

## NEW BACCALAUREATE SERIES

# How Do Students Earning CCB Degrees Compare to Their Peers at Public Universities in Washington State?



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This data note explores the extent to which the student population earning baccalaureate degrees at community and technical colleges mirrors the demographic characteristics of the student population earning baccalaureate degrees in comparable programs of study offered by four public universities in Washington State. Demographic analysis reveals important differences between these two student populations, both broadly and in the specific program areas of business administration and nursing. Among business administration degree earners, for instance, compared to men a substantially higher proportion of women earn CCB degrees (56.6%) relative to women earning baccalaureate degrees in business at public universities (45.8%). In terms of racial diversity, the entire population of CCB degree earners is more diverse than university baccalaureate earners, especially among African American and Latinx students. These results provide important preliminary evidence of the extent to which CCB policy serves as a policy lever to increase gender and racial diversity in baccalaureate attainment in Washington State.

## BACKGROUND

Twenty-three states currently allow community and technical colleges (CTCs) to confer baccalaureate degrees, reflecting a rapid diffusion of this initiative given six of these 23 states adopted such policies between 2018 and 2019 (Soler, 2019). States that authorize community college baccalaureates (CCB) are some of the most populous (California, Texas, Florida) but also some of the most sparsely populated (North Dakota, Idaho, Wyoming). CCB degree programs span diverse disciplines ranging from business to nursing to early childhood education (Bragg & Love, 2019).

The evolving CCB policy landscape deserves attention and has been the focus of important research (e.g. Bragg, 2019; Floyd & Skolnik, 2019). Bragg (2019) notes, however, that relatively little is known about

the students who participate in CCB programs, and even less is known about those who earn CCB degrees. Meza (2019) finds that in Washington State a diverse population of students enroll in CCB programs but that specifically “in growing high-wage, high-demand STEM programs, students are less likely to be female, African American, Latinx, older, or parents” compared to the overall population of CCB enrollees (p. 4). Meza also finds that overall the demographics of students in CCB programs align closer with students in professional/technical programs compared to the population of CTC students who transfer to universities. In terms of completion rates, Meza and Bragg (2020) find that CCB completion rates vary widely by program and student demographics.

The preliminary findings presented here on CCB completion rates complement Meza’s (2019) analysis of CCB enrollments in Washington State, and Meza and Bragg’s (2020) analysis of CCB completions. Importantly, this data note explores the extent to which the student population earning baccalaureate degrees at public CTCs mirrors the demographic characteristics of the student population earning baccalaureate degrees in comparable programs of study at public universities. The following question thus emerges as a guide for this analysis:

- In what ways is the demographic profile of students who earn baccalaureate degrees at CTCs in comparable programs of study similar to, or distinct from, the demographic profile of students who earn baccalaureate degrees at the state’s public universities?

This question makes an important contribution as research begins to paint a detailed picture of how CCB policy affects students in Washington State, one of two states that is scaling CCB degrees statewide (Bragg, 2019; Meza & Bragg, 2020). This contribution, in turn, has important implications for understanding the extent to which CCB policies contribute to states’ broader policy goals of increasing baccalaureate degree access and attainment.

## DATA

Data for this analysis come from a dataset comprising administrative data on enrollment and baccalaureate attainment in Washington State’s CTCs and public universities. Maintained by the SBCTC and shared with the CCRI team through a formal data-sharing agreement, the data for our analysis pertain to the population of all CCB degree earners in Washington between 2008 and 2017 (n=3,560). A subsample of students was selected (n=2,244) based on six programs of study<sup>1</sup> in which CCB degrees that were earned had a

comparable program of study at a public university in Washington.<sup>2</sup> That is, using the six-digit Classification of Instruction Program (CIP) codes as defined by the U.S. Department of Education’s National Center for Education Statistics, a comparison sample of students earning baccalaureate degrees in programs at the state’s public universities was constructed (n=13,071).

**Table 1. Baccalaureate Completers in Washington by Program Area**

	CCB Sample (n=2,244)	University Sample (n=13,701)
Business, Management Admin	40.1%	60.7%
Health Professions	31.1%	25.6%
Visual, Performing Arts	12.9%	3.0%
Computer, Info Science, IT	11.4%	5.5%
Natural Resource/Conservation	1.4%	1.4%
Education	1.3%	3.7%

The research question was thus explored using the comparable samples of CCB graduates and public university graduates detailed in Table 1. The predominant program areas for both samples are Business Administration and Health Professions. The reason for greater variation among the CCB graduates is attributable to different composition of program areas in the six categories. That is, CTCs offer 33 baccalaureate degree options among these six program areas whereas the public universities offer 17 options across the same six program areas. This finding reflects the necessity for newer baccalaureate degrees adopted by CTCs to be non-duplicative of existing university baccalaureate degree programs in order to meet emerging and distinctive workforce needs.

