Purpose: The purpose of this study is to compare student success outcomes, particularly graduation rates, by education abroad participation.

Population: All first-time, full-time undergraduates in fall cohorts (fall 2009 to 2012-depending on outcome being examined) who persisted to their third fall term. In order to select a comparable control group, only students who persist to their third fall will be examined as all education abroad students have already persisted at CSU long enough to allow for an education abroad experience. Since these experiences roughly occurs around this time, persistence to the third fall among the control group was desired to allow for adequate comparisons.

Groups:
- **Study Abroad (SA):** Students identified by Office of International Programs Education Abroad as participating in the program. Includes first-time, full-time undergraduates who started in a fall term and persisted to the third fall. Excludes students who started prior to fall 2009, transfer students, those students who started in spring or summer terms, and those students with a pending status.
- **Non-Study Abroad (Non-SA):** All first-time, full-time undergraduates who persisted to their third fall and were not included in the list by Office of International Programs Education Abroad in corresponding cohorts.
- **CSU:** All first-time, full-time undergraduates who persisted to their third term in aggregate in corresponding cohorts.

Outcomes:
- **Four-Year Grad Rate:** Percent of first-time, full-time undergraduates who graduate in four years (FA09-FA12 cohorts)
- **Five-Year Grad Rate:** Percent of first-time, full-time undergraduates who graduate in five years (FA09-FA11 cohorts)
- **Six-Year Grad Rate:** Percent of first-time, full-time undergraduates who graduate in six years (FA09-FA10 cohorts)
- **Average Years to Graduation:** The average number of years first-time, full-time undergraduates who have earned a degree take to graduate (FA09-FA10 cohorts)
Study Result Highlights:

• Graduation rates are higher for students with education abroad experiences compared to students without education abroad experiences.

• Higher graduation rates for students with education abroad experience compared to the no education abroad experience persist regardless if looking at four, five, or six-year graduation rates or average terms to graduation.

• When examining the graduation rates by student characteristics, the results suggest education abroad experience may have a particular positive impact on students with an average academic index of 115 or lower, students of a minority race and/or ethnicity, first generation students, and Pell recipients.

• There was some suggestion that students who earn a degree take longer to do so if they had education abroad experience compared to those with no education abroad experience on average; however, this data is from early cohorts of the education abroad program and future research with more recent cohorts is needed to further explore this finding.

• Overall, results support education abroad experience relationship with higher graduation rates, in particular, education abroad experiences could be used as a tool to increase graduation rates among certain subpopulations, such as students of a minority race/ethnicity, Pell recipients, first generation students, and students with an average index of 115 or less.
I. Demographic Comparison by Education Abroad Experience

The study abroad (SA) group has a higher percent of females and a higher overall average index compared to the non-study abroad (non-SA) group; however, the SA group has notably lower proportion of STEM majors and Colorado residents than the non-SA group. The groups were comparable within three percentage points for first generation status, Pell recipient status, and minority status.

Table 1. Comparison of groups by student and personal characteristics.

<table>
<thead>
<tr>
<th></th>
<th>Non-Study Abroad</th>
<th>Study Abroad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
<td>54.34%</td>
<td>69.88%</td>
</tr>
<tr>
<td>First Generation</td>
<td>23.12%</td>
<td>20.40%</td>
</tr>
<tr>
<td>Cohort STEM Major</td>
<td>35.15%</td>
<td>27.84%</td>
</tr>
<tr>
<td>Resident</td>
<td>79.20%</td>
<td>75.79%</td>
</tr>
<tr>
<td>Cohort Pell Recipient</td>
<td>20.42%</td>
<td>22.88%</td>
</tr>
<tr>
<td>Minority</td>
<td>16.72%</td>
<td>17.92%</td>
</tr>
<tr>
<td>Asian American</td>
<td>1.96%</td>
<td>0.95%</td>
</tr>
<tr>
<td>Black</td>
<td>2.26%</td>
<td>2.76%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>8.82%</td>
<td>9.63%</td>
</tr>
<tr>
<td>Avg. Index</td>
<td>115.56</td>
<td>116.41</td>
</tr>
<tr>
<td>Avg. Cohort Age</td>
<td>18.12</td>
<td>18.08</td>
</tr>
<tr>
<td>Group Total</td>
<td>11,927</td>
<td>1,049</td>
</tr>
</tbody>
</table>
II. Graduation Outcomes by Education Abroad Experience

Although the overall graduation rates will be higher among this specific population (students retained to their third fall term) compared to when including our published rates among all students in the FTFT cohorts, the SA group showed the highest rates of graduation rates regardless of which graduation rate examining. The SA group had the largest percentage point advantage to the non-SA group when examining five-year graduation rates (88.7-82.7 equals a six percentage point difference: 6PP). There was only a 4.2 percentage point advantage when examining the four-year graduation rate.

Figure A. Graduation rates by education abroad experience for those students who persisted to third fall.

![Graduation Rates by Study Abroad Experience](image)
Average Years to Graduation

The average years to graduation among students who earn a degree is 4.43 years. This is only slightly slower compared to the non-SA group (4.42 years), but quicker by a third of a year compared to the SA group. The .33-year difference between education abroad groups is notable; however, this is only looking at FA09 and FA10 cohorts to ensure students have had at least six years to earn a degree. It will be worthwhile to explore these findings with more recent data, which will also allow for a larger sample size for the SA group.

Figure B. Average number of years to graduation by education abroad experience for those students in the Fall 09 and Fall 10 cohorts who earned a degree within six years.
III. Graduation Rates by Student Characteristics and Education Abroad Experiences

This section will focus on graduation rates between study abroad groups by personal and student characteristics. Examining these results by characteristics help reveal if one group is disproportionately impacted by the study abroad experience and to identify patterns in data that may be impacting sub-populations even if not impacting the overall population.

