consisted of 412 students who visited the Science Resource Center (SRC), 810 students who visited the Math Resource Center (MRC), 269 students who visited the Writing Center (WC), and 965 students who met with a tutor (TUTOR) during Spring 2014 semester (CSN IR, 2015). Combined, with duplicates removed, the VSS group consisted of 2,059 students who demonstrated an engagement behavior during the Spring 2014 semester (CSN, IR 2015).

Monday Noon - 1pm Lunch

SLIDE – Enjoy your lunch. Please be back at 1:00

Presenter Note:

- Dismiss attendees for a one-hour lunch break.

Monday 1pm - 1:50pm Group Activity and Attendee Benefits

SLIDE – Welcome back!
Let's talk.

Presenter Note:

- Return from lunch for a session with a group activity to keep participants awake.

- Limit lecture after lunch to keep participants engaged with the presentation. It may be appropriate to take the first break earlier after lunch to allow participants time to digest.

SLIDE – WIIFMe
What's In It For Me?

Presenter Note:

- Inform attendees this portion of the program involves a group discussion.
- Separate attendees into groups relating to their job: Teachers, faculty, resource center employees

SLIDE – What is in it for attendees?
What would more student success mean to you?

SLIDE - What would your job look like if more of our students passed their classes and stayed in school?

Presenter Note:

- Allow a few minutes for each group to answer how more student success would impact them.
- Also, have each group list how student success would impact the other two groups.

SLIDE – Each group answers the following 4-part question.
How would more student success impact:

Teachers –
Administrators –
Resource Center employees –
CSN student body –

Presenter Note:

- This should lead to an interesting group discussion.
- Have each group share their list of how student success would impact the other groups. For example, the teachers describe student success' impact on administrators, employees, and students.

Hopefully, these ideas will come up. If not brought up by attendees, this information could be worked into the presentation:

- Teachers see an improved learning environment, with engaged learners actively involved in learning.

- Administrators could see improved statistics that help with accreditation and securing funding.
- Tutors and resource center employees will experience a richer meeting with students who are learning new information and master new skills. This could lead to support service employees finding a passion for teaching and becoming future teachers.
- Students see more positive results, which is CSN's mission!

Many stakeholders can benefit from increased student success at CSN. Of most importance, our students benefit the most because their success is CSN's mission. Also, if more students achieve then the classroom environment would be more conducive to learning. Some faculty members might find teaching and engaging students easier and apply more passion and personal commitment to student learning. Administrators at CSN might be able to use objective data of student success to secure additional funding, as well as use student success data during any of the accreditation proceedings that are required of Nevada's largest higher education institution.

Monday 2pm - 3:50pm Discussion of Study Results

Presenter Note:

- There will be a 10-minute break during this session, timed as close to 2:50 as possible without interrupting the flow of the presentation.

SLIDE –

Data Collected From CSN IR

Engagement behavior	Group size	Persisted	Courses attempted	Courses passed
Went to the SRC	412	238	1,112	870
Went to the MRC	810	424	2,324	1,794
Went to the WC	269	139	801	666
Met with a Tutor	935	495	2,570	1,891
VSS Group Total	2,059	1,092	5,750	4,428
DNV Group Total	33,414	14,336	83,054	58,812

Note. Table data summarized from data released by Institutional Research Department (J. Bearce, personal communication, June 10, 2015). Codes include Science Resource Center (SRC), Math Resource Center (MRC), Writing Center (WC), Visited Support Service (VSS), and Did Not Visit (DNV).

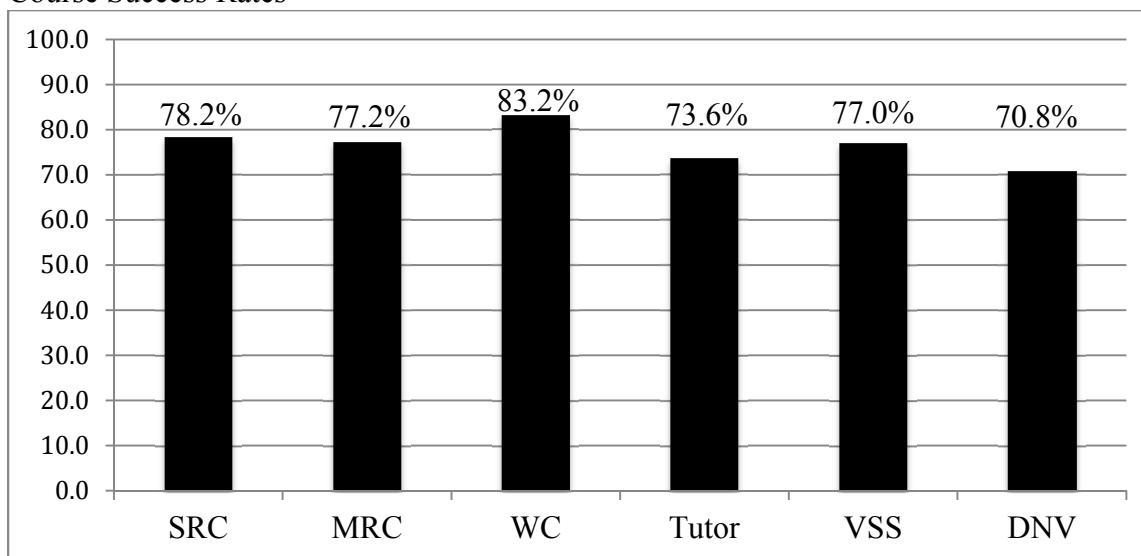
Presenter Note:

- Discuss the raw data from the study. Stress the VSS and DNV group totals.

- Table data summarized from data released by Institutional Research Department.

SLIDE

Course Success Rates



SLIDE -

Figure 3. Course success rates are the percentages of classes passed by members of each group.

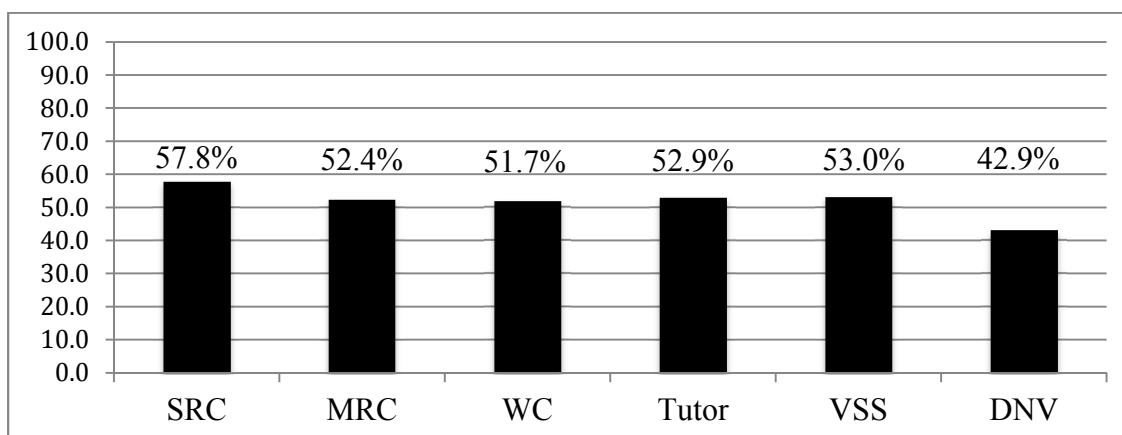
Students who Visited Support Service (VSS) passed 77.0% of courses and students who Did Not Visit (DNV) a support service passed 70.8% of their courses (CSN IR, 2015).

