



## Active and Collaborative Learning Benchmark

- [Cejda, B. D., & Hoover, R. E. \(2010\). Strategies for faculty-student engagement: How community college faculty engage Latino students. \*Community College Review\*, 29\(1\), 35-57.](#)
- [Corso, J., & Devine, J. \(2013\). Student technology mentors: A community college success story. \*Community College Enterprise\*, 19\(2\), 9-21.](#)
- [Duggan, M. H., & Williams, M. R. \(2010\). Community college student success courses: The student perspective. \*Community College Journal of Research and Practice\*, 35\(1-2\), 121-134. doi: 10.1080/10668926.2011.525185](#)
- [Hagedorn, L. S., Maxwell, W., Rodriguez, P., Hocesvar, D., & Fillpot, J. \(2010\). Peer and student-faculty relations in community colleges. \*Community College Journal of Research and Practice\*, 24\(7\), 587-598. doi: 10.1080/10668920050139730](#)
- [Lundberg, C. A. \(2014\). Peers and faculty as predictors of learning for community college students. \*Community College Review\*, 42\(2\), 79-98. doi: 10.1177/0091552113517931](#)
- [Maxwell, W. E. \(2000\). Student peer relations at a community college. \*Community College Journal of Research and Practice\*, 24\(3\), 207-217. doi: 10.1080/106689200264169](#)
- [Myers, B., Starobin, S. S., Chen, Y. A., Baul, T., & Kollasch, A. \(2015\). Predicting community college student's intention to transfer and major in STEM: Does student engagement matter?. \*Community College Journal of Research and Practice\*, 39\(4\), 344-354. doi: 10.1080/10668926.2014.981896](#)
- [O'Gara, L., Karp, M. M., & Hughes, K. L. \(2009\). Student success courses in the community college: An exploratory study of student perspectives. \*Community College Review\*, 36\(3\), 195-218. doi: 10.1177/0091552108327186](#)
- [Pope, M. L. \(2002\). Community college mentoring: Minority student perception. \*Community College Review\*, 30\(3\), 31-45. doi: 10.1177/009155210203000303](#)
- [Rose, L. H., Sellars-Mulhern, P., Jones, C., Trinidad, A., Pierre-Louis, J., Okomba, A. \(2014\). A qualitative exploration of autonomy and engagement for young women of color in community college. \*Community College Journal of Research and Practice\*, 38\(4\), 346-356. doi: 10.1080/10668926.2012.759518](#)
- [Sass, M. S., & Coll, K. \(2015\). The effect of service learning on community college students. \*Community College Journal of Research and Practice\*, 39\(3\), 280-288. doi: 10.1080/10668926.2012.756838](#)
- [Settle, J. S. \(2011\). Variables that encourage students to persist in community colleges. \*Community College Journal of Research and Practice\*, 35\(4\), 281-300. doi: 10.1080/10668920701831621](#)
- [Swigart, T. E., & Murrell, P. H. \(2001\). Factors influencing estimates of gains made among African-American and Caucasian community college students. \*Community College Journal of Research and Practice\*, 25\(4\), 297-312. doi: 10.1080/106689201750122406](#)

**Citation:** Cejda, B. D, & Hoover, R. E. (2010). Strategies for faculty-student engagement: How community college faculty engage Latino students. *Community College Review*, 29(1), 35-57.

**Source Type:** Peer-reviewed journal

**Type of Research:** Qualitative

**Mixed Methods Study:** N/A

**Quantitative Study:** N/A

**Qualitative Study:** Yes

N: 41 faculty members

Population subgroup focus: Latino students

Number of institutions: 3 community colleges

Grounded theory, case study, ethnography: Case study

Focus group or one-on-one interviews: 41 individual interviews

**Implementation Studies:** N/A

### **Summary of Study and Findings/Conclusions:**

“Student-faculty engagement has been identified as the best predictor of Latino student persistence. This study explores the strategies that community college faculty employ to engage Latino students. Findings indicate that knowledge, appreciation, and sensitivity to Hispanic cultures and an understanding of the preferred learning styles of Latino students are important considerations to establishing classroom environments that engage Latino students and, thus, facilitate their retention and academic success” (p. 135). “Virtually all of the faculty we spoke with share the perception that new faculty hires need to be aware of the nature of the community college, the students that attend the institution, and Hispanic culture” (p. 149).

### **Hypotheses/Research Questions:**

1. What strategies do community college faculty use to engage Latino students in the classroom and thus facilitate their academic success?
2. Do community college faculty use the same strategies as 4-year faculty to create classroom environments that promote student engagement?

### **Results:**

- “The community college faculty we interviewed stressed that ‘culture matters,’ and pointed to knowledge, appreciation, and sensitivity to Hispanic culture as the key component to successfully engaging Latino students” (p. 143).
- “A second cultural aspect that emerged from the transcripts was that of community—helpfulness, cooperation, and collaboration. Faculty participants explained that they

often found Latino students would turn to each other for help rather than approach the instructor...A number of faculty members at [Rural Community College] and [Suburban Community College], areas with higher numbers of immigrant Latino families, spoke of the importance of earning the trust of Latino students as a prerequisite before students would take the step of asking for assistance” (p. 142-143).

- “The faculty we interviewed described Latino students as social learners...The faculty have observed that Latino students prefer to sit together in class and to work in small groups rather than as individuals...If they have a class assignment that requires them to interact with individuals or organizations, they prefer to do so in two or threes rather than by themselves. In short, Latino students have demonstrated a preference for cooperation and collaboration rather than individualism and competition” (p. 144).
- “Latino students have appreciated a high level of formative feedback and appreciate receiving feedback in a manner that is constructive and encouraging. The manner in which they receive feedback is also important, as a number of faculty have had Latino students explain that they prefer not to receive individual feedback from a professor in front of their classmates. In terms of summative evaluation, Latino students have valued professors who find reasons to recognize the accomplishments of the class as a whole. Even small celebrations are reported as highly effective motivational tools” (p. 144).
- “Latino students show a greater interest in learning when they are able to connect the class materials to their personal experiences. A number of faculty indicated that they used journals as a way to encourage students to relate course material to their personal lives. Journaling activities have been well received by Latino students and sharing information from their journals with each other serves as a mechanism to encourage active participation in the class” (p. 144).
- “When discussing higher-order cognitive processing, faculty stressed the preference of Latino students to active approaches to learning...The interviewees were quick to point out that while Latino students, in general, do not respond well to competition, they have thrived in classes where active learning techniques are followed by active evaluation strategies” (p. 145).
- “The faculty also observed that Latino students prefer application in a ‘real world’ setting. A number of faculty incorporate simulations, a capstone assignment, or field trips so that students can either demonstrate or view the application of the classroom to work or life situations” (p. 145).
- “In order to engage students in the classroom, some community college faculty have developed a student-faculty relationship to overcome the fact that some Latinos are wary of authority...Others spoke of engaging the student outside of the classroom in casual conversation or developing relationships by attending social or cultural activities and then extending that relationship into the classroom and academic matters. Latino students have responded positively to personal attention and, once a relationship is developed, value one-on-one time with faculty” (p. 146).
- “The faculty we spoke with...[stressed] that creating a learning community facilitates the academic success of all students. How have the individuals we interviewed created such environments? They have been patient, used humor, and let the students know that mistakes were okay. As many community college students have a low level of self-

esteem, they have worked to build their confidence through frequent feedback and encouragement” (p. 146).

