

Factors Associated with Grade 3 Reading Outcomes of Students in the Commonwealth of the Northern Mariana Islands Public School System

Few elementary students in the Commonwealth of the Northern Mariana Islands (CNMI) are scoring at grade level or higher on the ACT Aspire reading assessment. This study examined data on students who enrolled in grade 3 in a CNMI public school from 2014/15 to 2018/19 to understand their grade 3 reading performance. The study used administrative data from the CNMI Public School System, including students' gender, free or reduced-price lunch receipt (a proxy for family income), age at kindergarten entry, ethnicity, enrollment in Head Start, mobility, and performance on the ACT Aspire grade 3 reading assessment.

Key findings and implications

- **Filipino students had a higher probability of demonstrating reading proficiency in grade 3 than students of other ethnicities, while other factors had a statistically significant yet minor relationship.** The largest difference in grade 3 reading performance was between Filipino students and students of other ethnicities: Filipino students were about 10 percentage points more likely than other students to demonstrate reading proficiency in grade 3. Female students, students who did not receive free or reduced-priced lunch, students who were older at kindergarten entry, and students who did not change schools from kindergarten to grade 3 were also more likely to demonstrate reading proficiency in grade 3 than their peers, but the differences were minor (less than 10 percentage points). Data limitations prevented further analysis of other factors that might be linked to reading performance, such as absenteeism or teacher education. CNMI Public School System stakeholders might consider exploring relationships between other education environment factors that might be stronger drivers of reading proficiency over which CNMI Public School System stakeholders have more control. More detailed qualitative data (collected via surveys, interviews, or focus groups) might also help elucidate the underlying behaviors or supports that different groups of students have that explain these differences. The additional data could also help CNMI Public School System stakeholders target additional resources to raise the reading achievement of all students.
- **Grade 3 reading proficiency did not differ based on Head Start enrollment.** There was no statistically significant difference in grade 3 reading proficiency between students who had enrolled in Head Start and students who had not. Although this finding does not suggest that Head Start is ineffective, CNMI stakeholders might wish to build on this study by examining the academic outcomes (including nonreading outcomes) of these students at additional time points and use data on Head Start attendance to understand whether program effects exist elsewhere. If data allow, CNMI stakeholders could also compare these associations with those for students who did or did not enroll in other early childhood education programs.