August 2016

College of Business Student Achievement by Demographic Group

The purpose of this report is to explore differences in freshman retention, third fall persistence and graduation rates in the most recent five cohorts by first generation (FG), minority, and low-income (Pell) status for the students in the College of Business (COB) compared to Colorado State University overall (CSU).

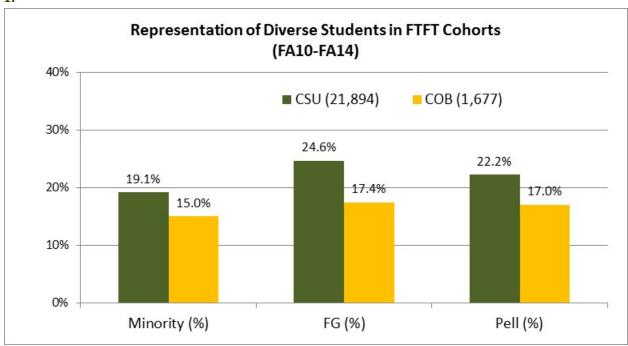
Executive Summary

The freshman retention, third fall persistence and 6-year graduation rates are considerably higher for COB compared to CSU overall for all demographic groups. Additionally, the difference in success rates for COB by FG and Pell status are generally smaller compared to the overall differences at CSU. However, the differences in freshman retention and third fall persistence by minority status within COB is larger than the overall differences at CSU. The representation of diverse students within the COB is also relatively low.

Demographics of COB Students

Figure 1, below, displays the proportional representation of first-time, full-time (FTFT) diverse students in the COB and CSU.





In the FA10 through FA14 of FTFT students, there are 21,894 FTFT students at CSU and 1,677 of these students start with a major in the COB. On average, there are 4379 FTFT students at CSU and 335 of these students start in COB each fall. The COB cohort size is relatively consistent ranging from the smallest cohort (311) in FA12 and the largest cohort (376) in FA11. There is smaller representation of Minority, FG, and Pell recipients in the COB compared to CSU. For instance, 24.6% of CSU students are FG but only 17.4% of COB students are FG. This overall observation of smaller representation of diverse students in COB compared to CSU is consistent for each of the five cohorts. The demographic representation and cohort size for COB and CSU by cohort is in Appendix A.

August 2016

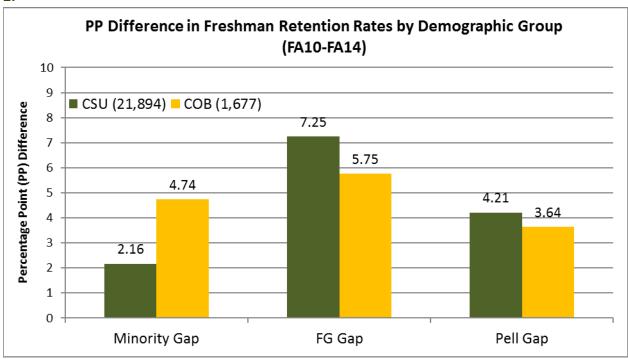
Percentage Point (PP) Differences in Observed Rates by Demographic Group

This section explores the gaps in freshman retention, third fall persistence, and 6-year graduation rates for students in COB and overall at CSU. The gaps (PP difference) in success rates are calculated by subtracting the demographic group's rate from the rate for the students who do not fall into that demographic group. The larger the magnitude of the difference the greater the demographic group's observed rate differs from their counterpart. The observed rates for COB and CSU by demographic group for all three outcomes are included in Appendix B.

Freshman Retention

Figure 2 displays the difference in persistence to the second fall (freshman retention) among FTFT students in the FA10-FA14 cohorts with a first semester major in the COB compared to CSU overall.

Figure 2.