- “Creating a supportive learning community does not mean that faculty must lower standards or expectations. Rather, many of the faculty related that they have initiated learning communities through frank discussions that emphasize standards and expectations...In terms of Latino students, a number of faculty members emphasized the importance of being flexible with time in order to create learning communities...Interviews also indicated that faculty provide opportunities for students to interact with each other at the beginning, during, or at the end of the class session. These individuals indicate that such practice provides for the Latino cultural aspect of turning to each other for help, but also provides the opportunity for a group to ask the faculty member a question” (p. 147).
- “Faculty also expressed a great deal of attention to creating learning communities that focus on success. They have been careful to not call on Latino students in class if they have perceived that doing so makes them uncomfortable. They have been nonconfrontational in evaluating student work, focusing on suggestions for improvement rather than elaborating on shortcomings. If language is a problem, they have utilized interpreters. Several reported exhaustively searching for texts and other learning resources in the native language of the student and allowing them to speak or write in their primary language. Many have incorporated peer tutoring or study groups to provide supplementary instruction” (p. 147).
- “Community college faculty who have facilitated the academic success of Latino students point to the importance of gaining some knowledge and sensitivity to Hispanic cultures. Some faculty sponsored student clubs or organizations or attended and celebrated Hispanic events with the students. Many encouraged students to share their culture in classroom assignments and discussion. When warranted, they stressed cultural relevance to the course content. Recognizing that Latinos value the community rather than the individual, a significant number of faculty have also incorporated community issues or focus on matters of social justice to apply abstract theory and classroom learning to practical real-life and work applications” (p. 148).
- “Community college faculty who were identified as facilitating the academic success of Latino students reported that they do not do anything ‘different,’ specifically for Latino students. They have, however, recognized that students enrolled in their classes will have a variety of cultural experiences and learning style preferences” (p. 150).
- “Although faculty leadership is important, faculty working alone will not be able to sustain an ongoing professional development agenda. Community colleges that have an interest in student engagement and success need to develop a culture of caring and support on their campus. It is important for the administration to work with faculty to develop a series of structured professional development seminars that help faculty and student affairs professionals better understand the cultures of historically underrepresented students and how culture impacts preferred learning styles” (p. 149).

**Citation:** Corso, J., & Devine, J. (2013). Student technology mentors: A community college success story. *Community College Enterprise*, 19(2), 9-21.

**Source Type:** Peer-reviewed journal

**Type of Research:** Quantitative

**Qualitative Study:**

N: Not reported

Population subgroup focus: N/A

Number of institutions: 1

Survey: Researcher-designed survey

Intervention: N/A

Transcript: No

Longitudinal: No

How were participating students selected: Survey participants were also participants in the Student Technology Mentor program

Randomized trial: N/A

Quasi-experimental study: N/A

Statistical method: Survey

Outcome measures: Instructional support for faculty, staff, and students; technology skills; student work experience and internship opportunities

Controlling for other variables: N/A

Statistics included: Percentages

**Implementation Studies:** N/A

**Summary of Study and Findings/Conclusions:**

The LaGuardia Community College Student Technology Mentor (STM) program demonstrates how a college's own students can become resources for the technology development of faculty, the improvement of teaching tools, and the expansion of library services. The program also illustrates how the Student Technology Mentors themselves benefit from campus employment, interaction with teaching faculty, and the community of peers that the service creates. These benefits are manifested in comparatively higher retention and graduation rates for those in the program as compared with other students of equal qualifications" (p. 9).

## Hypotheses/Research Questions:

- This study reviews the establishment and achievements of the Student Technology Mentor program, an initiative of LaGuardia Community College's Center for Teaching and Learning created in 2000.

## Results:

- "A survey of LaGuardia librarians conducted by the STM program in 2010 indicates that STMs are highly valued and serve a need in the library classes. They help offset student apprehension of database searches and save time for the librarian/instructor and for students when the need arises to help a student or troubleshoot a technical program" (p. 15).
- "In [a] survey of the STMs, 93.5% of those responding indicated that they had learned about other cultures through their working relationships with fellow STMs, other students, and faculty, with 74% indicating that group discussions about their culture had helped them to learn more about each other. Among those surveyed, there was unanimous agreement that the STM program had provided them with a sense of community and helped them to become comfortable working collaboratively with others" (p. 16).
- "Faculty were asked on a 2011 survey to rate STM technology skills: 75% of faculty responding rated STM skills as 'excellent,' while another 17.5% rated their skill levels as 'very good.' Commenting on STM classroom instructional support, faculty indicated the quality of service as 'excellent' and student interaction as 'positive and supportive' and 'very helpful and accommodating'" (p. 17).
- "Students in the STM program graduated at a 16% higher rate; had comparable GPAs upon graduation; and transferred to senior colleges at a rate of 6.5% higher than the general college population" (p. 17).
- "The [STM] program has helped [participants]: build technology skills and skills for lifelong learning; improve interpersonal and communication skills; build self-confidence; connect with a community of learners, students in other majors, and college faculty and staff; develop new perceptions of faculty and forge new relationships with faculty; work on campus; learn to respect and interact with diverse cultures; and, maintain academic success" (p. 18-19).

**Citation:** Duggan, M. H., & Williams, M. R. (2010). Community college student success courses: The student perspective. *Community College Journal of Research and Practice*, 35(1-2), 121-134. doi: 10.1080/10668926.2011.525185

**Source Type:** Peer-reviewed journal

**Type of Research:** Qualitative

**Mixed Methods Study:** N/A

**Qualitative Study:** Yes

N: 60

Population subgroup focus: N/A

Number of institutions: 10

Grounded theory, Case study, Ethnography: Case study

Focus group or one-on-one interviews: One-on-one interviews

**Implementation Studies:** N/A

### **Summary of Study and Findings/Conclusions:**

“This study explores student success courses from the student perspective to answer three questions: What topics do students find the most useful? What teaching methods do the students find most helpful? How can these courses be customized to better serve the students? The purpose of this study is to interview students from a number of community colleges, exploring these topics from the student perspective with the goal of orientation course enhancement. Although students reported the skills and information provided in these orientations [sic] classes to be useful, the usefulness of specific topics varied according to the precollege preparation of each student. The authors offer suggestions for creating specialized orientation programs and courses to fit the needs of the diverse community college population” (p. 121).

### **Hypotheses/Research Questions:**

1. What topics do students find the most useful?
2. What teaching methods do the students find most helpful?
3. How can these courses be customized to better serve the students?

### **Results:**

- “Initial memories of [students’] orientation/student success course varied greatly. Most students referred to the course as a ‘great experience,’ remembering ‘fun activities like setting goals and where I see myself in five years,’ reporting they ‘learned a lot about the campus’ and received ‘good tips on studying.’ One student voiced it was ‘daunting to me

to be in any college. The course was somewhat calming, but at times it made me more intimidated.’ Another student stated, ‘Others needed the course more than I did. I’m not sure it was worthwhile for me, but I learned one credit for very little work’” (p. 124-125).

- “Several students reported the course provided opportunities to meet faculty in their chosen field along with other students in their program. Some of the information provided was ‘common sense’ for freshmen, including how to dress for job interviews and help with writing papers, obtaining tutoring for math, and learning how to use technology, referred to as ‘real world’ skills” (p. 125).
- “A few students reported career research being the most useful part of the course. Another cited the online career/majors assessment because it ‘showed you the many options out there, ones that I didn’t even know about’” (p. 125).
- “Overall, students reported their orientation course having well prepared them for college. The course ‘gave [them] an idea of how to approach certain tasks such as research and which teachers and professionals could assist [them] in answering’ their questions...A few students, however, voiced some negatives regarding the course, calling it a ‘waste of time and money’ as they were already prepared for college” (p. 126).
- “Students reported most often using the information about colleges clubs and organizations; balancing between home, work, and school; blackboard training; time management; and organizational skills...Academic skills were the next most popular with students using study skills, note-taking, and test-taking skills...Increased engagement with the institution was also cited as students reported becoming more involved in student organizations and clubs” (p. 126).
- “Students learned to balance their academics with family, work, and social life. Few made academic adjustments, citing time management as being a key component” (p. 127).
- “While many students were pleased with the topics covered in the course, others offered suggestions of additional items for inclusion. Most students reported receiving information on employability skills, job search, resume writing, and job choice; students not receiving such information wanted it included. One student wanted to know how to use college experience to obtain a job or a better job. Another student asked for additional information on transfer” (p. 128).