Four-Year Graduation Rate

The SA group has higher four-year graduation rates compared to the non-SA group regardless of student characteristic. However, the gap is more pronounced among Pell recipients, first generation and students of a minority race/ethnicity (SA have a 3.1, 2.4, and 2.4 PP advantage respectively). Among females and STEM majors, the gap is less than 1.3 percentage point gap between groups.

Figure C. Four-Year graduation rate by student characteristic and education abroad experience for those students who persisted to third fall.
Five-Year Graduation Rate

Similar to the four-year graduation rate, the SA group has higher five-year graduation rates compared to the non-SA group regardless of student characteristics; however, the gaps are even more evident when examining five-year graduation rate gaps compared to the four-year graduation percentage point gaps. In particular, students of a minority race/ethnicity and Pell recipients in the SA group had a graduation rate over ten percentage points higher than students of a minority race/ethnicity and Pell recipients in a non-SA group (11.6 and 10.4 PP respectively), while first generation students in the SA group had a 6.5 PP gap compared to the non-SA group. The gap between groups among females and STEM majors also grew to 5.1 PP and 4.4 PP respectively, which is over a three point larger gap compared to the corresponding four-year graduation rate.

Figure D. Five-Year graduation rate by student characteristic and education abroad experience for those students who persisted to third fall.
Six-Year Graduation Rate

The overall trend of the four and five-year graduation rate continues among the six-year graduation rate. The percentage point gap for students of a minority race/ethnicity and first generation students grow even higher (13.2 PP and 8PP respectively), but the Pell recipient and female rate gap drops slightly (9.6 PP and 3.2 PP respectively) from the five-year graduation rate.

**Figure E. Six-Year graduation rate by student characteristic and education abroad experience for those students who persisted to third fall.**
**Graduation Rates by Academic Index**

As noted in Table 1, the non-SA group had an average index of 115.56 and the SA group had an average index of 116.41. Therefore, average index was examined to determine if rates varied by academic index. Students were divided into two groups: those students with an average index above 115 and those 115 or below. Graduation rates were then compared by education abroad experience.

The study abroad group continued to have higher graduation rates when comparing groups with similar index scores; however, the percentage point gap is much more prominent among those students with average index of 115 or lower. For instance, there is at least a seven percentage point gap between the study abroad groups for four, five, and six-year graduation rates among students with an average index score of 115 or lower; however, the percentage point gap only ranges from .6-3 points when examining students with an average index score of 116 or higher. This may suggest education abroad experience could have a disproportionate, positive impact on graduation rates for those students with an average index score of 115 or lower compared to those with an average index of 116 or higher.

**Figure F.** Graduation rates by average index score and education abroad experience for those students who persisted to third fall.
Average Years to Graduation

The average years to graduation was consistent with the overall findings regardless of student characteristics. Students with education abroad experience had longer averages to graduation compared to no education abroad experience. Among those FA09 and FA10 cohort students who had earned a degree, the largest gap was among female students (.35 year gap). Students had gaps between .26-.27 years for all other groups except for minority status. Students of a minority race/ethnicity (.21 year gap) had the smallest gap. It should be noted this is supportive of the above findings that students of a minority race/ethnicity who had education abroad experience had the largest positive gap in graduation rates compared to the non-SA group.

**Figure G.** *Average number of years to graduation earned by student characteristics and education abroad experience for those students who persisted to third fall and who earned a degree.*
IV. Conclusion

Overall, the results show positive results for the education abroad program when examining graduation rates. These positive findings are consistent for four, five, and six-year graduation rates; although, the five-year graduation rate reveals the most positive finding when compared to students who did not have an education abroad experience. Further, the higher graduation rates among the SA group persisted even when examining results by student characteristics. In particular, students of a minority race/ethnicity emerged as possibly being disproportionately positively impacted by education abroad experience when comparing graduation rates to students with no study abroad experiences. This is also suggested for students who are cohort Pell recipients or first generation. Results also suggest that the education abroad experience may have a particular positive impact on students with an average index score of 115 or lower. Students with no study abroad experience showed lower average years to graduation than SA students; however, it is to be noted this is just for FA09 and FA10 cohorts, which has a small SA group size, and this should be explored further as more cohorts are available to analyze.
Appendix A

Table 2 identifies education abroad experience based on the study abroad flag in CSU’s databases and not from the Office of International Programs. The population still includes only first-time, full-time undergraduates in fall cohorts who persist to their third fall (FA09-FA12). Average years to graduation look at all students who earned a degree in FA09 or FA10.

**Table 2** Student success outcomes and group counts by education abroad experience as noted in CSU’s databases.

<table>
<thead>
<tr>
<th>Cohort Term</th>
<th>Non-Study Abroad</th>
<th>Study Abroad</th>
<th>CSU</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%/Avg.</td>
<td>#</td>
</tr>
<tr>
<td>Four-Year Grad Rate</td>
<td>FA09-FA12</td>
<td>11,927</td>
<td>54.8</td>
</tr>
<tr>
<td>Five-Year Grad Rate</td>
<td>FA09-FA11</td>
<td>9,048</td>
<td>81.9</td>
</tr>
<tr>
<td>Six-Year Grad Rate</td>
<td>FA09-FA10</td>
<td>6,102</td>
<td>86.9</td>
</tr>
<tr>
<td>Avg. Years to Graduation</td>
<td>FA09-FA10</td>
<td>4,915</td>
<td>4.44</td>
</tr>
</tbody>
</table>