



DATA VOYAGER Preliminary Findings

I. Introduction

GCC Research focus is on the disaggregated data of CTE Programs based on ethnicity. From this disaggregated data, identify the gaps on enrollment, degree attainment and time to degree. From the gaps, determine the effectivity of efforts in addressing the gaps and the challenges in the process.

The population of the research are enrollments from Fall 2020 to Spring 2024 and completion or degree awarded from the same period of Fall 2020 to Spring 2024 of students declared on CTE Programs such as:

Accounting	Family Services
AST - General Service Technician	Food & Beverage Management
AST - Master Service Technician	Foodservice Management
	Hotel Operations &
Automotive Service Technology	Management
Career Technical Education	Human Services
	Industry Certification
Certified Nursing Assistant	Cosmetology
	International Hotel
Civil Engineering Technology	Management
Computer Aided Design &	
Drafting	Office Technology
Computer Networking	Practical Nursing
Computer Science	Pre-Architectural Drafting
Construction Technology	Sign Language Interpreting
Continuing Education	Supervision & Management
Criminal Justice	Surveying Technology
Culinary Arts	Tourism & Travel Management
Early Childhood Education	Visual Communications
Education	Marketing
Emergency Management	Medical Assisting
	Medium/Heavy Truck Diesel
Environmental Technician	Tech



II. Data Analysis

Initial findings on unduplicated enrollment of students declared in CTE Programs based on ethnicity shown in Table 1 below suggests that the highest population of students are Chamorros, with an average of 41.98% ,followed by Filipinos at 39.01% and Chuukese at 4.38%. This correlates to the [Guam 2020 Census from the Bureau of Statistics and Plan \(Government of Guam\)](#) wherein the top population is Chamorro followed by Filipino. This table also shows that there is a period of recovery in the number of enrollments from the Covid-19 pandemic (FA20 – SP23) but generally a decrease in enrollment after Guam was hit by Typhoon Mawar in the Summer of 2024 (FA23 – SP24).

Ethnicity	Fall 2020	Spring 2021	Fall 2021	Spring 2022	Fall 2022	Spring 2023	Fall 2023	Spring 2024
Am. Indian or Alaskan Native	0.28%	0.06%	0.24%	0.12%	0.12%	0.13%	0.20%	0.07%
Asian	0.17%	0.13%	0.24%	0.00%	0.00%	0.32%	2.41%	4.01%
Asian Indian	0.06%	0.06%	0.06%	0.06%	0.06%	0.00%	0.00%	0.00%
Asian or Pacific Islander	0.00%	0.00%	0.00%	0.42%	0.29%	0.00%	0.00%	0.00%
Black	0.67%	0.70%	0.65%	0.72%	0.75%	0.64%	0.59%	0.79%
Burmese	0.00%	0.00%	0.06%	0.00%	0.00%	0.00%	0.00%	0.00%
Carolinian	0.00%	0.00%	0.06%	0.12%	0.06%	0.06%	0.00%	0.00%
Chamorro	42.15%	43.75%	42.25%	42.80%	44.22%	43.65%	39.79%	37.27%
Chinese	0.67%	0.76%	0.53%	0.78%	0.46%	0.64%	0.46%	0.93%
Chuukese	4.62%	3.56%	4.20%	4.20%	4.68%	4.49%	4.70%	4.58%
Filipino	42.09%	41.52%	41.24%	38.60%	37.92%	37.82%	36.73%	36.12%
Hispanic	0.00%	0.70%	0.71%	0.60%	0.64%	0.45%	0.26%	0.00%
Hispanic or Latino	0.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.57%
Japanese	0.45%	0.63%	1.01%	1.14%	0.92%	1.03%	0.72%	0.72%
Korean	0.89%	1.08%	0.89%	1.26%	1.04%	1.54%	1.11%	1.07%
Kosraean	0.11%	0.13%	0.06%	0.18%	0.12%	0.19%	0.13%	0.14%
Marshallese	0.06%	0.13%	0.06%	0.12%	0.35%	0.32%	0.46%	0.36%
Native Haw. or Pac. Islander	0.06%	0.00%	0.12%	0.00%	0.00%	0.06%	3.00%	4.22%



Other	0.33%	0.25%	0.12%	0.60%	0.40%	0.32%	0.72%	0.64%
Palauan	1.56%	2.03%	1.89%	1.92%	2.43%	2.63%	2.09%	2.07%
Ponapean	1.17%	0.89%	1.42%	0.90%	1.45%	1.35%	1.44%	1.65%
Thai	0.00%	0.00%	0.00%	0.00%	0.06%	0.00%	0.00%	0.00%
Two or More Races	0.28%	0.25%	0.47%	0.72%	0.52%	0.96%	1.11%	1.07%
Unknown	0.84%	0.44%	0.95%	1.14%	0.81%	0.77%	0.98%	1.00%
Vietnamese	0.06%	0.06%	0.12%	0.24%	0.12%	0.06%	0.00%	0.00%
White	2.06%	1.65%	1.66%	1.98%	1.56%	1.60%	1.70%	1.57%
Yapese	1.11%	1.21%	1.01%	1.38%	1.04%	0.96%	1.44%	1.14%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%

Table 2 shows that when it comes to Degree Awarded, the Filipinos has an average of 47.94% success rate of students to earn a Degree followed by Chamorros at 38.98% and Chuukese at 2.42%.