**Citation:** Hagedorn, L. S., Maxwell, W., Rodriguez, P., Hocevar, D., & Fillpot, J. (2000). Peer and student-faculty relations in community colleges. *Community College Journal of Research and Practice*, 24(7), 587-598. doi: 10.1080/10668920050139730

**Source Type:** Peer-reviewed journal

**Type of Research:** Quantitative

**Mixed Methods Study:** N/A

**Quantitative Study:**

N: 1,359 students for the first survey; 744 students for the second survey. Ultimately, 179 male students and 269 female students; total n=448

Population subgroup focus: N/A

Number of Institutions: 1

Survey: No specific survey name; it was a classroom survey that asked demographic questions and questions about educational attitudes. Another survey instrument was administered later in the semester; this survey measured social integration variables.

Intervention: No

Transcript: No

Longitudinal: No

How were participating students selected: Surveys were “administered to 1359 students enrolled in a variety of general education courses” (p. 591)

Randomized trial: No

Quasi-experimental study: Yes

Statistical method: MANCOVA/ANCOVA and Discriminant Function

Outcome measures: student-student relationships, student-faculty relationships, and participation in activities and student organizations

Controlling for other variables: Age, parent education, financial burden of college, full-time status, academic habits (reverse coded), have job, intend to transfer, number of dependent children

Statistics included: MANCOVA, “Corrected” mean, standard deviation, *F*, eta-squared, standardized discriminant function coefficients, chi-square, *p*-values, Eigenvalues

**Qualitative Study:** N/A

**Implementation Studies:** N/A

**Summary of Study and Findings/Conclusions:**

This study seeks to identify differences between male and female community college students in relation to their peer and student-faculty relationships. The results from the study were derived after using a two-phase analysis. The authors applied a MANCOVA in the first phase of the study in order to determine if there were differences between male and females across multiple factors. The second phase involved applying a descriptive discriminant analysis in order to determine how and in which factors males and females differ the most.

**Hypotheses/Research Questions:**

1. Do the peer relationships of community college students differ by gender?
2. Do the faculty-student relationships of community college students differ by gender?

**Results:**

- A two-phase analysis was used. “In the first phase, [the researchers] identified the significant factors on which male and female participants differed and applied a MANCOVA to test for differences between male and female participants across multiple factors while controlling for background and other variables. In the second phase, we applied a descriptive discriminant analysis to answer the following questions: *Where or how do males and females most differ*” (p. 592)?
- “Two somewhat conflicting interpretations may be suggested for [the] findings. Our first interpretation, based on the low means and variabilities in the data, is that the students at the community college in this study were rarely involved in social relations outside of the classroom, regardless [of] gender. Our second possible interpretation suggests that researchers have used the wrong measures in their studies of social involvement in community colleges” (p. 595).

**Phase One:**

- “The simple univariate frequency distributions revealed a pattern of generally low rates of contact with faculty members outside of the classroom for most of the students in the study. With so little variance in most of these measures, there was little possibility of gender differences” (p. 592-593).
- Among male and female students surveyed, about 20% of students shared and discussed their personal concerns with an instructor.
- Concerning discussions of career matters and informal socialization with instructors, at least 80% of students had not discussed either topic with an instructor. The authors note “that any differences between male and female students were muted by an environment in which student-faculty contact is perceived to be quite low” (p. 593). However, 85% of students surveyed, including both males and females, noted that they believed their instructors to be good teachers.

- Compared with male students, five percent more of females noted that they found it easy to “have close relations with faculty” and were, also, “satisfied with student-faculty relations” (p. 593). The authors also note that, compared with male students, 9% more of females “discussed career matters with faculty members at least occasionally” (p. 593).
- “Significant differences were found in the univariate ANCOVAs for six of the variables. Male students reported participating more often in college activities. Female students, on the other hand, reported having less difficulty meeting and making friends than male students, and they studied more often with other students. As the student-faculty interaction variables, female students more often discussed their career plans with faculty members, found it easier to develop close relations with faculty members, and reported higher levels of satisfaction with student-faculty relations” (p. 593-594).

#### Phase Two:

- The effect sizes from Phase 1 that indicate that while there were statistically significant gender differences, there were small. The authors posit that this sample of community college students “displayed a pattern of greater involvement by female students in informal relations while male students were more involved in formal social relations” (p. 594).
- The authors did not find any appreciable coefficients related to off-campus social roles between students and faculty. The authors note that other variables concerning off-campus roles “[suggest] that male students were more likely than female students to have a job and to be from families in which the parents had middle or higher levels of education, whereas female students were slightly more likely to be living with dependent children and to have higher scores on an index of motivation for academic performance in their courses” (p. 594-595).
- “One discriminant function was extracted. The resulting Eigenvalue was .181, the canonical correlation was .392 and 67.6% of the sample was correctly classified. Gender differences accounted for 15.3% of the variability of the scores of the discriminant function” (p. 594).

**Citation:** Lundberg, C. A. (2014). Peers and faculty as predictors of learning for community college students. *Community College Review*, 42(2), 79-98. doi: 10.1177/0091552113517931

**Source Type:** Peer-reviewed journal

**Type of Research:** Quantitative

**Mixed Methods Study:** N/A

**Quantitative Study:**

N: 239

Population subgroup focus: N/A

Number of Institutions: 12

Survey: Community College Student Experiences Questionnaire (CCSEQ)

Intervention: N/A

Transcript: N/A

Longitudinal: N/A

How were participating students selected: "Participants were members of nominated organizations who were present at a meeting when the survey was administered" (p. 86).

Randomized trial: N/A

Quasi-experimental study: N/A

Statistical method: Multiple linear regression

Outcome measures: General education, intellectual skills, science and technology, personal development, and career preparation

Controlling for other variables: N/A

Statistics included:  $b$ ,  $p$ ,  $R^2$ ,  $F$

**Implementation Studies:** N/A

**Summary of Study and Findings/Conclusions:**

"This study tested the extent to which student interaction with faculty, student peer teaching situations, student organization involvement, and discussion with diverse others contributed to self-reported learning for students involved in an ethnic-specific or multicultural student organization. The Community College Student Experiences Questionnaire (CCSEQ) was used to collect data from 239 students who were involved in an ethnic-specific or multicultural student organization at 1 of 12 different community colleges. Self-reported learning was reported in the

following domains: general education, intellectual skills, science and technology, personal development, and career preparation. For each of the five learning outcomes, frequent interaction with faculty was the strongest predictor in the model. Engagement with peers contributed to most outcomes, but not as strongly as student-faculty interaction. Thus, the study extend the contribution of faculty interaction to the arena outside the classroom and suggests further research about the ways student-faculty interaction benefits students at the community college level” (p. 79).

### **Hypotheses/Research Questions:**

- “The current study tested the extent to which faculty interaction, peer teaching, student organization involvement, and discussion with diverse others contributed to self-reported learning for students involved in at least one ethnic-specific or multicultural student organization” (p. 80).

### **Results:**

- “For each of the five learning outcomes, frequent interaction with faculty was the strongest predictor in the model. It predicted gains in general education ( $b=.249$ ,  $p<.001$ ), intellectual skills ( $b=.299$ ,  $p<.001$ ), science and technology ( $b=.343$ ,  $p<.001$ ), personal development ( $b=.332$ ,  $p<.001$ ), and career preparation ( $b=.362$ ,  $p<.001$ )” (p. 88).
- “The three variables measuring engagement with peers were weaker predictors than frequent interaction with faculty, but each contributed to most outcomes. Peer teaching contributed positively to gains in science and technology ( $b=.259$ ,  $p<.001$ ), intellectual skills ( $b=.127$ ,  $p<.05$ ). Frequency of participation in a student organization contributed positively to gains in personal development ( $b=.191$ ,  $p<.01$ ), intellectual skills ( $b=.178$ ,  $p<.01$ ), career preparation ( $b=.142$ ,  $p<.05$ ), and general education ( $b=.127$ ,  $p<.05$ ). Discussing ideas with diverse others contributed only to gains in general education ( $b=.228$ ,  $p<.01$ ). Interacting with diverse acquaintance contributed substantially to gains in general education ( $b=.228$ ,  $p<.01$ ), but not to the other outcomes” (p. 88).
- “The only student background characteristic that made a significant contribution to learning was non-native English speaker, which made a positive contribution to gains in science and technology ( $b=.227$ ,  $p<.001$ ) and contributed to 5% to the total variance explained by the model. Students’ perception that administrative staff were helpful contributed to gains in general education ( $b=.173$ ,  $p<.01$ ) and intellectual skills ( $b=.126$ ,  $p<.05$ ). Perceptions that instructors were approachable, helpful, and supportive contributed to gains in career preparation ( $b=.182$ ,  $p<.01$ ). Each of these institutional characteristics contributed to gains in career preparation ( $b=.182$ ,  $p<.01$ ). Each of these institutional characteristics contributed 7% or less to the total variance explained by the model” (p. 88).
- “In summary, the measures of engagement contributed the most to the variance, ranging from 30% (for general education) to 18% (for personal development). Student and institutional characteristics contributed much less to the variance (from 0% for personal development to 6% for general education)” (p. 88).