Presenter Note:

- Discuss the analysis of course success rates.
- Every engagement behavior group in the study had a higher course success rate than the group of students who did not display one of these engagement behaviors.
- Comparing each group to the Did Not Visit (DNV) group, the increased course success rate varies from + 2.8% (students who met with a tutor), to + 12.4% (students who went to the Writing Center).
- Combined, all students who Visited a Support Service (VSS) were successful in 77% of their courses, compared to the approximately 71% course success rate of students who Did Not Visit (DNV) a support service.
- There were approximately 89,000 courses attempted by students in this study. This large amount of data adds validity and applicability to this study.

SLIDE

Annual Persistence Rates



SLIDE -

Figure 4. Annual Persistence rates for each subcategory, the Visited Support Service (VSS, 53.0%) group, and the Did Not Visit (DNV, 42.9%) group (CSN IR, 2015).

SLIDE - Every engagement behavior group had a higher annual persistence rate than the group of students who did not display one of these engagement behaviors. Combined, 53% of students who Visited a Support Service (VSS) persisted, compared to approximately 43% of the Did Not Visit group (DNV).

SLIDE - When comparing each behavior to the Did Not Visit (DNV) group, the increased persistence rate varies from + 8.8% (Students who went to the Writing Center), to + 14.9% (students who went to the Science Resource Center).

Presenter Note:

- Discuss the analysis of annual persistence rates.
- The VSS group showed 10% higher tendency to persist from one year to the next.
- Every sub-category of the VSS group had a higher persistence rate than students in the DNV group.

SLIDE

Independent Samples *t* tests Levels of Significance

	VSS	Tutor	SRC	MRC	WC
Course Success Rate	.027*	.012*	.032*	.027*	.051
Persistence Rate	.067	.066	.093	.063	.059

Note. Table of significance levels (2-tailed) as the DNV group was compared to each other grouping. Results within a 95 % confidence interval are indicated above*.

SLIDE - The independent samples t tests results indicated a statistically significant difference in the course success rates between the students in the Visited Support Service (VSS) group and the Did Not Visit (DNV) group, $t(1) = 23.84, p = .027$.

Presenter Note:

- The students who visited support services had a statistically significant higher course success rate. The DNV persistence rates were numerically lower than the VSS and all subcategories of engagement, but the t tests did not indicate there was significance to these differences.

SLIDE – Students who get support have better academic outcomes.

- Annual Persistence Rates:
 - 43% of students who did NOT visit a support service.
 - 53% of students who DID get support.
- Course Success Rates:
 - 71% of students who did NOT visit a support service.
 - 77% of students who DID get support.
- Key Point:
 - Support services work to help our students, so we need to increase the number of students who use these services.

Presenter Note:

- Review these key data.
- Thus, the students who visited support services had a statistically significant higher course success rate. The DNV persistence rates were numerically lower than the VSS and all subcategories of engagement, but the t tests did not indicate there was significance to these differences.

Monday 4pm - 4:50pm Discussion, Summary, Preview

SLIDE – Group Discussion

Presenter Note:

- I would like your input on several questions. Please share your first thoughts when you hear/see each prompt. I also ask that you politely share your feelings about other attendee's comments.
- Remember, this is a study that found that engagement is key to success; Engage this discussion!

SLIDE – Do you think more students should seek support at CSN?

SLIDE – Is “seeking help” a student responsibility, or is “reaching out” a school’s responsibility?

SLIDE – How do your perceptions fit in current research?

SLIDE - Do the study data match attendee’s experiences?

SLIDE - Stigma – Who actually visits support services?

SLIDE – Why do you think 90% of CSN students do NOT use a support service?

SLIDE - Have you referred students or talked with students who have visited a support service?

SLIDE - What have you heard about any resource center experiences?

Presenter Note:

- Read each discussion prompt and then get input from attendees.
- Attempt to get input from everyone in the room.
- In addition to replying to the prompts, encourage attendees to discuss with each other their reactions to comments made. Do your best to make this an engaging discussion.

SLIDE - Day 1 Conclusion

- Summary of day – current research shows CSN support services are effective.

Presenter Note:

- It is important that attendees have a belief that academic support helps students.

SLIDE - Day 2 Preview

- Tomorrow we will explore how students currently get to support service and ways to increase student usage.

Presenter Note:

- Read the slide and build interest in tomorrow’s topic.

Monday 5pm End of First Day

SLIDE – Thank you for attending today!

See you tomorrow at 8:00am.

I will be available for questions and answers until 5:30pm.

Presenter Note:

- Thank attendees for their attention and participation during the day.
- Remind attendees that the program will continue promptly at 8:00am tomorrow.
- Announce that you will be available immediately following the conclusion to discuss items with attendees.
- Dismiss for the day with an option to stay an extra 30 minutes to talk with the presenter.
- (Presenter is available until 6:00 pm each day. He/she will answer questions, address concerns, and interact with participants.)

Presenter Reflection:

Each day, the presenter should stay in the room until 6:00pm. After answering all attendee questions, the presenter should complete a few minutes of reflection on the day. It would be helpful to write down presenter thoughts and reflections in a log to help prepare future SOS@CSN presentations.

From the presenter's perspective, answer these important questions:

- What went right today?
 - What could be improved?
 - What information could be added to today's content to keep the presentation fresh and applicable to CSN?
 - What changes needed to be made to the presentation?
 - What are your additional notes or comments from today's presentation?
 - What did you learn today?
-

Tuesday 8am - 8:50am Good morning! It is the start of Day 2.

SLIDE – Good morning and welcome to back to SOS@CSN!
 Tuesday’s Theme – Getting More Students to Try a Support Service

Presenter Note:

- Welcome attendees.
- Take roll.

SLIDE – Brief Discussion

What do you recall from yesterday?
 What was your “take home” message from yesterday?

SLIDE - How do you answer, “What did you learn Monday?”

Presenter Note:

- Lead a discussion around the prompts on the slides.
- Having many attendees answer the last question may help to refine future presentations.

SLIDE – Overview of today
 Recent data show an increase in usage of support services by students at CSN.