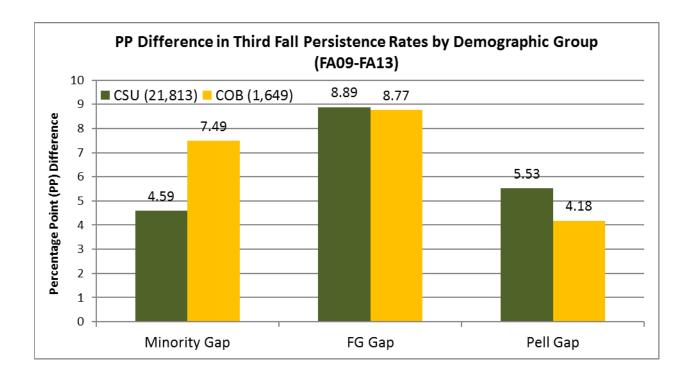
Minority, FG, and Pell students have lower rates of freshman retention compared to their demographic counterpart overall at CSU and in the COB. For instance, minority students who start as FTFT students with a major in COB are retained at a rate of 85.7%, which is 4.7 PPs lower than the freshman retention rate of non-minority students in COB (90.4%). Across all demographic groups, the COB freshmen retention rates are higher than the overall rates at CSU. For instance, the COB minority rate of 85.7% is higher than the overall minority rate of 83.7%. However, the purpose of this report is to explore how rates differ within the COB by demographic group. The differences between demographic groups for COB are smaller for FG and Pell students compared to the overall differences at CSU, but larger for minority students.

August 2016

Third Fall Persistence Rates

Figure 3 displays the difference in third fall persistence among FTFT students in the FA09-FA13 cohorts with a first semester major in the COB compared to CSU overall.

Figure 3.



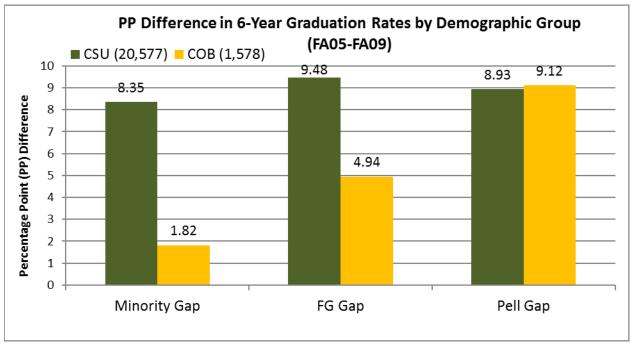
The difference in rates across each demographic group increased substantially in the third fall compared to the second fall (freshman retention) at CSU overall and for the COB. For example, the COB minority gap increased to 7.5 PPs at the third fall compared to 4.7 PPs at the second fall. Additionally, the trends in gaps for second-fall continue to the third-fall. For instance, across all groups the third-fall persistence rates are higher for COB compared to CSU overall. The difference in third fall persistence rates across minority status are larger for COB compared to CSU overall; however, the difference in third fall persistence rates across Pell status are larger for CSU overall compared to COB. Overall, at CSU the FG third fall persistence rate is 70.0% which is lower than the COB FG persistence rate of 77.3%, but the non-FG rates are higher overall at CSU (78.9%) and in the COB (86.1%). The PP difference between FG and non-FG is negligibly larger overall at CSU (8.9 PPs) compared to COB (8.8 PPs). The magnitude of the COB difference across minority status is noteworthy because minority students in COB persist to the third fall at a rate that is much lower than non-minority students in COB.

August 2016

6-Year Graduation Rates

Figure 4 displays the difference in 6-year university graduation rates among FA05-FA09 FTFT students with a first-semester major in the COB and overall at CSU.

Figure 4.



The difference in rates across each demographic group increased overall at CSU, but not in the COB. The gaps in 6-year graduation rates for the COB decreased across minority and FG status and these gaps are relatively small. However, the COB gap increased for Pell students from a 4.2 PP gap in third fall retention to a 9.1 PP gap in 6-year graduation. The difference in 6-year graduation rates by Pell status is larger for the COB than CSU overall; although, the magnitude of this difference is relatively small. Similar to the previous two outcomes the 6-year graduation rates displayed in Appendix B are higher for the COB compared to CSU overall regardless of the demographic group.

The difference in the COB gap across minority status in 6-year graduation compared to third fall persistence is large and possibly due to differences between the COB cohorts. The third fall persistence gap by minority status for the older cohorts (FA05-FA09) is only 1.46 PPs; however, the third fall persistence gap by minority status for newer cohorts (FA09-FA13) COB is 7.49 (figure 3). These results indicate that the gap in 6-year graduation rates across minority status for the newer cohorts will be much larger than the gap displayed in figure 4.