**Citation:** Maxwell, W. E. (2000). Student peer relations at a community college. *Community College Journal of Research and Practice*, 24(3), 207-217. doi: 10.1080/106689200264169

**Source Type:** Peer-reviewed journal

**Type of Research:** Quantitative

**Qualitative Study:**

N: 744

Population subgroup focus: N/A

Number of institutions: 1

Survey: Researcher-designed survey

Intervention: N/A

Transcript: No

Longitudinal: No

How were participating students selected: “The specific sample for this study included the students who participated in a midsemester classroom questionnaire survey in one or more of a variety of 19 introductory general education courses (including anatomy and physiology, biology, chemistry, English, health, history, math, philosophy, politics, psychology, and sociology)” (p. 210).

Randomized trial: N/A

Quasi-experimental study: N/A

Statistical method: Survey

Outcome measures: Peer relations and social integration

Controlling for other variables: N/A

Statistics included: Percentages, frequency, standard deviation

**Implementation Studies:** N/A

**Summary of Study and Findings/Conclusions:**

“Recent studies have reported little student social activity and conflicting findings of positive, negligible, or even negative effects of social integration on academic outcomes at community colleges. These conflicting research findings may be partially attributable to the use of instruments originally developed for the study of traditional social relations at four-year institutions. This study explored the possibility of distinctive patterns of student peer relations at

a community college in terms of two questions: (a) frequency of peer relations and (b) variation among students. Classroom surveys were given to students in 19 general education courses at the beginning of the semester (N = 1,359) and midsemester (N = 744). The findings indicated that few students engaged in some of the traditional activities of four-year college students and that over half of the students occasionally or frequently studied together” (p. 207).

### **Hypotheses/Research Questions:**

1. What is the frequency of various kinds of peer relations?
2. What is the variation among students in their peer relations?

### **Results:**

- “The students who participated in the midsemester classroom questionnaire survey indicated that the large majority of them felt that it was not difficult for them to meet and make friends with other students. Seventy-one percent of the students disagreed or strongly disagreed with the survey item ‘It has been difficult for me to meet and make friends with other students’” (p. 212).
- “However, despite the perception by most students that it was not difficult to meet and make friends on campus, few students reported frequently participating in activities with other students” (p. 212).
- “A large majority of the students, 78%, indicated that they almost never attended meetings of campus clubs, organizations, or student government” (p. 213).
- “Even fewer students attended artistic, dramatic, or musical activities on campus” (p. 213).
- “Somewhat more of the students reported chatting with peers in the student center, an arena that may be an important point of similarity for two- and four-year colleges. However, a majority of students, 60% indicated that they almost never did this” (p. 213).
- “In striking contrast to the limited involvement of students in extracurricular activities, the majority of students did interact with each other around their courses. Although a large proportion of students, 42%, reported that they almost never shared their studies, studying together was the most frequently occurring of the social activities examined on this questionnaire survey” (p. 213).
- “Peer activity centered around college courses as a main area of social activity was similarly displayed for those who set up a regular study group with other students. Twenty-eight percent of the students, three times as many as reported weekly student club attendance, responded that they had met with a study group nine or more times by midsemester” (p. 214).

**Citation:** Myers, B., Starobin, S. S., Chen, Y. A., Baul, T., & Kollasch, A. (2015). Predicting community college student's intention to transfer and major in STEM: Does student engagement matter? *Community College Journal of Research and Practice*, 39(4), 344-354. doi: 10.1080/10668926.2014.981896

**Source Type:** Peer-reviewed journal

**Type of Research:** Quantitative

**Mixed Methods Study:** N/A

**Quantitative Study:**

N: 5140

Population subgroup focus: N/A

Number of Institutions: 15

Survey: STEM Student Success Literacy Survey

Intervention: N/A

Transcript: N/A

Longitudinal: N/A

How were participating students selected: The researchers "excluded students who were in remedial courses, late start/late enroll courses, noncredit courses, high school dual-enrollment courses, freshman seminar courses, lower-level ESL (English as a second language) courses, independent study courses, individual instruction courses (example: piano lessons), and distance education courses" (p. 346).

Randomized trial: N/A

Quasi-experimental study: N/A

Statistical method: Binary logistic regression analysis

Outcome measures: Transfer engagement, faculty engagement on coursework, faculty staff encouragement or assistance, and peer engagement

Controlling for other variables: N/A

Statistics included: Exploratory factor analysis, Cronbach's alpha, confirmatory factor analysis, full information maximum likelihood estimation imputation, goodness-of-fit index, Bentler's comparative fit index, root mean square error of approximation, alpha reliability coefficient, -2 Log Likelihood, and Hosmer & Lemeshow test

**Implementation Studies:** N/A



## Summary of Study and Findings/Conclusions:

“This study examined the influence of community college students’ engagement on their intention to transfer and major in a STEM (science, technology, engineering, and math) field. The STEM Student Success Literacy Survey was used to collect data among all 15 community colleges in Iowa. The authors developed a measurement model for community college student engagement and used the model to predict students’ intention to transfer and major in STEM fields. The engagement measurement model consisted of four constructs: peer engagement, transfer engagement, faculty/staff encouragement/assistance, and faculty engagement on coursework. To predict the students’ intention, the logistic regression analysis was employed. The results suggest that students’ demographic and background characteristics contributed to predict their STEM aspirations. The study was concluded by implications for policy, practice, and future research” (p. 344).

## Hypotheses/Research Questions:

1. How can student engagement constructs be measured?
2. To what extent do student demographics and student engagement levels predict students’ intention to major in STEM fields through transfer?

## Results:

- “The descriptive results exhibit a number of similarities between two groups of students: all students who responded to the survey and a subset of students who indicated their STEM aspiration. For example, the majority of students in both groups were female, between 18 and 24 years of age and White/Caucasian” (p. 347).
- “Four engagement constructs emerged by EFA [exploratory factor analysis] and were confirmed by CFA: transfer engagement, faculty engagement on coursework, faculty/staff encouragement/assistance, and peer engagement. According to the EFA results, the four constructs consisted of three to six variables with factor loadings between .500 and .844. The constructs produced alpha reliability coefficients between  $\alpha=.691$  and  $\alpha=.834$ . The four engagement constructs were then entered into a confirmatory factor analysis” (p. 347).
- “For the logistic regression, 34 independent variables were entered into the binary logistic regression analysis in five blocks. Nine variables that produced statistically significant results at the  $p \leq .05$  level were retained in the final model as predictors of students’ intention to transfer and major in a STEM field. The results of the chi-square analysis, -2 Log Likelihood, and Hosmer & Lemeshow test indicated that the model is statistically significantly reliable in distinguishing between students with STEM aspirations and those students without STEM aspirations” (p. 349).
- “The variable Level of Science Completed ( $p < .001$ ) indicated that students who completed more science are 1.75 times more likely to have STEM aspirations than students who completed few science courses. Students who indicated that they had completed more math courses ( $p < .001$ ) are 1.56 times more likely than students who completed few math courses to have STEM aspirations. The variable Native Language ( $p < .005$ ) revealed that students whose native language is not English are more likely to

have STEM aspirations than students who indicated that English is their native language. The variable Age ( $p < .005$ ) indicated that older students are 1.28 times more likely than younger students to possess STEM aspirations. Students who indicated that their gender ( $p < .001$ ) is male are more likely than female students to respond that they have STEM aspirations. The variable Concern for Finances ( $p < .05$ ) indicated that students who are more concerned with financing their education are 1.12 times more likely to have STEM aspirations than those students who have few concerns for financing their education. Students who indicated that they work very few hours per week ( $p < .01$ ) are more likely to have STEM aspirations than students who frequently work at a job for pay. The variable Highest Desired Degree ( $p < .001$ ) revealed that students who would like to complete a higher degree are... 1.22 times more likely than students who do not intend to complete a higher degree to have STEM aspirations. Students who indicated that they have transfer intentions ( $p = .001$ ) are 4.31 times more likely to have STEM aspirations than those students who do not intend to transfer” (p. 349-350).

