

# WHAT FACTORS PREDICT THE 6-YEAR GRADUATION RATE?

The North Dakota State Systemic Improvement Plan (SSIP) leadership team set out to identify factors that predict the 6-year graduation for all students and for students with disabilities (SWD) with a focus on students with an Emotional Disturbance (ED). The rates of students without disabilities (SWOD) were also examined.

## 2021-22 COHORT RESULTS

The 2021-22 cohort represents those students who started 9th grade in 2018-19 and would have graduated on time (i.e., in four years) in 2021-22; their 6-year graduation rate is their graduation rate status as of 2023-24.

### MAIN FINDINGS

SWD (n=900) are significantly less likely to graduate than SWOD (n=7,264).

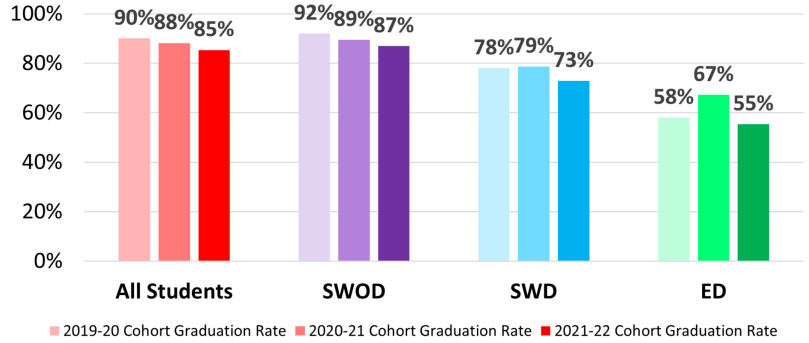
SWD are more likely to take 5-6 years to graduate than SWOD who, in turn, are more likely to take 4 years to graduate than SWD.

Within the SWD group, students with ED (n=121) are less likely to graduate and more likely to drop out than other SWD.

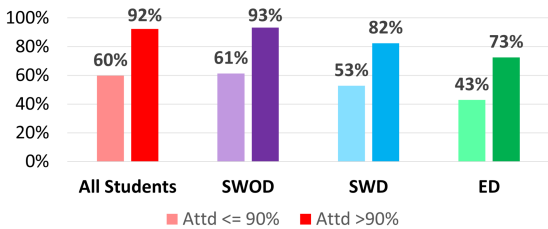
Within the SWD group, students placed in the regular education environment at least 80% of the time are more likely to graduate than SWD in more restrictive environments.

Attendance rate and disciplinary status are the strongest predictors of graduation.

### OVERALL 6-YEAR GRADUATION RATES BY GROUP

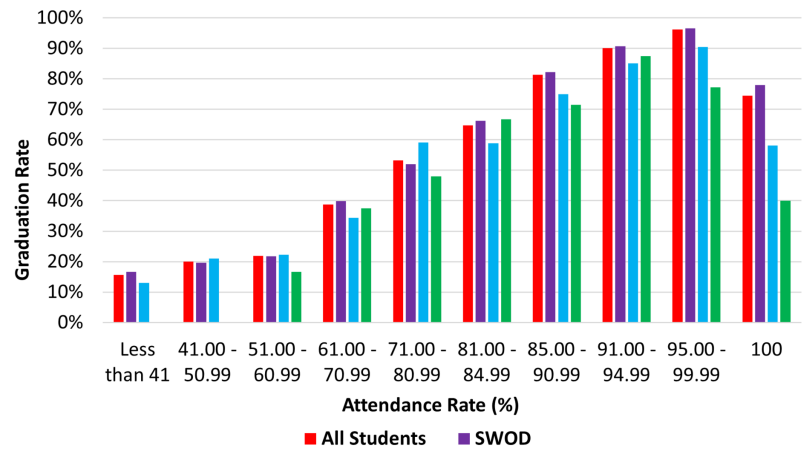


### GRADUATION RATES BY ATTENDANCE RATES

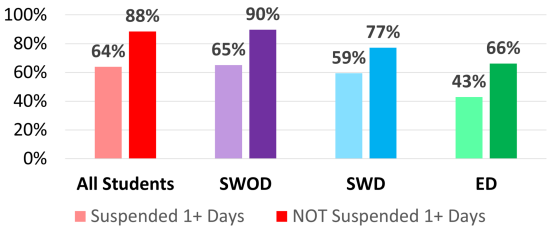


### GRADUATION RATES BY ATTENDANCE RATE GROUPING

The higher the attendance, the more likely one is to graduate unless 100% attendance, then there is a decrease in graduation.



### GRADUATION RATES BY DISCIPLINARY STATUS



### BEST PREDICTORS

- Attendance rate
- Free/reduced lunch status
- Gender
- Suspension rate of 1+ days
- Special Ed Status
- Math proficiency
- Homeless status
- Engagement status

#### Notes:

- Course grades (a variable that typically has a strong relationship with graduation) was not included in the model due to unavailability.
- Engagement status is measured by a student survey that asks about students' level of commitment to school in 3 domains: Behavioral, Cognitive, and Emotional

### OTHER RELATIONSHIPS

- Students scoring proficient on math and reading on the state test in 8th grade are more likely to graduate than those not scoring proficient.
- Students receiving free/reduced lunch are less likely to graduate than other students.
- Native American students are less likely to graduate than students of other races/ethnicities.
- Male students are less likely to graduate than female students.
- Students who do not complete the Engagement Survey (and thus presumably are at the lowest level of engagement) are less likely to graduate than students who complete the survey and score at the "disengaged" level of engagement who in turn are less likely to graduate than students who score at the "compliant" or "committed" levels of engagement.

### IMPLICATIONS



Early Warning System

School leaders can use the information about the predictors as part of their early warning system. Students who are at risk of not graduating can be identified early (e.g., based on low attendance rates in middle school/high schools; not scoring proficient on 8th grade state test; being suspended for three or more days) and then receive targeted support.



Interviews

Follow-up interviews with special education units that have high graduation rates and/or graduation rates higher than expected given the regression model could be conducted.

3 units had graduation rates higher than 95%.

4 units had SWD graduation rates higher than 95%\*.

4 units had higher than expected graduation rates for SWD\*.

1 unit had a higher than expected graduation rate for students with ED\*\*.

\*Based on units with at least 10 SWD.  
\*\*Based on units with at least 10 ED students.



Student Engagement

Conducting further analyses on the relationship of student engagement and graduation could be helpful. Determining how the ND engagement survey results can better serve as a potential predictor could be explored.