Presenter note:

- Prepare attendees for today’s topic of getting more students to utilize the CASs.

SLIDE –
 The number of student visits to tutoring services more than doubled between Fall 2012 and 2014.

Student Visits to CSN Tutoring Centers by Campus

Semester	West Charleston	Cheyenne	Henderson	Total visits
Fall 2012	2,255	1,014	421	3,690
Spring 2013	3,414	1,052	519	4,985
Fall 2013	2,890	1,636	675	5,201
Spring 2014	4,232	1,852	819	6,903
Fall 2014	4,848	2,297	1,172	8,317

Data on this slide are from Tutorial Services Update e-mail sent to CAS employees in December of 2014 (S. Keller, personal communication, December 2014) and represent

the number of visits to each CSN campus tutoring center and the total number of visits in select semesters.

Presenter Note:

- Efforts to increase student's usage of support services are working. The Tutorial Services Center has more than doubled the number of students who met with a tutor in the last two years.
- Steps are currently being taken to increase student usage. This program is part of a larger movement to reach this goal.

SLIDE –

“We will continue our promotional efforts in the fall. We will do classroom presentations, contact new CSN students via email and phone, attend college events such as CSN Connections, and engage in various other initiatives to get the word out that support is available to our students.”

Dr. Shellie Keller 8/25/2014

Presenter Note:

The complete quote from within an email received on 8/5/2014 from Shellie Keller to all student services employees.

We will continue our promotional efforts in the fall. We will do classroom presentations, contact new CSN students via email and phone, attend college events such as CSN Connections, and engage in various other initiatives to get the word out that support is available to our students. Please be aware that many of you will be scheduled for the Welcome Back Crew, CSN Connections and classroom presentations. I thank you for your assistance beforehand – these are great ways to let all students know free and unlimited academic support is available.

(S. Keller, personal communication, August 5, 2014).

SLIDE – Let's take a break!

Presenter Note:

- After the break, we will discuss some of the ways to increase the number of students who visit a support service for the first time.

Tuesday 9am – 10:50am Lecture

SLIDE –CSN Resources

The majority of academic classes have tutoring available.

Presenter Note:

- Let us take a look at some of the resources available to CSN students.
- There will be two 10-minute breaks during this session, timed as close to 50-minute intervals as possible without interrupting the flow of the presentation.

Hopefully, you can have an employee of each resource center give a presentation. They should each share location information such as hours of operation and topics covered. Additionally, have each share a story of helping a student understand course content or experiencing personal growth.

SLIDE – Map of Charleston campus with all resource centers marked (CSN, n.d).
Add the most recent map of campus prior to presentation.

Presenter Note:

Prior to the presentation, download a current campus map and insert the image here. This map should also be used as handouts during the program.

SLIDE – Introduction to some of the available resources provided at CSN Centers for Academic Success (CAS).

- Tutoring Center
- Science Resource Center
- Math Resource Center
- Writing Center

Presenter Note:

- There are many other resources available to CSN students, but this presentation will focus on these Centers for Academic Success.

SLIDE - The goal of the Centers for Academic Success (CAS) is to provide quality academic assistance and support classroom instruction through several academic support services to foster students' overall academic success.

<https://www.csn.edu/centers-academic-success>

Presenter Note:

- Introduce attendees to the CAS goal and website.

SLIDE – Tutoring Center
 Building D – Room 203
 Phone: 702-651-5732

Information is available online at www.mywco.com/CSNTutoring

Tutoring support is available for students in most science, biology, chemistry, math, and English classes.

Presenter Note:

- Introduce attendees to the resource center, discussing the operating hours and specific classes supported. Students are encouraged to schedule tutoring sessions in advance. Walk-in sessions are available sometimes.

SLIDE – Science Resource Center
Building H - Room 203
Phone: 702-651-7615

This CAS supports students enrolled in biology, chemistry, physics, and other science courses.

Presenter Note:

- Introduce attendees to the resource center, discussing the operating hours and specific classes supported.

SLIDE – Math Resource Center
Building K - Room 406
Phone: 702-651-7320

This CAS supports students in all math prerequisite courses and courses up to and including Math 181.

Presenter Note:

- Introduce attendees to the resource center, discussing the operating hours and specific classes supported.

SLIDE – Writing Center
CHARLESTON Bldg. C – Room 112
Phone: 702-651-7402

Helps students develop writing skills by understanding writing mechanics and by reviewing samples of actual student writings.

Presenter Note:

- Introduce attendees to the resource center, discussing the operating hours and specific classes supported.

SLIDE – X marks your spot.

Create a pirate-themed map showing students how to find academic treasure.

SLIDE – CSN Treasure Map

Add campus map with CAS locations marked with large Xs prior to presentation.

Presenter Note:

- **Prior to the presentation**, the presenter should create a map of the campus with all CAS centers marked with large Xs. Insert a picture of the presenter's pirate map onto this slide.
- Review the locations of the various resource centers. Also, identify other campus landmarks to help attendees understand the locations, perhaps identifying the building the SOS@CSN presentation is being held.
- Each attendee will receive a map as a handout.
- As a fun and engaging activity, attendees will each mark their handout with a large X to identify the two closest resource centers. Next, mark the map by circling either their classroom or office.
- Attendees should create a pirate-themed treasure map.
- The goal of this activity is to create a display that attendees can hang on a wall to show CSN students exactly where they can go for help. Perhaps even hand out highlighters and let attendees show their creativity.

Learning Objective – Create a pirate-themed treasure map showing students how to locate Centers of Academic Success

SLIDE –Inter-learner engagement opportunity.

(Arrr. That be fancy talk for move your booty and show others your pirate map.)

Share your work.

Talk about SOS@CSN content with others in the room.

Presenter Note:

- Attendees should talk with each other and share their map they decorated.
- This is a few minutes to encourage inter-learner engagement.
- Have the attendees talk to each other about topics such as engagement, academic success, academic support, and personal experiences.

SLIDE – Let's take a break!

Presenter Note:

- After the break, we will discuss some common pathways that lead to a CSN student's first visit to Center of Academic Success.

Tuesday 11:00am – Noon

SLIDE – How do students find resources?

Presenter Note:

- The last topic before lunch is the routes that lead CSN students to their first visit to a Center of Academic Success.

SLIDE - Three common pathways for a student's first visit to a Center of Academic Success (CAS):

1. Referrals from instructors.
2. In-class presentations.
3. Email / contacting current students.

Presenter Note:

- We will discuss each of these three common pathways CSN students take leading to their first visit to a CAS.

SLIDE – Pathway 1. Instructor referral to a CAS.

Presenter Note:

- Many of our students come to a CAS for the first time because a teacher recommends it.

SLIDE – There are several ways instructors refer to CAS.

- Many instructors directly refer students to a resource center.
- Write a recommendation on any assignment that a student scores a poor grade.