- “The results of the logistic regression analysis for STEM aspirations confirmed what previous literature suggested: that male students, whose native language is not English, who excel in science and math, and have high degree aspirations are more likely to have STEM aspirations” (p. 350).

**Citation:** O’Gara, L., Karp, M. M., & Hughes, K. L. (2009). Student success courses in the community college: An exploratory study of student perspectives. *Community College Review*, 36(3), 195-218. doi: 10.1177/0091552108327186

**Source Type:** Peer-reviewed journal

**Type of Research:** Qualitative

**Mixed Methods Study:** N/A

**Qualitative Study:** Yes

N: 44

Population subgroup focus: N/A

Number of institutions: 2

Grounded theory, Case study, Ethnography: Case study

Focus group or one-on-one interviews: One-on-one interviews

**Implementation Studies:** N/A

**Summary of Study and Findings/Conclusions:**

“This study examines student success courses in two urban community colleges. Through analysis of student interview data, we find that such courses are an essential resource for students, in large part because the various benefits reinforce one another and magnify their influence. These benefits include learning about the college, classes, and study skills. In addition, students build important relationships with professors and peers” (p. 195).

**Hypotheses/Research Questions:**

“This base of quantitative work provides a promise picture of the influence these courses may have on student persistence and credential attainment. More quantitative work is necessary to establish a causal relationship between participation in student success courses and positive student outcomes. Yet what is lack as well is a qualitative exploration of these courses as seen through the eyes of the students themselves. Such explorations can help us understand how the particular course content lends itself to student support. The present study begins to build this qualitative body of knowledge. We sought to examine the institutional and personal factors that contribute to or hinder students’ persistence in the community college. The student success course was initially just one of one of many areas explored in student interviews; however, it soon became apparent that the course was very important in influencing behaviors associated with persistence. Thus our findings on the student success course are emergent and inductive; additional research is needed” (p. 197-198).

**Results:**

- “It became clear that the students generally found the [Student Success] course to be beneficial in a variety of ways: They gained information about the college, developed skills and techniques that could help them in their academic endeavors, and created important relationships. In addition, these benefits reinforced one another to bring about behaviors that supported persistence” (p. 204).
- “Students reported that the student success course was a convenient, one-stop location for receiving a variety of necessary information in a coherent way; this was in contrast to how they reported information was otherwise made available. Community colleges provide a wealth of information to students on wide-ranging topics including graduation requirements, course schedules, available support services, and student events and clubs. This information is made available through a variety of sources including advisors, professors, and printed materials such as fliers and course catalogs. Students reported, however, that many of these information sources were not well coordinated and were often difficult to access...Students who did find useful information described how they would encounter these information sources randomly, for example, from a flyer posted on a bulletin board or through an impromptu run-in with a professor or peer. This meant that they often did not get the information they needed in ways that were useful to them or at appropriate time in their educational trajectories. They did not appear to have a consistent and reliable source of information” (p. 204).
- Students in [the] sample reported that the student success course provided them with information about the services available at the college such as personal counseling, college advising, tutoring, transfer advising, and student activities. This course was an important avenue through which students became knowledgeable the resources available at the college. Students who did not take the college success course reported receiving information about college services through random interactions with professors, peers, and general college advisors. These interactions gave students some information about the resources available at the college, yet students did not receive a full picture of the services available. In addition, not all students experienced these interactions and were thus left without an understanding of the resources offered at the college” (p. 205).
- “Why was the student success course more effective in presenting this type of information than other sources? First, the course enabled students to engage in small and large group discussions and complete assignments that focused on institutional services...Second, class visits from various college representatives provided information to students...Finally, the student success course included guided tours to the various support services offices on campus...As a result of these activities, our analysis indicated that students who participated in the student success course generally knew more about available services and had more accurate information about these services than did the students who had not enrolled in the class” (p. 205).
- “Students also found that information about course selection and graduation requirements gained through the student success course was more useful than the information gained through other avenues such as college advisors. Course advising for four-year students at the two colleges in our sample usually consisted of a short meeting with a college advisor prior to course registration. Students meet with whichever

counselor was available, and if they had follow-up questions, they usually met with a different counselor. Students often reported feeling rushed during these meetings and said that the meetings rarely focused on long-term goals or planning. In addition, some students reported receiving contradictory or inaccurate information during this process” (p. 206).

- “The student success course appears to remedy some of the confusion students felt when using the general college advisors. Students in our sample reported receiving information and guidance regarding program planning and course selection in their student success course. This occurred through individual meetings with the college success professors, class presentations from general college advisors, and projects” (p. 206).
- “Students in [the] sample also reported that the college success course helped them develop time management and study skills they needed to be successful. This is critical in light of the fact that community college students often have many other commitments beside their studies such as taking care of family members or working full time” (p. 207).
- “Course activities helped students learn about and practice effective academic habits. During one course observation, for example, students were completing presentations on note-taking techniques. This helped the student presenters practice such techniques while teaching their peers about this useful skill. In another student presentation, students discussed good study habits, highlighting examples of how to study effectively, such as by forming study groups” (p. 208).
- “Several students described how the student success course helped them forge relationships with their peers and professors. These relationships are hypothesized to be particularly important, because they can help students integrate into the social and academic fabric of the school, thereby encouraging them to persist to a degree (Tinto, 1993). It is often difficult for community college students to forge such relationships because of the myriad demands on their time. Students reported that their student success course helped them form relationships with professors and peers that they would not otherwise have created, thereby increasing their integration into the college” (p. 208).
- “In order to benefit from support services, students need to actually use them, not just know about them. This means that students need to know how to access a service and feel comfortable doing so. The student success course encourages both of these things, thereby helping students take advantage of services in a way that just learning about them, or just feeling comfortable on campus, would not. Tutoring is a prime example of this. At both colleges, it was a widely publicized support service, and most students learned about it from a variety of sources. However, students in our sample who took the student success course were much more likely to actually attend tutoring sessions than students who did not. Fifty-eight percent of students in our sample who took the student success course made use of tutoring, whereas 23% of students who did not take the course did so. Given the small size of our sample and the exploratory nature of the study, we cannot assume there is a causal relationship. But it is important to remember that students usually enrolled in student success courses because they were required to do so, not because they were more motivated or more conscientious than students who

did not enroll. Thus the correlation may indicate that the course encourages use of tutoring services” (p. 210).

- “As we have noted, many students felt that general course advising was poor but that they received good course information in their student success courses. In addition, students created relationships with the professors of their student success courses. For many students, this relationship extended beyond their time in the student success course, turning into a long-term source of quality course advising. The structure of the student success course encouraged interactions between students and professors, thus students felt that their student success professors knew them and their goals well. This enabled the student success professors to give student individualized advice on courses, which was greatly appreciated. Because students had a relationship with and trusted their professors, they often sought them out after the class ended, opting to meet with the student success professor rather than a college advisor when selecting courses for future semesters” (p. 211-212).
- “As previously discussed, it appears that the student success course facilitated students’ relationships with their peers and professors. That seems to have contributed to students’ overall feelings of integration into the social and academic fabric of the college. These two benefits reinforced each other and enabled students to access important information networks in the college. Through their feeling of assimilation, students felt comfortable making contact with even more people such as classmates, staff members, and faculty members, which increased the amount of information they were able to access” (p. 212).