The data used for this analysis contain demographic characteristics of degree graduates; as is sometimes the case with administrative data, inconsistencies may

<sup>1</sup> This analysis follows how Meza (2019) and Meza and Bragg (2020) define program areas in Business (CIP codes beginning in 52), Education (CIP code 13), and Healthcare (CIP code 51); Computer, Info Science, and IT (CIP code 11) is its own program area in this analysis as is Natural Resource/Conservation (CIP code 3) whereas this CIP code is part of Meza and Bragg’s “STEM” program area; Visual, Performing Arts (CIP code 50) is likewise its own program area in this analysis.

<sup>2</sup> These institutions are Central Washington University, Eastern Washington University, Western Washington University, Washington State University – Pullman, and Washington State University’s three branch campuses in Spokane, Tri-Cities, and Vancouver. The three University of Washington campuses are not included.

emerge that result in some cases having incomplete demographic information. This incompleteness is noted by “Missing” when relevant to the analysis.

### FINDINGS: PATTERNS ACROSS ALL PROGRAM AREAS

Demographic data allow for a comparison of CCB degree earners to their peers in similar programs at public universities across race, ethnicity, and gender. Table 2 presents the demographic makeup of the CCB sample and the comparison sample of baccalaureate completers at public universities for the six program areas, in aggregate, used for this analysis.

Both samples of degree earners are more than 50% white, although the proportion of white graduates in the sample of BA completers at public universities (62.7%) is higher than the proportion of white students earning CCB degrees (56.8%). The CCB sample of graduates also contains a higher proportion of Hispanic/Latinx, Asian, and African American students compared to the sample of BA completers at public universities. Both samples have a higher proportion of females than males.

**Table 2. Completion Rates by Demographics**

	CCB Sample (n=2,244)	University Sample (n=13,701)
White	56.8%	62.7%
Hispanic/Latinx	8.6%	6.5%
Asian	7.7%	7.2%
African American	3.8%	2.0%
Pacific Islander	3.3%	5.8%
Multiracial	3.1%	2.3%
Native American	0.9%	1.1%
Missing	15.4%	12.4%
Female	56.7%	58.0%
Male	33.8%	38.1%
Missing	9.4%	3.9%

### NARROWING THE COMPARISON WITH A CLOSER LOOK AT BUSINESS ADMINISTRATION BACCALAUREATE DEGREES

Using the six-digit CIP code to narrow the focus of this analysis, specific programs can be analyzed across both samples when sufficient sample sizes allow for such comparisons. Students earning baccalaureate degrees in business administration present an opportunity for this particular analysis, given that this major is the most popular among both the CCB sample of graduates (n=558, or 24.9% of the sample) and public university sample (n=4,579 or 35.1% of the sample).

The subsamples of business administration degree earners is predominately white. However, unlike the broad sample, substantial gaps emerge across racial and ethnic student populations (Table 3). The proportion of Hispanic/Latinx students earning CCB degrees in business administration (14.5%), for instance, is more than double the proportion of this student population earning baccalaureate degrees at public universities (6.7%).

**Table 3. Completion Rates by Demographics: Business Administration**

	CCB Sample (n=558)	University Sample (n=4,579)
White	66.8%	59.9%
Hispanic/Latinx	14.5%	6.7%
Asian	1.2%	9.9%
African American	<1.0%	2.0%
Pacific Islander	<1.0%	8.5%
Multiracial	2.1%	2.4%
Native American	2.2%	2.4%
Missing	11.2%	9.4%
Female	56.6%	45.8%
Male	36.4%	50.1%
Missing	6.9%	4.2%

This pattern of CCB degree attainment by students of color enrolled in business administration extends findings from Meza (2019) that Latinx students appear more likely to enroll and complete CCB business administration programs compared to other demographic groups pursuing CCB degrees in business administration. Asian students and Pacific Islander students represent nearly 10% and 8.5%, respectively, of BA completers at public universities whereas the baccalaureate completion rates for these two groups hover around a single percentage point among the CCB completers.