Presenter Note:

- Discuss ways that instructors have used to refer students to a CAS.

SLIDE – Give out treasure maps to success!

Attach your “treasure map” to course syllabus so each student gets a copy on the first day of class.

Hang your Treasure Map on the wall in your classroom.

Presenter Note:

- Encourage attendees to see the value in their “treasure map” they created earlier in the program.
- Suggest that all teachers begin giving out copies of the treasure map to students on the first day of class.

SLIDE – How do you think instructors can best refer CSN students to a CAS?

Presenter Note:

- Ask attendees which method of instructor referral they think is most effective?
- Are there suggestions for other ways instructors can refer students to a CAS?

SLIDE – Pathway 2. Presentations.

Presenter Note:

- Another common pathway students take to visiting a CAS for the first time involves learning about available support services during an in-class presentation.

SLIDE – Don’t Cancel That Class.

Classroom presentations that inform students about relevant support services available.

Presenter note:

- Hopefully, another presenter will be available to discuss the Don’t Cancel That Class program. Having a presenter change is a valuable tool to keeping attendees engaged in a presentation.
- Faculty members can schedule in-class presentations, in which student service representatives present a program called, Don’t Cancel That Class. This 30-minute presentation is designed to educate CSN students about support services available. This powerful program is customized to show specifically what support is available for that class. For example, students in English 101 are shown where the Writing Center is located and told what hours English 101 tutors are available.

SLIDE – “Whether you are a good student or someone who is having difficulty in school, these workshops will help you develop sophisticated learning strategies required for success in a college setting.”

<https://www.csn.edu/college-success>

Presenter Note:

- The information in Don’t Cancel That Class presentation is designed to help as many CSN students as possible (CSN, Student Services, 2014). Students struggling to pass a class can get support, as well as students who strive to earn

the highest grade possible. This is important to the thousands of CSN students entering limited-space programs such as the nursing program.

Effective Summer 2015, all workshops will be coordinated through Tutorial Services' "Don't Cancel That Class" program, which will be held via classroom presentations. College success workshops are designed with ALL students in mind. Whether you are a good student or someone who is having difficulty in school, these workshops will help you develop sophisticated learning strategies required for success in a college setting. Workshops are presented by highly trained Advisor/Success Coaches in partnership with outstanding CSN faculty members and staff members.
<https://www.csn.edu/college-success>

SLIDE – Pathway 3. Contacting students.

- CSN employees contact students by phone, email, and poster information.

Presenter Note:

- There are many methods of communication utilized to inform students about CAS.
- There are many signs and posters around the campus informing students about available services, their locations, and operating hours.
- There are individual websites for most CAS with maps, hours, and additional information such as classes supported or models available for students to work with.
- CSN support service staff calls all new students, telling them about services available. Students received this initiative very well. The telephone call shows students they have support and provides an opportunity for new students to have their first conversation with a support service employee.
- All CSN students also get assigned a CSN student email, and this contact is used to routinely update students about campus events and provides links to various CSN departments and resource centers.

SLIDE – To review, three common pathways for a student's first visit to a Center of Academic Success (CAS) are:

1. Referrals from instructors.
2. In-class presentations.
3. Email / contacting current students.

Presenter Note:

- Ask attendees if they have any additional ways to encourage a student to visit a CAS for the first time.

Learning Objective 6. Understand most common pathways that lead to CSN students visiting a CAS for the first time.

SLIDE – Could you give a walking tour?

Most resource centers are located to be close to students taking specific classes. For example, the Science Resource Center is located a few doors away from the Biology lecture rooms. Could you lead a tour on the first day of class to show students exactly where to go if they want support?

SLIDE – Have a great lunch and please be back at 1:00.

Presenter Note:

- Dismiss attendees for lunch, reminding them to please be back promptly by 1:00.

Tuesday Noon – 1pm Lunch

Tuesday 1pm - 1:50pm Group Activity and Review of Topic

SLIDE – Welcome back!

Presenter Note:

- Welcome attendees back for the afternoon session of Day 2.
- Limit lecture after lunch to keep participants engaged with the presentation. It may be appropriate to take the first break earlier after lunch to allow participants time to digest.

SLIDE – Speaking of lunch...

Presenter Note:

- Ask, Did anyone eat at a place for the first time?

SLIDE – What makes you try a restaurant for the first time?

Presenter Note:

- Lead a group discussion, inquiring as to how attendees try a new restaurant.
- The presenter or assistant should use this as an opportunity to **create a list** of reasons people try a new restaurant, store, or attraction for the first time. Use a

dry erase board or another type of media to write each suggestion as it comes from attendees.

- Have attendees recall reasons and the presenter makes a list.

SLIDE – These are reasons people try a new service that I came up with:

- Recommendation from a friend.
- Walk in / location.
- Online review.

Presenter Note:

- Add these if they are not already on the list.

SLIDE – These are reasons people return for a second visit:

- Great service.
- Delivered what you wanted or more than expected.
- Great experience.
- Close by/ Easy to visit.
- Felt welcomed while there and invited back.

Presenter Note:

- Add these to a second list.

SLIDE – What motivates you to return to a store / restaurant / event?

Presenter Note:

- Lead a brief group discussion inquiring why attendees return to a place they have been before.
- Ask attendees if they have any events they do repetitively like run in 5Ks, go to a favorite restaurant, or see an annual music festival.
- At this point, there should be ample ideas written on the list so the attendees can see them.

SLIDE - How can we use similar strategies to get students to “try a new service” and visit a Center of Academic Success?

Presenter Note:

- This is a key point in the program.
- Hopefully, an interesting discussion can be had as attendees apply the strategies that get people to visit restaurants to visit CAS.

Learning Objective – Understand pathways that lead to CSN students visiting a CAS for the first time

SLIDE – Let’s take a break!

Presenter Note:

- After the break, we will continue our discussion on encouraging CSN students to seek academic support.

Tuesday 2pm - 4:50pm Group Activity, Review, Preview

Presenter Note:

- There will be two 10-minute breaks during this session, timed as close to 50-minute intervals as possible without interrupting the flow of the presentation.

SLIDE – Please discuss the information on each slide and how it applies to CSN students, teachers, and employees.

SLIDE - Bring-A-Friend
Classmates share a session!

This is a powerful way to encourage academic success by increasing engagement between students, between students and a school program and between students and curriculum content.

Presenter Note:

- “Bring-A-Friend” appointments: two students from the same class come together to review course information.
- This slide directly relates to the study’s engagement framework.

Learning objective.

Apply behaviors that encourage engagement among CSN students, between CSN students and school programs, and between students and the curriculum or course content.

SLIDE – Check Your Notes!

Review your notes for accuracy and completeness by discussing them with a CAS employee.