**Citation:** Pope, M. L. (2002). Community college mentoring: Minority student perception. *Community College Review*, 30(3), 31-45. doi: 10.1177/009155210203000303

**Source Type:** Peer-reviewed journal

**Type of Research:** Quantitative

**Mixed Methods Study:** N/A

**Quantitative Study:**

N: 375

Population subgroup focus: Students of African American, Asian, Hispanic, and Native-American descent

Number of Institutions: 15

Survey: Self-designed survey

Intervention: N/A

Transcript: N/A

Longitudinal: N/A

How were participating students selected: “The researcher selected the public two-year institutions randomly from the 2000 Carnegie Foundation classification of higher education institutions...After the institutions were selected, the names and addresses of the chief student affairs officers, defined typically as vice president or dean of student services, of each of these institutions were located on each institution’s Web site. They were asked to respond to (1) whether their institution would be willing to participate in the study; (2) whether they were willing to participate and who would be responsible for the distribution of the study to 25 students of color; and (3) when would be the most opportune time for the institution to participate in the study” (p. 34).

Randomized trial: N/A

Quasi-experimental study: N/A

Statistical method: ANOVA, chi-square analysis, multiple comparisons analysis

Outcome measures: Availability of the types of mentoring

Controlling for other variables: Race

Statistics included: Degrees of freedom, sum of squares, mean square, frequency, significance

**Implementation Studies:** N/A

## Summary of Study and Findings/Conclusions:

“The present investigation proposes that multiple levels of mentoring provide both formal and informal methods of mentoring for minority students...This present study will analyze the perceptions of minority students regarding this notion of multiple levels of mentoring on their community college campuses” (p. 33).

## Hypotheses/Research Questions:

1. What aspects of mentoring are important to minority students?
2. What are minority students' perceptions of whether their current institution provides these multiple levels of mentoring?
3. Is there a relationship between the perceptions of importance and the availability of these multiple levels of mentoring by minority students?
4. Is there a difference in minority students' perceptions, based upon race, of whether their current institution provides multiple levels of mentoring?

## Results:

- “Based on the results, students of color felt that multiple types of mentoring are important for minority students attending community colleges. The respondents were positive overall in their perceptions of the mentoring statements, with at least 70% of the respondents stating that each type of mentoring was important in all except one of the statements. The statement, which received the least number of affirmative responses, 172 (68.8%), was focused on whether the student thought that his or her individual participation in mentoring was important” (p. 35).
- “Additionally, most of the responses to the importance of mentoring based on individual ethnic groups were rated affirmatively by at least 70% of the respondents, with the exception of four overall instances. Only 8 (66.7%) students of Asian descent rated the statement related to their peers serving as mentors to them as being important. Similarly, only 18 (64.3%) Hispanics and 120 (69.0%) African Americans responded affirmatively to this statement. Asian-American students also rated the statement related to staff members mentoring students relatively low with only one half of the respondents responding positively” (p. 35).
- “The overall mean for all students participating in the study yielded means that ranged from the low of 3.22 (SD=1.23), the statement related to the individual student mentoring other students [I mentor other students], to the high of 4.10 (SD=.88), the statement related to the importance of mentoring to student success at the institution [Mentoring is important for success at this institution]” (p. 37).
- “Among groups, there were marginal means also, with the lowest rated by Asian respondents for the statement related to the respondent mentoring other students (M=2.00; SD=1.21), and the highest rated by Asian respondents for the statement related to the importance of mentoring for student success (M=4.167; SD=.94). The researcher aggregated the means for each of the statements by race, and the overall perception of the availability of mentoring programs for Asian students was lower than the four other groups” (p. 38).



- “Research question number three, which related to whether a relationship existed between the perceptions of importance and availability of these multiple levels of mentoring by minority students, was answered by performing a chi-square analysis of the responses; both related to the students’ perceptions of importance and the availability of the programs at their institutions. The results of this analysis indicated that there was an association between these two variables for each of the statements except one—faculty serve as mentors for all students. Thus, the students perceived that the services they deemed important were services that were available on their campuses, with the exception of faculty mentoring students” (p. 38).
- “To answer research question number four, which focused on whether there was a difference in minority students’ perceptions, based upon race of their current institution’s provision of multiple levels of mentoring, a one-way ANOVA was performed using race as the independent variables; the responses related to the availability of the types of mentoring as the dependent variable. Results indicated that there were significant differences in four of the statements regarding mentoring. A multiple comparisons analysis was utilized to determine where those differences existed within the race variables. Hispanic respondents had a significantly lower agreement than did African-American, Native-American, and multiethnic students with the perceived availability of persons of color at their institution that they would consider as potential mentors. Similarly, Asian respondents had a significantly lower agreement level than did African-American and Native-American students regarding the availability of peer mentors to assist them. Also, Asian students had a significantly lower level of agreement than did African-American students with the statement regarding involvement of staff at their institution in the mentoring process. Finally, Asian students had a significantly lower level of agreement than did African-American and Native-American students regarding their individual participation in mentoring fellow students” (p. 38-39).
- “The respondents in this study rated each type of mentoring relatively high, with a significant majority of the students providing positive responses regarding each type of mentoring. Each type was found in some form or combination of mentoring types in a variety of programs, activities, and environmental factors that the research has shown are important in mentoring relationships” (p. 41).

**Citation:** Rose, L. H., Sellars-Mulhern, P., Jones, C., Trinidad, A., Pierre-Louis, J., & Okomba, A. (2014). A qualitative exploration of autonomy and engagement for young women of color in community college. *Community College Journal of Research and Practice*, 38(4), 346-356. doi: 10.1080/10668926.2012.759518

**Source Type:** Peer-reviewed journal

**Type of Research:** Qualitative

**Mixed Methods Study:** N/A

**Qualitative Study:** Yes

N: 61

Population subgroup focus: Latina, Black, and Asian women between the ages of 18 and 24

Number of institutions: 3

Grounded theory, Case study, Ethnography: Phenomenology and grounded theory

Focus group or one-on-one interviews: Focus groups

**Implementation Studies:** N/A

### **Summary of Study and Findings/Conclusions:**

“Given the nationwide concern about college persistence and graduation rates, this article reviews pertinent literature related to autonomous learning as well as social and academic engagement. It also presents findings of a qualitative study of young community college women of color, as understudied population. The article, part of a larger research project that explores the obstacles faced by young women of color, describes their experiences related to academic and social engagement and self-determination in the community-college setting. Data were collected from 15 focus groups with a total of 61 Latina, Black, and Asian women between the ages of 18 and 24 on three community college campuses in a large northeastern city in the United States. The findings of this exploratory study suggest that young women of color demonstrate a compelling determination to complete college autonomously and, to a lesser degree, are willing to engage socially and academically. The findings prompt the suggestion that academic and student affairs professionals create opportunities to develop autonomous learning strategies that can be nested within academic and social engagement activities” (p. 346-347).

### **Hypotheses/Research Questions:**

“This study explored the lived experience of young women of color on community college campuses through a dual lens. Conceptually, intrinsic motivation and engagement seem to be unrelated concepts, yet both are noted as empirical must-haves if students are to succeed” (p. 350).

