

## Using High School and College Data to Predict Teacher Candidates' Performance on the Praxis at Unibetsedåt Guåhan (University of Guam)

Unibetsedåt Guåhan (University of Guam, UOG) is home to the only local K–12 teacher preparation program on Guåhan (Guam), but the number of students who complete the program each year is not enough to reduce the Guam Department of Education's (GDOE) chronic teacher shortage. Students must pass the Praxis Core (reading, writing, and math subtests) to be admitted to the UOG School of Education, but many students fail to meet this criterion. This study provides information about which student demographic and academic preparation characteristics predict success on the Praxis Core test and its subtests. This information is needed to increase admissions to the School of Education and, ultimately, to increase the number of available teachers. GDOE and the School of Education provided data on two groups of students who enrolled at UOG between fall 2012 and fall 2017 and attempted at least one Praxis Core subtest within three years of enrolling. Group 1 included only students who graduated from a Guåhan public high school ( $n = 128$ ) and was used to explore high school academic preparation characteristics, and group 2 included all students, regardless of the high school from which they graduated ( $n = 216$ ), and was used to explore college academic preparation characteristics.

### Key findings

- **Students had higher pass rates on the individual subtests than on the Praxis Core test.** Although students had higher pass rates on the individual subtests than on the Praxis Core test, students from both the high school and UOG groups were less likely to pass the Praxis math subtest than the reading or writing subtest.
- **Guåhan public high school graduates who earned any Advanced Placement or honors math credits had higher pass rates on the Praxis Core test than graduates who did not earn any Advanced Placement or honors math credits.** Guåhan public high school graduates who earned any Advanced Placement or honors math credits in high school had a pass rate of 78 percent on the Praxis Core test compared with 39 percent for graduates who did not earn any Advanced Placement or honors math credits.
- **For Unibetsedåt Guåhan students, Pell Grant status and gender were related to pass rates on the Praxis Core test and subtests.** UOG students who did not receive a Pell Grant in college (a proxy for socioeconomic status) had a higher pass rate (59 percent) on the Praxis Core test than students who received a Pell Grant (44 percent). Male students had a higher pass rate than female students on both the Praxis reading (92 percent for male students and 75 percent for female students) and math (77 percent for male students and 55 percent for female students) subtests.

By better understanding which Praxis subtests are more difficult for students to pass, GDOE staff and UOG faculty can align or design curricula to cover the topics that the Praxis Core test and its subtests cover. Students might benefit from having resources—test preparation materials, study groups, and mentors—to help them prepare for a career in education. Moreover, understanding the high school and college academic preparation characteristics that contribute to pass rates of student subgroups could help increase the number of students who pass the Praxis Core test and go on to enroll at the UOG School of Education.