Presenter Note:

- Students can bring their lecture notes to a resource center and review them with a tutor for completeness and accuracy.

SLIDE – Hands-on and Interactive Learning

Students touch, hold, and physically interact with learning materials.

Presenter Note:

- Students can visit a resource center to interact with the various models and learning tools. The Science Center has several anatomical models for students to learn about the position of the body's organs, muscles, and bones. The Writing Center has many posters about creating Reference Lists and proper citation methods.

SLIDE – Continual Contact via Email

Presenter Note:

- CSN student emails are powerful broadcast mediums.
- Imagine if instructors sent out emails with links for students to review course content and links to available CSN resources.
- There are also some email broadcasts from various CSN departments. These are examples of how information can be spread rapidly to a large population for very little cost.

SLIDE – Continual Contact via Posters and Print Marketing

Presenter Note:

- CSN will continue to display resource hours, locations, websites, and other information to help students access the available resources.

SLIDE – Referrals, referrals, and more referrals.

- Referrals from teacher to student.
- Referrals from classmate to student.

Presenter Note:

- Reinforce the value of referrals to CAS. Possible referral routes include from teacher to student and from one student to a classmate.

SLIDE – Role-playing referrals

A team competition.

Presenter Note:

- Divide the attendees into two groups; Perhaps simply those on the left half of the room and those on the right.

SLIDE –

Create a skit showing at least three referral techniques discussed today. Each group will create, and then perform a skit for the other group.

Presenter Note:

- This activity uses group-learning techniques to build engagement among attendees. Similar techniques are discussed in the study as a valuable tool to encourage student success.
- After both groups have performed their skit, complete this referral topic with a group discussion.
- Referrals are a powerful technique to getting more students to visit a resource center.

Learning Opportunity

Demonstrate the ability to refer CSN students to attend their first visit at a CAS

SLIDE – Elevator Pitch.

90-second speech encouraging a student to visit support services.

Presenter Note:

- There is a classic sales technique called an “elevator pitch.” The idea is, you should be able to summarize why a student should visit support services, how they could benefit, within 90-seconds (the length of an elevator ride).

SLIDE -

Did you know more students pass their classes after visiting support services? When I was a student, I learned that there are ways to get the help I needed. I would go to the science center to play with the anatomy models, talk to biology tutors, and listen to other students. I found so much support and I liked the people so much that I became a science tutor and started working with students taking Biology 101. I suggest that all science students stop in the resource center during their first week of class. That way you can see what type of equipment they have and how you can get academic help when you need it. Do you know where the Science Center of Academic Success is? Do you have time to stop in there now?

Presenter Note:

- Either write your own elevator pitch or use the one provided.
- Be able to “perform” this elevator pitch to demonstrate this learning objective to attendees.

SLIDE – Parts of a Pitch:
 Introduction.
 Benefits to the listener.
 Explanation of the process.
 Call to action.

Presenter Note:

- Attendees will work together to outline their elevator pitch.
- Ask for 6 volunteers to share their elevator pitch with everyone.

Learning objective

Attendees will create an elevator pitch to explain why a student should visit a support service within 90 seconds.

SLIDE – Winding down, looking back and ahead

Day 1. We learned our support services work to help students succeed.

Presenter Note:

- Let us reflect back on what we learned yesterday: Engagement can help students succeed.
- Specifically, engagement behaviors like visiting academic resource centers might help students pass more classes, stay in school, and eventually graduate.

SLIDE - Day 2 Conclusion.

Several paths lead to a student making their first visit to a CAS.

Presenter Note:

- Today we discussed several ways that can encourage students to seek academic support.
- We prepared to refer students to a CAS and practice this skill.

SLIDE - Day 3 Preview

Tomorrow we will explore more ways we can help CSN students achieve their academic goals.

SLIDE – Reminder – Your attendance here shows you are dedicated to helping CSN students. Keep up your great work.

Presenter Note:

- Thank attendees for being here today.
- Dismiss attendees until 8:00am tomorrow.

SLIDE – See you tomorrow at 8:00am.

I am available for the next 30 minutes to talk to attendees.

Presenter Note:

- Dismiss for the day with an option to stay an extra 30 minutes to talk with the presenter.
- (Presenter is available until 6:00pm each day. He/she will answer questions, address concerns, and interact with participants.)

Presenter Reflection:

Each day, the presenter should stay in the room until 6:00. After answering all attendee questions, the presenter should complete a few minutes of reflection on the day. It would be helpful to write down presenter thoughts and reflections in a log to help prepare future SOS@CSN presentations.

From the presenter's perspective, answer these important questions:

- What went right today?
- What could be improved?
- What information could be added to today's content to keep the presentation fresh and applicable to CSN?
- What changes needed to be made to the presentation?
- What are your additional notes or comments from today's presentation?
- What did you learn today?

Tuesday 5pm End of Day 2

Wednesday 8am - 8:50am Good morning! Start day 3

SLIDE – Good morning!

Welcome to the final day of SOS@CSN!

Presenter Note:

- Greet the attendees and take roll.

SLIDE – Statistics, numbers, engagement theory ...

What are we really talking about?

SLIDE – SOS@CSN is about helping students succeed.

We have been discussing a 21st-century approach to a centuries-old problem:

How can we help more students pass their classes and stay in school until they graduate?

Presenter Note:

- Remind attendees that our purpose here is to help students reach their goal. This is a noble purpose and the attendees should be proud of their dedication to helping others.

SLIDE – We have seen that CSN’s CAS are effective at supporting students.

Presenter Note:

- Students who visit a CAS have several methods of learning including hands-on learning and discussing course content.

SLIDE – We have seen that a higher percentage of students pass their classes and stay in school if they visit a CAS.

Presenter Note:

- You don’t have to cover all details, but a review of study findings are repeated here.
- Every engagement behavior group had a higher annual persistence rate than the group of students who did not display one of these engagement behaviors. Combined, 53% of students who Visited a Support Service (VSS) persisted, compared to approximately 43% of the Did Not Visit group (DNV).
- Every engagement behavior group in the study had a higher course success rate than the group of students who did not display one of these engagement behaviors.
- Comparing each group to the Did Not Visit (DNV) group, the increased course success rate varies from + 2.8% (students who met with a tutor), to + 12.4% (students who went to the Writing Center).
- Combined, all students who Visited a Support Service (VSS) were successful in 77% of their courses, compared to the approximately 71% course success rate of students who Did Not Visit (DNV) a support service.

SLIDE - We have discussed common pathways for a student’s first visit to support services.

Presenter Note:

- We created maps and even competed over referral techniques!

SLIDE - We have discussed benefits to CSN employees when students succeed.

Presenter Note:

- Remember that more student success helps everyone. Teachers, employees, and the school all receive benefits as more students reach their goals.

SLIDE – Our goal after attending SOS@CSN is to increase the number of student visits to CSN CAS locations.