### **Results:**

- “The intense drive to be autonomous, as though the key to success were a solitary quest, was a pervasive theme...These young women approached college with purpose. In each of the focus groups, regardless of credits accumulated, young women spoke with pride and determination when they described how they managed on their own, both in and out of the classroom...Reverberating through many of the interviews was the sense that self-reliance would lead to positive educational outcomes. Thus, autonomy was articulated as both aspiration and purposeful—both as a goal and a credo” (p. 352).
- “Young women early in the college journey noted that they shied away from others...Successful young women in their third and fourth semesters also mentioned that they had avoided socializing...The notion that the route to college success is meant to be achieved on a solitary mission was echoed across the focus groups. However, not all students avoided social contact altogether. Many found connections with other students as instrumentally useful in the navigation of the complex processes of the urban community college terrain...One cohort of students across all three campuses that spoke about social engagement as a vehicle for academic success were the young women who had grade point averages greater than 3.5. High achieving young women spoke about the sense of community and the support provided by fellow students...It is important to note that students who are high achievers appeared to be courted more frequently by honors societies, scholarship advisors, and leadership groups, thus facilitating instrumental engagement” (p. 353-354).

**Citation:** Sass, M. S., & Coll, K. (2015). The effect of service learning on community college students. *Community College Journal of Research and Practice*, 39(3), 280-288. doi: 10.1080/10668926.2012.756838

**Source Type:** Peer-reviewed journal

**Type of Research:** Quantitative

**Mixed Methods Study:** N/A

**Quantitative Study:**

N: 69 in experimental group, 64 in the control group

Population subgroup focus: N/A

Number of Institutions: 1

Survey: Pre- and posttests of the Communicative Adaptability Scale (CAS)

Intervention: Yes

Transcript: N/A

Longitudinal: N/A

How were participating students selected: Random sample

Randomized trial: N/A

Quasi-experimental study: Yes

Statistical method: t-test differences in pre- and post-test scores.

Outcome measures: Change scores (pre- and post-test) on the Communicative Adaptability Scale (CAS) overall score and scores on the three instrument subscales (Social Composure, Appropriate Disclosure, and Articulation)

Controlling for other variables: Whether or not students participated in a service learning project or used any social media tools in a Communication 101 course

Statistics included: Mean, standard deviation, t-test, *df*, *p*-value, mean gains

**Implementation Studies:** N/A

**Summary of Study and Findings/Conclusions:**

“This study discusses the implementation of a service learning component in community college communication 101 level courses. Through the execution of a service learning component in communication classes at a community college, students’ communicative competency and attitude toward community service is assessed. Using two different delivery approaches, a

quantitative study assessed the pretest and posttest of the standardized tool Communicative Adaptability Scale (CAS). Eight sections of communication 101 courses were distributed into two groups: (a) an experimental group and (b) a control group. The experimental group (n=69) was required to finish a service learning project consisting of 15 hours by the end of the semester. The control group (n=64) students did not participate in a community service project. Quantitative research methods were applied through data collection of the CAS taken by participants pre-implementation and post-implementation of the service learning component, which was a community service project. The CAS results support that the implementation of service learning significantly increases students' communication adaptability and competence" (p. 280).

### **Hypotheses/Research Questions:**

- None listed

### **Results:**

- "Independent sample t tests were conducted to examine the effect of service learning among the experimental group and on the control group that had no exposure to a service learning project. A t test was conducted on the pre-and posttest results of the control group and the experimental group. In the control group, significant results were found in the Appropriate Disclosure subscale where the pretest (M=3.4, SD=.8) is significantly different from the posttest (M=3.7, SD=.8);  $t(120)=-1.8$ ,  $p=.074$ " (p. 285).
- "Significant results for the experimental pre- and posttest were found in the subscales of Social Composure, Articulation, and overall CAS score. The social composure subscale pretest (M=3.6, SD=.61) is significantly different from the posttest (M=3.8, SD=.67);  $t(122)=-1.7$ ,  $p=.086$ . The articulation subscale pretest (M=3.4, SD=.82) is significantly different from the posttest (M=3.7, SD=.82);  $t(122)=-2.7$ ,  $p=.008$ . Third, the overall CAS score pretest (M=3.5, SD=.44) is significantly different from the posttest (M=3.7, SD=.42);  $t(132)=-2.1$ ,  $p=.040$ . Founded on the results comparing gains and losses between the groups, evidence shows that there are four subscales positively influenced by service learning" (p. 285).
- "Based on the t tests, it was discovered that the experimental group had significant results in the Social Composure, Articulation, and the overall CAS scores. There was also a significant difference found in the control group regarding the Appropriate Disclosure subscale" (p. 286).
- "The t-test results support the theory that service learning produces better communication skills. Several t tests showed significant results for the experimental pre-and posttest in Social Composure and Articulation subscales and the overall CAS score" (p. 286).
- "Students' social composure confidence increased after actively volunteering, suggesting that communicating outside the classroom and in the community caused them to feel more comfortable and confident when conversing with others" (p. 286).
- "In the overall CAS score, the five subscales included are social composure, appropriate disclosure, articulation, wit, social experience, and social confirmation. The pre- and

posttest outcome of the overall CAS score showed significant changes for the experimental group. This overall score, which consists of all five subscales accumulated, illuminates that service learning significantly increases students' positive perception of their communication aptitude and competence" (p. 286).

**Citation:** Settle, J. S. (2011). Variables that encourage students to persist in community colleges. *Community College Journal of Research and Practice*, 35(4), 281-300. doi: 10.1080/10668920701831621

**Source Type:** Peer-reviewed journal

**Type of Research:** Quantitative

**Mixed Methods Study:** N/A

**Quantitative Study:**

N: 310

Population subgroup focus: N/A

Number of Institutions: Unknown—data is from the Beginning Postsecondary Students Longitudinal Study

Survey: Beginning Postsecondary Students Longitudinal Study

Intervention: N/A

Transcript: N/A

Longitudinal: Yes

How were participating students selected: From the Beginning Postsecondary Students Longitudinal Study

Randomized trial: N/A

Quasi-experimental study: N/A

Statistical method: Logistic regression analysis, Nagelkerke  $R^2$ , chi-square, degrees of freedom, correct prediction

Outcome measures: Year-to-year persistence

Controlling for other variables: N/A

Statistics included: Delta- $p$ , Beta coefficient, significance level,  $p$ -value

**Implementation Studies:** N/A

**Summary of Study and Findings/Conclusions:**

“Estimating the persistence of first-time students from the first year to the second year of college is a growing social and financial concern. Studying how socioeconomic status affects year-to-year persistence may help to identify and assist those students who have socioeconomic profiles most likely to indicate challenges to year-to-year persistence. This study used data from

the Beginning Postsecondary Students Longitudinal Study (BPS: 96/98), a nationally representative survey, to provide additional information about the patterns of educational attainment and persistence for a subset of more than 51,000 students included in the NPSAS:96 survey. The study used all students enrolled as first-time beginning students at two-year institutions. The purpose of the study was to develop and test a theoretical framework for describing the persistence of students at two-year institutions. The preliminary model included 39 literature-based variables grouped into seven factors: background, high school, college-entry, financial, social integration, academic integration, and college performance. The data were tested using descriptive statistics and logistic regression to determine the predictive value of the models for the students. Social capital variables, particularly student integration to the collegiate environment, were strongly associated with persistence of students. Contact between students and faculty outside of the classroom environment is critical to persistence” (p. 281).

### **Hypotheses/Research Questions:**

1. How does socioeconomic status, including social-capital variables, positively or negatively influence the year-to-year persistence of first-generation college students compared to continuing-generation students?
2. What effect does socioeconomic status suggest for persistence of students?
3. How do background, high school, college-entry, financial, social integration, academic integration, and college performance factors affect year-to-year persistence for first-generation students?
4. What implications do these findings have for future federal and institutional policy decisions for first-generation and continuing-generation students?

### **Results:**

- “A total of 183 first-generation students from the total two-year sample of 310 students were considered. Of the sample, 183 persisted to the next year, or 60%...The model correctly predicted 92.7% of all first-generation students who persisted. The model predicted 54.35% of first-generation students who did not persist. The overall predictive percentage for the model was 83.06% for all persistence decisions” (p. 291).
- “All students who persisted had friends attending the same institution and had social contact with faculty members outside of the classroom. Both of these variables were associated with year-to-year persistence at a 1.000 or ‘perfect’ association. In addition to the two constant association variables, several other variables were strongly associated with persistence to the second year. Students who were older than 21 years of age were much more likely to persist. Other significant variables included coming from a family of two or three additional family members, having at least one other family member in college, attending full-time, not delaying entry into postsecondary education, satisfaction with the cost of the college, having financial aid, and living on-campus. Students who persisted also indicated satisfaction with their intellectual development and the college’s prestige. Students who had some level of dissatisfaction with the instructor’s ability to teach and did not participate in fine arts activities were associated with persistence.