Gender represents another divergence across CCB and public university degree earners: more women than men earn CCB degrees in business (56.6% compared to 36.4%) but at the public universities, slightly more men than women earn baccalaureate degrees in business (50.1% compared to 45.8%).

### **NARROWING THE COMPARISON WITH A CLOSER LOOK AT NURSING BACCALAUREATE DEGREES**

Following business administration, a baccalaureate degree in nursing is the second-most common choice among degree earners in both the CCB sample (n=214, or 9.5% of the sample) and public university sample (n=2,136 or 16.3% of the sample). Whereas the number of public university degrees earned is 10 times the size of the CCB group, each is sufficiently large to draw general inferences across the two subsamples. The fact that nearly 10% of the CCB sample earns baccalaureate degrees in nursing signals an important contribution of CCB degree earners in addressing this high-demand field in Washington’s labor market.

Not only are hundreds of graduates entering nursing through a CCB gateway, but the population of CCB students earning nursing degrees is more racially and ethnically diverse compared to their peers who earn nursing baccalaureate degrees at public universities in the state (Table 4). Gender is relatively consistent across the two subsamples.

**Table 3 . Completion Rates by Demographics: Nursing**

	CCB Sample (n=214)	University Sample (n=2,136)
White	59.8%	70.5%
Hispanic/Latinx	7.0%	7.7%
Asian	8.4%	5.3%
African American	2.8%	2.5%
Pacific Islander	6.0%	<1.0%
Multiracial	3.7%	2.1%
Native American	<1.0%	<1.0%
Missing	11.7%	10.2%
Female	84.1%	82.2%
Male	9.3%	14.4%
Missing	6.5%	3.4%

### **DISCUSSION & IMPLICATIONS**

The analysis in this data note explores how the demographics of students in Washington who earn CCB degrees vary from the demographics of students who earn comparable baccalaureate degrees at four public universities in the state. This is a critical question to consider since a purpose of CCB policy is to expand baccalaureate degree access and outcomes for student populations that have historically faced barriers to baccalaureate attainment.

The proportion of women is higher in the overall samples of CCB students and students completing baccalaureate degrees at public universities (56.7% and 58.0%, respectively) and among students completing nursing degrees (84.1% and 82.2%, for CCB students

and public university degree earners). However, among students earning a bachelor's degree in business administration, the proportion of women is more than 10 percentage points greater among CCB students compared to women earning baccalaureate degrees at public universities (56.6% compared to 45.8%). Since the 2016-2017 nationwide proportion of women earning baccalaureate degrees in business was 47.1% (National Center for Education Statistics, 2018), a proportion similar to female baccalaureate degree earners this analysis's subsample (45.8%), such a finding concerning the higher proportion of women earning CCB degrees in business administration warrants additional analysis to explore how CCB programs may be expanding access to and attainment of bachelor's degrees for women.

The demographic representation of students varies meaningfully both within the CCB graduate sample, between the CCB graduates and the comparison university graduate sample, and across program areas. A closer look at African American graduates, Latinx graduates, and Pacific Islander graduates reveals these nuanced differences:

- **Latinx graduates** are a higher proportion of the CCB graduate sample compared to the proportion of Latinx graduates in the sample of degree earners at public university; the proportion of Latinx graduates earning CCB degrees in business administration is more than twice the size of the proportion of Latinx graduates earning baccalaureate degrees at public universities; and in nursing, the proportion of Latinx graduates is comparable<sup>3</sup> across both the CCB sample and the public university sample.
- **African American graduates** similarly represent a higher proportion of the CCB sample compared to the proportion of African American graduates in the sample of degree earners at public universities; across business administration and nursing the proportion of African American graduates is

comparable between CCB degree earners and those earning baccalaureate degrees at public universities.

- **Pacific Islander graduates** demonstrate wider variation; this student group represents a higher proportion of the CCB sample compared to the proportion of Pacific Islander graduates in the sample of degree earners at public universities; however, substantially more Pacific Islander graduates earn baccalaureate degrees in business at public universities but also earn substantially more baccalaureate degrees in nursing at CTCs.

These results ultimately demonstrate that in nearly all cases, racial diversity among CCB degree earners is greater than, or for some demographic groups at least comparable to, what is found among degree earners at the public universities. Care must be taken in generalizing broadly about these findings since these results are a product of the specific student sample created for this analysis. At the same time, these results provide important preliminary evidence to inform future research on the extent to which CCB policy serves as a policy lever to increase baccalaureate access.

<sup>3</sup>“Comparable” is defined here as a difference between the two proportions that is less than a single-percentage point.

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