Learning Objective.

Increase the number of students who visit a CAS.

SLIDE – Field trip!

Talk a walk with me to a nearby CAS.

Presenter Note:

- The presenter, or a CAS employee that has been introduced to attendees, leads a brief field trip to the closest CAS.
- Attendees should learn the location, enter the center, and see what is available for students. This is a brief activity that may lead into dismissing attendees from the CAS for a break and meet them back in the original room.
- **Make sure this is pre-arranged!**

SLIDE – Let's take a break!

Presenter Note:

- After the break, we will continue our discussion on reaching this goal.

Wednesday 9am – 11:50am Lecture

SLIDE – Final lecture session.

Getting more total-visits to a CAS, including more first-time visits and more returning student-visits.

Presenter Note:

- This morning's topic is getting more total-visits to Centers of Academic Success.
- There will be two 10-minute breaks during this session, timed as close to 9:50am and 10:50am as possible without interrupting the flow of the presentation.

SLIDE – What are additional ways to increase the total number of visits to CSN's Centers of Academic Success?

Presenter Note:

- Yesterday we focused on getting more CSN students to visit a CAS for the first time. Today we will expand on this idea.

SLIDE – What things encourage a student to return for additional CAS visits after their first time?

Presenter Note:

- Build a brief discussion asking,
- What techniques do you recall from yesterday that could get students to return for a second appointment?

SLIDE – What are the benefits of a student scheduling multiple sessions at a CAS?

Presenter Note:

- Have attendees discuss the pros and cons of scheduling multiple sessions at a CAS.
- This could include schedules like every Monday after class, three sessions in preparation for the final exam, or other variable schedules that meet the student's need.

SLIDE – What are the benefits of small group (2-5 students) sessions with a tutor?

Presenter Note:

- Have attendees discuss the pros and cons of working with a few classmates to learn new material and develop new skills.

SLIDE – If you were a student, which would appeal to you more?

A. Scheduling multiple appointments between you and the same tutor?

(or)

B. You and a classmate scheduling a shared appointment with a tutor?

Presenter Note:

- Have attendees select either A or B. After a few moments for each attendee to make a decision, have a vote and see what the group consensus is.
- Prompt a few attendees as to why they voted each way.

SLIDE – These are some suggestions for ways faculty could increase the total number of student visits to a CAS.

Faculty members can schedule one hour each week as an “office hour” in the CAS.

Presenter Note:

- An example of this would be a math instructor whose class meets on Monday from 1:00 until 2:50, who then goes to the Math Academic Center of Success from 3:00 to 4:00 to meet with the some of the same students.

SLIDE –

Instructors can use CAS as meeting place to review completed assignments.

Homework can become formative assessments.

Presenter Note:

- Imagine the learning power if an instructor worked through homework assignments with students. Even if the grade cannot be improved, students could use assignments as learning opportunities.
- This engagement behavior includes an interaction between students and their teacher.
- The study demonstrated there is value in encouraging this type of student-teacher engagement.

SLIDE – Instructors can review exams in a resource center to help students understand any items they missed on the exam.

Presenter Note:

- This would give learners another opportunity to grasp knowledge and master their class-related information and curriculum.
- Unfortunately, many students never review exams to look at questions they answered incorrectly. This practice would also help instructors identify commonly confused topics, and they could refine their classroom presentations.

SLIDE – Schedule focused reviews prior to final exams.

Presenter Note:

- There is great potential to help student prior to their final exams.
- A tutor, CAS employee, or faculty member could schedule 30-minute reviews a day or two prior to final exams.

Wednesday Noon -1pm Lunch

SLIDE – Enjoy your lunch. Please be back at 1:00

Presenter Note:

- Dismiss attendees for lunch.

Wednesday 1pm - 1:50pm Welcome back!

SLIDE – Welcome back!

Presenter Note:

- Limit lecture after lunch to keep participants engaged with the presentation. It may be appropriate to take the first break earlier after lunch to allow participants time to digest.

SLIDE –

In additional to CAS, all CSN students have access to free online academic support.

- Students must log into Canvas to access SMARTHINKING.
- <https://www.csn.edu/smartthinking>

Presenter Note:

- Introduce attendees to a relatively new feature called SMARTHINKING.
- All CSN students have access, but they must use the web-based portal called Canvas.

SLIDE – SMARTHINKING provides both static resources and tutors available for online chat support.

Presenter Note:

- Review each slide and inform attendees about the valuable SMARTHINKING resources.
- It is likely that the attendees are not familiar with this new online resource.

SLIDE - SMARTHINKING has the online tutoring, online writing services, and homework help services that help students succeed. Tutors are available up to 24 hours a day, seven days a week in a variety of subjects.

SLIDE - Over 80% of SMARTHINKING online tutors have a Masters or Ph.D in their respective discipline, and they average eight years of teaching experience.

SLIDE - SMARTHINKING provides online tutoring in mathematics (basic skills - calculus II), writing, chemistry, physics, biology, introduction to human anatomy and physiology, accounting, economics, introductory finance, Spanish, and statistics.

SLIDE - Online math tutors are available 24 hours a day, seven days a week during the school year.

SLIDE - SMARTHINKING's Online Writing Lab helps students at secondary, post-secondary, and graduate levels become stronger writers. Students receive a detailed, personalized critique of any written assignment, such as an essay, report, personal statement, cover letter, resume, or creative story.

SLIDE - We discussed ways to increase the number of students who visit a CAS. How can we use similar techniques to encourage students to utilize SMARTHINKING?

Presenter Note:

- Lead a brief discussion about the pros and cons of online academic support.
- Ask attendees for suggestions on ways to increase student usage of SMARTHINKING.

SLIDE - Final group activity – ICE Time!

Information Contact Exchange

Presenter Note:

- Ask attendees to exchange contact information with each other. While some may voluntarily exchange cell phone numbers, suggest that attendees exchange CSN email addresses.

SLIDE – Presenter Name

Presenter position

Add information prior to presentation.

Presenter email

Presenter Note:

- **Add your contact information here prior to presentation.**
- Encourage attendees to use their cell phones and take a picture of the screen displaying the presenter's contact information.

SLIDE – Spend a few minutes exchanging email addresses with other attendees.

Presenter Note:

- Allow a few minutes for attendees to walk around the room and exchange contact information.
- Building connections between attendees is a powerful engagement technique that can help attendees apply SOS@CSN throughout their daily activities.

SLIDE – Break time.

Presenter Note:

- Allow the information exchange time to be completed, and then dismiss attendees for a 10-minute break.

Wednesday 2pm – 3:50pm Conclusion and Call to Action

SLIDE – Call to Action!

Using what you have learned.

Presenter Note:

- The goal of this session is helping you apply what you have learned during the SOS@CSN program to when you return to your normal activities of your role at CSN.
- There will be two 10-minute breaks during this session, timed as close to 50-minute intervals as possible without interrupting the flow of the presentation.