Finally, grade point average was significantly associated with persistence; students who had 'A' and 'B' level grades were more likely to persist" (p. 295).

- For first-generation students: "Every student who persisted had friends attending the same institutional and had social contact with faculty members outside of the classroom. Both of these variables were associated with year-to-year persistence at a 1.000 or perfect association. In addition, all first-generation students who persisted were also over the age of 21. Several other variables were strongly associated with persistence. Nine of the 30 significant variables were associated with persistence with a  $p = \leq .25$ , or 25%. First-generation students who persisted were associated with attendance at a school within 150 miles of their home, living on campus, having an e-mail account, being satisfied with the campus climate and their intellectual development, going places with friends, having a lower SAT score, and earning 'B' and 'C' grades" (p. 296).
- For continuing-generation students: "Continuing-generation students who persisted were likely to be male, from either a very small family of only two persons or a large family of more than four persons, from a nonrigorous high school curriculum located in rural areas, not on any financial aid, dissatisfied with the instructor's ability to teach, not participating in fine arts activities, did not meet with advisor about academic plans, and did not talk with faculty outside of class" (p. 296-297).

**Citation:** Swigart, T. E., & Murrell, P. H. (2001). Factors influencing estimates of gains made among African-American and Caucasian community college students. *Community College Journal of Research and Practice*, 25(4), 297-312. doi: 10.1080/106689201750122406

**Source Type:** Peer-reviewed journal

**Type of Research:** Quantitative

**Mixed Methods Study:** N/A

**Quantitative Study:**

N: 552

Population subgroup focus: African-American and Caucasian students

Number of Institutions: Not mentioned—students were selected from the national CCSEQ database

Survey: Community College Student Experiences Questionnaire (CCSEQ)

Intervention: N/A

Transcript: N/A

Longitudinal: N/A

How were participating students selected: Random sample

Randomized trial: N/A

Quasi-experimental study: Yes

Statistical method: ANOVAs, Tukey-Kramer tests

Outcome measures: Student perceptions of academic, social, and personal growth and development

Controlling for other variables: Age, gender, and enrollment status

Statistics included: *F* test, *p* test, mean, standard deviation,  $R^2$ , beta

**Implementation Studies:** N/A

**Summary of Study and Findings/Conclusions:**

“This study examined whether African-American and Caucasian students attending a two-year college differed in the relationship between the quality of their efforts exerted toward important educational objectives and their perceptions of growth and development in academic and nonacademic domains. The results suggest that the relationship between student effort and self-reported gains are not the same for African-American and Caucasian students. When

background variables were statistically controlled for, quality of effort yielded several common and unique influences on estimates of gains made for each group. African-American students reported greater gains, which were explained by more involvement toward the completion of important educational objectives. These findings are discussed in light of Pace's theory and past research on students attending two- and four-year institutions" (p. 297).

### **Hypotheses/Research Questions:**

1. Are African-American and Caucasian community college students similar in terms of levels of quality of effort?
2. Is the relationship between quality of effort and self-reported gains the same for African-American and Caucasian community college students?

### **Results:**

- "The ANOVAs for quality of effort in student acquaintances and self-reported gains were highly significant ( $p < .0001$ ). The ANOVAs for library, faculty, writing, and computers also were significant ( $p < .001$ ). The ANOVA for coursework was significant at  $p < .01$ " (p. 302).
- "Tukey-Kramer statistics suggested differences among involvement and gains. As for quality of effort, African-American students were more involved in coursework, library use, faculty member interaction, student interaction, and use of computer technology. Regarding self-reported gains, African-American students reported more gains than did Caucasian students" (p. 302-303).
- "Of primary interest was determining the influence of quality of effort on estimates of gains while controlling for student characteristics and a college program variable. Therefore, the first step was to enter a block of background variables (i.e., age, gender, and enrollment status) and examine the percentage of variance explained ( $R^2$ ) in each group. When considered together, background variables did not explain a significant amount of variance in gains for African-American students. The results were different for Caucasian students...background variables explained about 13% of variance in gains for Caucasian students...Although age was not important (the  $t$  test for its beta was not significant), examining the direction of the standardized beta suggests that self-reported gains were higher for Caucasian students if they were enrolled full time but lower if they were women" (p. 304).
- "When age, gender, and enrollment status were controlled, about 52% of self-reported African-American students' gains was explained by greater involvement in coursework, library use, faculty member interactions, writing, and computer use. A different picture emerged for the Caucasian students. The influence of gender on gains disappeared once quality of effort was included in the analyses. Also of interest is that the influence of enrollment status on gains became less importance once quality of effort was taken into consideration. Thus, for Caucasian students, the important influences on gains were enrollment status, faculty member interactions, student acquaintances, science, writing, and computer use. As a group, these variables explained 52% of the variance in gains for Caucasian students" (p. 304, 306).

- “That the influence of background variables on self-reported gains was minimal compared with how involved students were in the learning process is consistent with Pace’s (1984) theory. What students bring to college is not as important as how much they do while in college for influencing learning and growth. As for ethnicity, the findings of this study are consistent with earlier research using the [College Student Experiences Questionnaire] that suggested that the relationships between student involvement and self-reported gains are different for African-American and Caucasian students” (p. 306).
- “The between-group mean comparisons presented [in the article] suggest that the Caucasian students in this sample were older and enrolled in more credit hours when they completed the CCSEQ than their African-American counterparts. The African-American students in this sample were exerting more effort toward activities related to coursework, library use, faculty member and student interaction, writing, and use of computer technology. African-American students also reported significantly higher levels of gains in social, personal, and academic growth than did the Caucasian students...Although quality of effort exerted by both groups of students yielded a number of common and unique influences on gains, the analyses suggested that increased involvement in coursework and library use by African-American students exerted an important influence on their self-reported gains. The extra effort in these activities by the African-American students clearly paid off in terms of their self-reported gains. Interestingly, the extra effort exerted by the African-American students toward making student acquaintances did not explain variance in gains. One possibility is that many of these African-American students might have been commuter students, who tend to have fewer opportunities to interact with other students outside of class” (p. 306-307).
- “The regression analyses also suggested that African-American and Caucasian students were similar in that increased involvement in faculty member interactions, writing, and use of computers explained a significant amount of variance in self-reported gains. For Caucasian students, increased involvement in writing activities and computer use were more important in explaining gains than for their African-American counterparts. Thus, for both groups of students, what mattered most was their involvement in activities such as talking one-on-one with their instructors about course progress, preparing rough drafts of term papers, and asking fellow students to proofread them” (p. 307).
- “Regarding technology, it was important for both groups of students that they used computers, E-mail, and World Wide Web instructional materials” (p. 307).
- “Immediately apparent for the African-American group is the dominant role that involvement in coursework played in explaining gains. This means that what mattered most for African-American students in terms of gains was the degree to which they were actively involved and participating in activities such as class discussions or summarizing major points and information from their readings and notes. Although not as important as their involvement in coursework, African-American students indicated that their use of the library had an effect on what they got out of college. Thus, they benefitted from using the library to read, study, or prepare bibliographies for term papers” (p. 307-308).
- “Enrollment status, student acquaintances, and science activities had a unique influence on gains for Caucasian students. Caucasian students classified as full time reported making greater gains than part-time students. Caucasian students reported more gains if

they were making more effort toward initiating contact with students who were different in some regard...Taking advantage of science activities was also beneficial for Caucasian students” (p. 308).

- “Involvement in activities related to art, music, and theater and vocational preparation did not explain gains variance in this sample” (p. 308).