Table 2. CTE Program Degree Conferral (Ethnicity)				
Ethnicity	AY20-21	AY21-22	AY22-23	AY23-24
Am. Indian or Alaskan Native	0.00%	0.00%	0.54%	0.00%
Asian	0.00%	0.29%	0.82%	0.27%
Asian Indian	0.00%	0.00%	0.27%	0.00%
Black	0.30%	0.00%	0.54%	0.27%
Chamorro	42.14%	42.94%	34.78%	36.07%
Chinese	0.89%	0.86%	0.54%	0.27%
Chuukese	2.08%	1.44%	2.45%	3.71%
Filipino	48.37%	47.26%	48.91%	47.21%
Hispanic or Latino	0.00%	0.86%	0.82%	0.27%
Japanese	0.00%	0.86%	1.36%	1.06%
Korean	0.30%	1.15%	0.82%	1.06%
Kosraean	0.00%	0.00%	0.27%	0.00%
Marshallese	0.00%	0.00%	0.00%	0.53%
Native Haw. or Pac. Islander	0.30%	0.00%	0.27%	0.80%
Other	0.89%	0.00%	0.27%	0.00%
Palauan	0.89%	1.15%	2.99%	2.65%
Ponapean	1.19%	0.58%	1.36%	2.65%
Two or More Races	0.59%	0.86%	0.54%	0.00%
Unknown	0.30%	0.29%	1.63%	0.27%
Vietnamese	0.30%	0.00%	0.00%	0.00%
White	1.48%	1.44%	0.54%	1.33%



Yapese	0.00%	0.00%	0.27%	1.59%
Grand Total	100%	100%	100%	100%

Table 3 shows the average number of years for students to complete and earn degree from their primary declared program. An average of 2.5 years for Chuukese students earn their degree from when they declare to the program while 2.9 years for Filipino students and 3.5 years for Chamorro students.

Table 3. Average Time To Completion [in years] by Primary Program (Ethnicity)				
Ethnicity	AY20-21	AY21-22	AY22-23	AY23-24
Asian	—	1.0	1.7	0.5
Asian Indian	—	—	2.5	—
Black	1.5	—	4.0	—
Chamorro	3.5	3.0	3.5	4.0
Chinese	2.3	5.0	4.3	4.5
Chuukese	2.2	1.9	2.8	3.0
Filipino	2.8	3.3	2.8	2.6
Hispanic or Latino	—	2.3	1.5	2.0
Japanese	—	2.0	2.3	1.6
Korean	—	2.0	2.7	2.9
Kosraean	—	—	1.0	—
Marshallese	—	—	—	3.0
Native Haw. or Pac. Islander	1.0	—	1.0	2.5
Other	2.3	—	8.0	—
Palauan	8.3	1.5	3.7	3.6
Ponapean	2.3	3.0	4.1	3.6
Two or More Races	2.0	2.0	3.0	—
Unknown	0.5	0.5	2.1	2.5
Vietnamese	2.0	—	—	—
White	3.3	2.2	1.5	4.0
Yapese	—	—	3.0	2.1

III. Summary of Discussions

In the course of the discussion of the inquiry team, the following were identified:

- 1) Enhancement of internal processes on student data collection such as application form, data entry into the Student Information System and periodic update of student information to ensure student success.



2) Use of disaggregated data to aid student success. Expand reporting of disaggregated data to be more useful in research and decision making.

IV. Recommendation and Next Steps

GCC's Board Policy- 161 Diversity, Equity and Inclusion. adopted in February 10, 2023, mandates that the College maintains an environment that supports the diversity of people and ideas.

Part of this effort is the implementation of Program Review in Fall 2024. The Program Review template was developed in the Spring 2023 and feedback were received from the Faculty, Deans and the Vice President of Academic Affairs. Data sets for the Program Review was presented and improved upon during the course of training and discussions in AY2023-2024. The data sets include disaggregated data of each program that will allow authors to analyze enrollment, retention, persistence and completion of the student within each program. In the Program Review template, it also allows the author to document recommendation for continuous quality improvement of the program.

In a more recent move, the Student Application Form was revised to uniformly gather student information and use only a single application form for all programs. Assessment will be done to determine the effectiveness of the revised Student Application Form in gathering data and how it translates in capturing data in the Student Information System.

Also, system training will be provided to ensure that data entry is consistent and accurate. A periodic review to determine accuracy of data will be conducted. Additional training will be provided, if necessary.

A meaningful and collaborative effort of the partnership of Guam Community College (GCC), University of Guam (UOG) and the Guam Department of Education (GDOE) through an MOU on Data Sharing will enhance data collection, ultimately improving student success. USDOE 's State Longitudinal Data System (SLD's) ongoing grant project known locally as the Guam One Stop Data Village (GOSDV) aims to track the progression of students from K-1 up to postsecondary. With the addition of Guam Department of Labor (DOL) and Guam Department of Public Health and Social Services (DPHSS), the GOSDV system will include data on individuals from birth to employment. The system allows research that can benefit students throughout their journey to success. However, because each entity has their own system, matching of records is a challenge. Data definitions vary across entities. The GOSDV system hopes to establish commonality and match data across systems, resulting in meaningful data for research and federal and local government reports.



Through this Data Voyage project, GCC examined internal processes related to data collection and reporting, with the hope of improving student success through the analysis of disaggregated data.