SLIDE – So far your tools from this program include a treasure map showing CAS locations and contact information for an attendee and the presenter.

Presenter Note:

- Remind attendees that they have several implementation tools to help them apply program content with current CSN students and coworkers.

SLIDE – Did you practice your elevator pitch last night?

Presenter Note:

Encourage three or four attendees to perform the elevator pitch they outlined yesterday.

SLIDE – Is there tutoring available for the classes I teach?

Presenter Note:

- Have each attendee name any class they are involved in or teach. Perhaps the Center of Academic Success employees in the room could answer if there are one-on-one tutoring appointments routinely available for each class.

SLIDE – Is there support at a Center of Academic Support for the classes I teach?

Presenter Note:

- Have each attendee name any class they teach or are involved in. Perhaps the Center of Academic Success employees in the room could answer if there are employees at specific centers for students from each class.

SLIDE – Last SOS@CSN activity:
 Inter-attendee engagement
 (Talk to each other!)
 NO PHONES!

Presenter Note:

- The last 15 minutes of this session is an ideal time for attendees to interact with each other, reflect on the program's content, and share their personal reflection on the relationship with student behaviors and student academic outcomes.
- Tell attendees that there are to be no phones out, attendees should actually talk to each other!

SLIDE

What student behaviors help them succeed?
 What student behaviors make it more difficult for a student to succeed?

Presenter Note:

- These discussions give attendees a chance to reflect on their learning. Encourage small group discussions for each of the following prompts, and then have each group their answers.
- As earlier, the presenter should write lists of responses on a dry erase board.
- The presenter should load the board with lots of information as it comes from attendees.
- These lists created are important because attendees will reference these lists as they complete the program evaluation in the final hour.
- **Make a list:** Helpful Student Behaviors.
- **Make a list:** Harmful Student Behaviors.

SLIDE

What were the strengths of this training program?
 What did you learn?
 What will you do with this information?

Presenter Note:

- **Make a list:** SOS@CSN Strengths.

SLIDE –

What were the weaknesses of this training program?
 What is missing?

What could be added / done differently to improve the next presentation of SOS@CSN?

Presenter Note:

- **Make a list:** SOS@CSN Weaknesses

SLIDE – Let’s take a break!

Presenter Note:

- After the break, we will conclude the SOS@CSN presentation.

Wednesday 4pm – 4:45pm Evaluation Survey

SLIDE – Attendee Evaluation and Input

Presenter Note:

- The SOS@CSN Attendee Survey is located in Appendix B (Whaley, 2016). It will take about 20 minutes to hand out, have attendees complete the survey, and then recollect them.
- The survey includes many questions about attendees’ opinions and perceptions about the program they attended.

SLIDE –
Attendee Feedback

Presenter Note:

- Quickly review the surveys, and then lead a group discussion.
- Discuss each learning objective and ask attendees if they feel the objective was met. Also, review the final survey questions. Ask for, and make a note of any information that attendees suggest adding to the program.

Wednesday 4:45pm Certificates

SLIDE – Thank you for attending!
Please come up and receive your certificates for completing SOS@CSN!

Presenter Note:

- Attendees should receive certificates after completing SOS@CSN.
- These should be made prior to the last day.
- Certificates should be given out to attendees at the end of the third day, at approximately 4:45.

Wednesday 5pm End of Program

SLIDE – This concludes the SOS@CSN presentation.
I will be available for questions and answers until 5:30pm.

Presenter Note:

- Thank attendees for their attention and participation during the program.
- Announce that you will be available immediately following the conclusion to discuss items with attendees.

- Dismiss for the day with an option to stay an extra 30 minutes to talk with the presenter.
- (Presenter is available until 6:00 pm each day. He/she will answer questions, address concerns, and interact with participants.)

Presenter Reflection:

Each day, the presenter should stay in the room until 6:00. After answering all attendee questions, the presenter should complete a few minutes of reflection on the day. It would be helpful to write down presenter thoughts and reflections in a log to help prepare future SOS@CSN presentations.

The presenter should take pictures of the lists that are around the room. Reviewing these lists could help future presenters refine the SOS@CSN program.

From the presenter's perspective, answer these important questions:

- What went right today?
- What could be improved?
- What information could be added to today's content to keep the presentation fresh and applicable to CSN?
- What changes needed to be made to the presentation?
- What are your additional notes or comments from today's presentation?

In addition, reflect on these questions:

- Overall, how did this SOS@CSN presentation go?
 - What could be done to improve the overall program?
 - Are there sections of SOS@CSN that need to be moved/rearranged to improve the flow of the program?
 - What did you learn as a presenter?
-

Questions and Answers

The information in the Questions & Answers (Q&A) section is here for two reasons. If time permits, the presenter could cover this material as part of the presentation. Additionally, this information is to inform the presenter to answer attendee questions as they are expressed throughout the presentation.

Q: Why should students go to a resource center other than to talk to a CSN employee?

A: There are lots of physical materials that are available in the various resource centers. The science centers have anatomical models and working physiology demonstrations like a machine where balloons represent lungs and students using the machine can understand the way air pressures change to force air into and out of the lungs. The writing center has additional resources like books and posters that explain the rules of writing. The math center has computer programs that perform advanced statistics calculations.

Q: Does asking for help indicate I am a poor student?

A: Getting help means that a student is dedicated to succeeding in school! You would not build a home without learning about construction, you would not work on your car without knowledge, and it is the same with education: first you have to learn the basics, and that often means asking for help.

Q: What is engagement? What are some examples?

A: Engagement is the interactions that influence students. There are many examples of CSN student engagement, including:

- students talking to each other while sitting on a couch in the science hallway,
- students working together inside a classroom,
- students meeting after class at the campus coffee shop,
- students asking questions and talking with a teacher,
- students seeing projected stars, planets, and universes in the Astrology lab,
- students using CSN resources online to complete classwork,
- students meeting in campus clubs, organizations, and volunteer roles.

Q: Is tutoring just for struggling students?

A: Tutoring services help a lot of students with a wide range of needs. Many students visit with a tutor to grasp a subject's fundamentals, and tutors are also a valuable tool to learn advanced concepts and experience deep learning by discussing topics one-on-one with a tutor.

Q: What were the key study findings?

A: Students who get support have better academic outcomes.

- Annual Persistence Rates:
 - 43% of students who did NOT visit a support service.
 - 53% of students who DID get support.
- Course Success Rates:
 - 71% of students who did NOT visit a support service.
 - 77% of students who DID get support.
- Key Point:
 - Support services work to help our students, so we need to increase the number of students who use these services.

Q: Where are other CAS locations besides the Charleston campus?

A: There are CAS locations on the Cheyenne and Henderson campuses.

