# Using High School Data to Predict College Success in Palau







# Why this study?

Research shows that high school background and experiences can be predictive of college readiness and success. 1, 2, 3 To support the Palau Ministry of Education and Palau Community College in improving the college readiness and success of their students, REL Pacific examined the relationship between high school academic factors and college success outcomes in Palau.

#### High school academic factors:

- High school grade point average (GPA).
- Grade 10 Palau Achievement Test math and English Language Arts scores.
- Math and English course grades.
- Career academy.<sup>4</sup>

#### College success outcomes:

- Earning a college GPA of 2.0 or higher in their first year.
- Persisting to a second year of college.
- Completing an associate degree or certificate within three years.



#### **Methods**

Data from 234 students who graduated from Palau High School during spring 2013–2015 and attended Palau Community College were analyzed using logistic regression to examine the relationship between the high school academic factors and college success outcomes. Logistic regression is a method that examines the relationship between a set of predictor variables with a yes/no outcome variable.

### **Findings**

Earning a college GPA of 2.0 or higher:

- Sixty percent of students had a GPA average of 2.0 or higher in their first year in college.
- Students with a higher GPA in high school were more likely to have a college GPA of at least 2.0.
- Students with higher scores on the math Palau Achievement Test were more likely to have a GPA of 2.0 or higher.

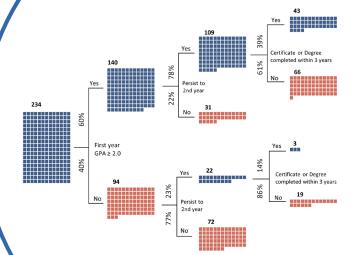
Persisting to a second year of college:

- Fifty-six percent of students persisted to a second year of college.
- Students in the Construction Technology Career Academy were less likely than students in other career academies to persist to a second year of college.

Completing an associate degree or certificate within three years:

- Twenty percent of students completed an associate degree or certificate within three years.
- Students with a higher GPA in high school were more likely to complete an associate degree or certificate within three years.
- Students who earned a C or higher in high school English I were more likely to complete an associate degree or certificate within three years.

Less than forty percent of PHS graduates who earned a first-year college GPA of at least 2.0 and persisted to their second year at PCC completed a certificate or degree within 3 years.



# Factors That Have the Strongest Association With College Success in Palau

Factors related to increased college success.



Higher high school GPA



Higher math score on the grade 10 Palau Achievement Test



Earning a grade of C or higher in high school English I and English IV courses

Factors related to decreased college success.



Enrollment in the Construction Technology Career Academy during high school

# What might Palau consider doing to increase college success?

**Examine supports available for learning English in high school.** Because students who earned a grade of C or higher in grade 9 and 12 English courses were more likely to persist to a second year of college and graduate within three years, the Palau Ministry of Education may want to examine the supports available to help students learn English better. Because students' second language abilities develop from their first language abilities, <sup>5</sup> the Palau Ministry of Education might consider providing more materials and instruction in Palauan.

Review the alignment between the Construction Technology Career Academy and the needs of students planning to attend college. Students in the Construction Technology Career Academy were the least likely to persist to a second year of college and graduate within three years. There may be a misalignment between the content and skills of the Construction Technology Career Academy and academic college coursework. However, students may also be leaving college early for employment.

Investigate factors that Palau Community College can control to help their students succeed. Because early college success did not necessarily translate to later college success for many students, Palau Community College may want to investigate the college-level factors, such as course sequencing or academic counseling services, that contribute to college success.

**Provide additional supports for students in college.** Students with a lower high school GPA and lower math scores on the Palau Achievement Test were less likely to succeed in college. Exploring academic support programs such as summer bridge programs or academic and career counseling may support college success.



To access the published REL study, visit: <a href="https://ies.ed.gov/ncee/edlabs/regions/pacific/pdf/REL\_2021059.pdf">https://ies.ed.gov/ncee/edlabs/regions/pacific/pdf/REL\_2021059.pdf</a>

#### **Notes**

- 1. Adelman, C. (2006). The toolbox revisited: Paths to degree completion from high school through college. Office of Vocational and Adult Education, U.S. Department of Education. http://www2.ed.gov/rschstat/research.pubs/toolboxrevisit/toolbox.pdf
- 2. Geiser, S. & Santelices, M. V. (2007). Validity of high-school grades in predicting student success beyond the freshman year: High-school record vs. standardized tests as indicators of four-year college outcomes. University of California, Berkeley, Center for Studies in Higher Education. http://files.eric.ed.gov/fulltext/ED502858.pdf
- 3. Wiley, A., Wyatt, J., & Camara, W. (2010). The development of a multidimensional college readiness index (College Board Research Report No. 2010–3). Cascade Educational Consultants. http://www.cascadeeducationalconsultants.com/resources/Blog/College-Readiness-Index.pdf
- 4. Palau High School offered seven career academies, which included Natural Resources–Agriculture, Health and Human Services–Health Pathway, Business Information, Industrial Engineering–Automotive Technology, Industrial Engineering–Construction Technology, Health and Human Services–Tourism and Hospitality, and Liberal Arts (college preparatory). Grade 11 and 12 students were required to enroll in a career academy.
- 5. García, O. (2009). Bilingual education in the 21st century: A global perspective. Blackwell.

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