August 2016

Percentage Point (PP) Differences in Predicted Rates by Demographic Group

A prior <u>study</u> completed by Institutional Research Planning & Effectiveness explored the differences for COB students in predicted graduation and retention rates compared to the observed rates for the most recent five cohorts of FTFT students. This analysis uses regression models to predict COB retention and graduation rates based on the academic preparation and demographics of departments' cohorts. Student characteristics vary considerably by college; therefore, when evaluating the COB's retention and graduation rates it is important to consider the cohorts' attributes.

It is important to consider COB's predicted success rates in addition to the observed rates by demographic group (main analysis in this report) because the predicted rates account for the multivariate relationships of demographics and academic preparation with student achievement. This prior report indicates that COB has a retention and graduation rates that are higher than what would be predicted for COB based on the demographics and CCHE index score of all CSU FTFT students. These results commensurate with the results from the observed rates (discussed in the prior section). FG, Pell, and minority COB students have higher rates of success compared to the overall FG, Pell and minority rates and typically the gaps within demographic group is smaller for COB. The representation of diverse student in COB is smaller than CSU overall so when a gap is larger for a demographic group (freshman retention for minority students) it is likely that COB's overall observed rate is not strongly weighted by the demographic group.

Conclusions

In conclusion, diverse students in the COB have higher rates of success compared to diverse students overall at CSU; however, these demographics groups are underrepresented in COB compared to CSU overall. Additionally, the difference in success rates by demographic group for the COB is generally smaller than CSU overall. The one exception to this are for minority students second and third fall persistence and Pell students 6-year graduation. The magnitude of the difference in gaps by minority status for COB (compared to CSU overall) is large enough to warrant further exploration. In other words, within COB minority students do better than minority students overall at CSU but COB minority students persist to the second and third fall at rates that are significantly different than non-minority students in COB.

It is important to understand the differences in student achievement by demographic group within colleges to identify areas that are helping or hindering the overall university effort to reduce achievement gaps for minority, FG and Pell students. These results indicate that minority students in the COB are being retained to the second and third fall semesters at a significantly lower rate than non-minority COB students. Additionally, it appears that minority students in newer COB cohorts have larger gaps compared to minority students in older COB cohorts. Although minority students are not a large proportion of the COB, increasing their persistence rate could have an impact on CSU's overall rates because of the magnitude of the difference between minority and non-minority within COB.

August 2016

Appendix A

FA05-FA14 Cohort Demographics for CSU overall and COB

	Headcount		Minority (%)		FG (%)		Pell (%)	
Cohort Term	CSU	СОВ	CSU	СОВ	CSU	СОВ	CSU	СОВ
FA05	3,807	298	13.9%	12.4%	28.9%	24.5%	14.7%	11.4%
FA06	3,971	317	14.6%	10.4%	27.5%	28.1%	13.1%	12.6%
FA07	4,288	322	14.7%	12.4%	25.4%	20.5%	14.2%	10.6%
FA08	4,308	348	13.6%	9.8%	24.3%	25.0%	14.4%	12.4%
FA09	4,203	293	15.5%	13.0%	24.6%	21.2%	18.2%	14.3%
FA10	4,369	328	16.5%	13.1%	23.2%	14.6%	22.0%	17.4%
FA11	4,419	376	19.0%	12.0%	25.8%	20.5%	24.2%	18.1%
FA12	4,449	311	19.3%	15.1%	26.1%	17.0%	22.7%	18.3%
FA13	4,373	341	20.4%	18.8%	24.0%	20.2%	21.2%	16.1%
FA14	4,284	321	20.5%	16.2%	23.8%	14.0%	20.8%	15.0%

Appendix B

Retention and Graduation Rates for CSU overall and COB by Demographic Group

	Freshman Retention (FA	\10-FA14)	Third Fall Persistence (6YR Graduation (FA05-FA09)		
	CSU	СОВ	CSU	СОВ	CSU	СОВ
Minority	83.7%	85.7%	73.0%	78.1%	58.5%	75.8%
Non-Minority	85.9%	90.4%	77.6%	85.6%	66.8%	77.6%
FG	80.0%	84.9%	70.0%	77.3%	58.6%	73.7%
Non-FG	87.3%	90.7%	78.9%	86.1%	68.1%	78.6%
Pell Eligible	82.2%	86.7%	72.4%	81.0%	58.0%	69.4%
Non-Pell Eligible	86.4%	90.3%	77.9%	85.2%	66.9%	78.6%