Cheyenne Campus of College of Southern Nevada

3200 East Cheyenne Ave.

North Las Vegas, Nevada 89031

Henderson Campus of College of Southern Nevada

700 College Drive

Henderson, Nevada 89015

Tutoring Center

CHEYENNE	Room 2106 (Library)	702-651-4232
HENDERSON	Bldg. C – Computer Lab	702-651-3125

Math Resource Center

CHEYENNE	Room 2651	702-651-4685
HENDERSON	Bldg. B - Room 201	702-651-3167

Science Resource Center

CHEYENNE	Rooms S245 & 247	702-651-4088
HENDERSON	Bldg. B - Room 201	702-651-3167

Writing Center

CHEYENNE	Room 1707 (Telecom Building)	702-651-4101
HENDERSON	Bldg. C – Computer Lab	702-651-3187

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Appendix B: SOS@CSN Attendee Survey

Please answer each question and add your comments to this survey.

This survey may be completed anonymously.

Preferably, attendees may choose to add your name and contact information if you are willing to discuss this survey with the presenter to improve future SOS@CSN presentations.

These questions relate to the learning objectives (LO) expressed at SOS@CSN's onset.

LO1. Create a 90-second elevator pitch to explain why a student should visit a CAS.

I created an elevator pitch, and I am comfortable explaining why a student should visit a CAS.

1	2	3	4	5
Strongly Disagree		Neutral		Strongly Agree

Comments:

LO2. Demonstrate the ability to refer CSN students to attend their first CAS visit.

I have demonstrated, and am confident in my ability to refer CSN students for their first visit to a CAS.

1	2	3	4	5
Strongly Disagree		Neutral		Strongly Agree

Comments:

LO3. Create a pirate-themed treasure map showing students how to locate a CAS.

I have created a map showing CAS locations near my office/classroom/workspace that I can share with students so they know the location of support services.

1	2	3	4	5
Strongly Disagree		Neutral		Strongly Agree

Comments:

LO4. Perform and support behaviors that encourage engagement among CSN students, between students and school programs, and between students and course content.

I can perform and support behaviors that encourage engagement among CSN students, between students and school programs, and between students and course content.

1	2	3	4	5
Strongly Disagree		Neutral		Strongly Agree

Comments:

LO5. Know the location and operating hours of a CAS.

I know the location and operating hours of the CASs relating to my area of instruction.

1	2	3	4	5
Strongly Disagree		Neutral		Strongly Agree

Comments:

LO6. Understand most common pathways that lead to CSN students visiting a CAS for the first time.

I understand the most common pathways a student takes to CAS: Referrals, in-class presentations, and CAS marketing procedures.

1	2	3	4	5
Strongly Disagree		Neutral		Strongly Agree

Comments:

LO7. Distinguish and explain the difference between walk-in support and CAS services that must be scheduled in advance.

I understand and am comfortable explaining the difference between walk-in services and services that students must schedule in advance.

1	2	3	4	5
Strongly Disagree		Neutral		Strongly Agree

Comments:

LO8. Possess enough knowledge of various CASs in order to refer students to the best support service for them.

Overall, I have enough knowledge to refer students to the CAS that best fits their needs.

1	2	3	4	5
Strongly Disagree		Neutral		Strongly Agree

Comments:

LO9. Increase first-time visits to CASs.

I feel this program will increase the number of first-time visits to a CAS.

1	2	3	4	5
Strongly Disagree		Neutral		Strongly Agree

Comments:

LO10. Increase the total number of student visits to CASs.

I feel this program will increase the total number of visits to CASs.

1	2	3	4	5
Strongly Disagree		Neutral		Strongly Agree

Comments:

Additional Survey Items

I think the content of SOS@CSN will help me do my job at CSN.

1 2 3 4 5
 Strongly Disagree Neutral Strongly Agree

Comments:

I learned a lot about engagement and student success.

1 2 3 4 5
 Strongly Disagree Neutral Strongly Agree

Comments:

What was the best part of the SOS@CSN program?

What parts of SOS@CSN need to be changed to improve the presentation?

What would you add to the SOS@CSN program?

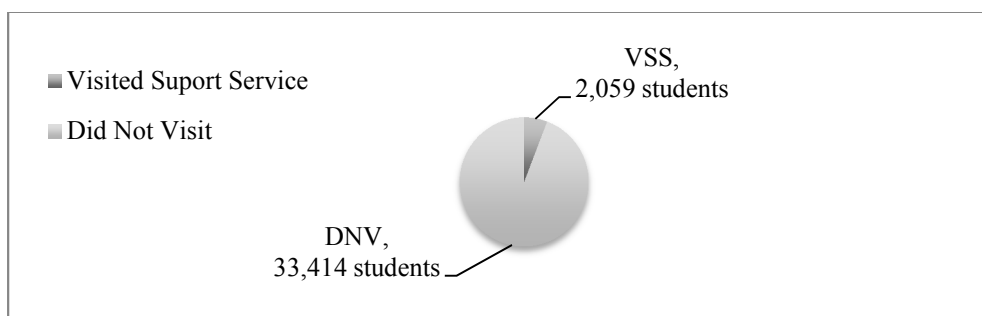
What feedback do you have about your experience while attending SOS@CSN?

If you would like to discuss this survey, or would like the presenter to contact you,
 Include your email below:

(*optional*) _____
 email address

Thank you for your feedback, and for participating in the SOS@CSN program.
 With your help, we can help more students reach their academic goals.

Appendix C: Handouts for SOS@CSN Attendees

Study Summary from SOS@CSN**Study Population and Groups:**

Data from Spring 2014 enrollment: the study population ($N = 35,473$ students), the Visited Support Service (VSS, $n = 2,059$ students) group, and the Did Not Visit (DNV, $n = 33,414$ students) group (CSN IR, 2015).

Study Data:

A total of 35,473 students enrolled in 88,804 courses in spring 2014 evaluated for course success, and persistence calculated with enrollment data from Spring 2014 to Spring 2015

Study Findings:

- Annual Persistence Rates:
 - 43% of students who did NOT visit a support service.
 - 53% of students who DID get support.
- Course Success Rates:
 - 71% of students who did NOT visit a support service.
 - 77% of students who DID get support.

Study Implications:

CSN support services work to help our students, so we need to increase the number of students who use these services.

Sample Elevator Pitch

Did you know more students pass their classes after visiting a Center of Academic Success? When I was a student, I learned that there are ways to get the help I needed. I would go to the science center to play with the anatomy models, talk to biology tutors, and listen to other students. I found so much support, and I liked the people so much, that I became a science tutor and started working with students taking Biology 101. I suggest that all science students stop in the resource center during their first week of class. That way you can see what type of equipment they have and how you can get academic help when you need it. Do you know where the science center is? Do you have time to stop in the science center now?

Appendix D National Institutes of Health Certificate of Completion

