NDDPI
NORTH DAKOTA
DEPARTMENT OF PUBLIC INSTRUCTION

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 Disability (ED). The rates of students without disabilities (SWOD) were also examined.

2022-23 COHORT RESULTS

The 2022-23 cohort represents those students who started 9th grade in 2019-20 and would have graduated on time (i.e., in four years) in 2022-23; their 6-year graduation rate is their graduation rate status as of 2024-25.

MAIN FINDINGS

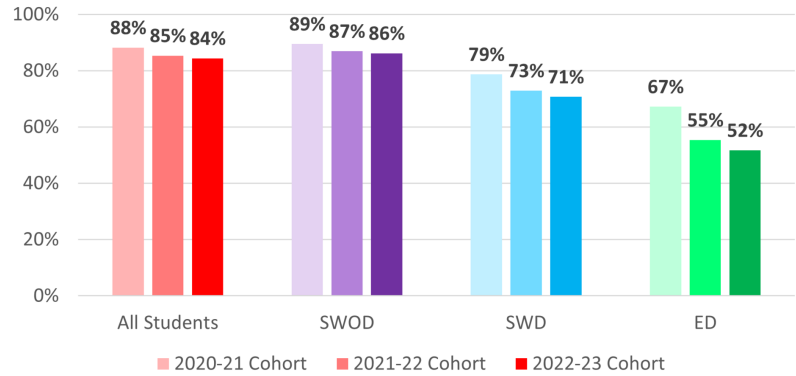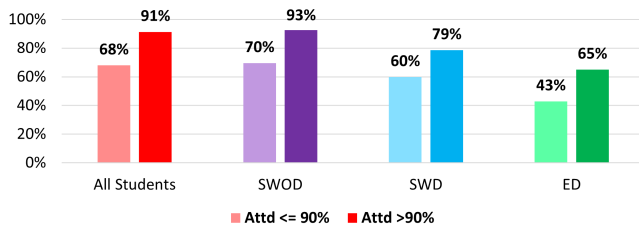|	
SWD (n=977) are significantly less likely to graduate than SWOD (n=7,369).	SWD are more likely to take 5-6 years to graduate than SWOD who, in turn, are more likely to take 4 years to graduate than SWD.
Within the SWD group, students with ED (n=151) are less likely to graduate and more likely to drop 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.

GRADUATION RATES BY ATTENDANCE RATES

Attd <= 90% ■ Attd >90%

GRADUATION RATES BY DISCIPLINARY STATUS

■ Suspended 1+ Days   ■ NOT Suspended 1+ Days

OVERALL 6-YEAR GRADUATION RATES BY GROUP

■ 2020-21 Cohort   ■ 2021-22 Cohort   ■ 2022-23 Cohort
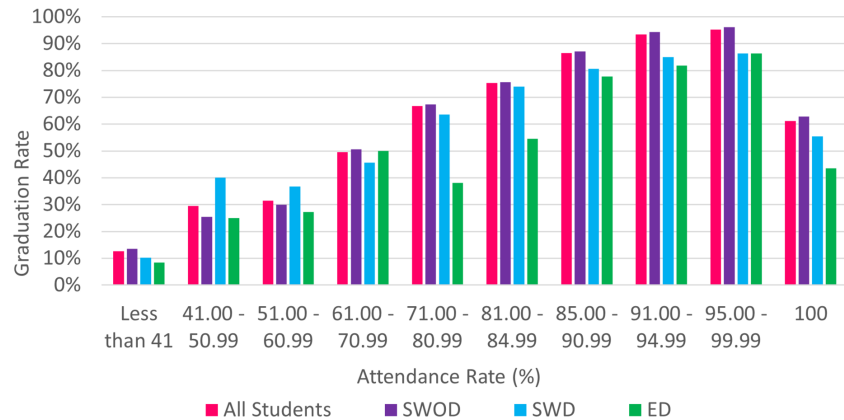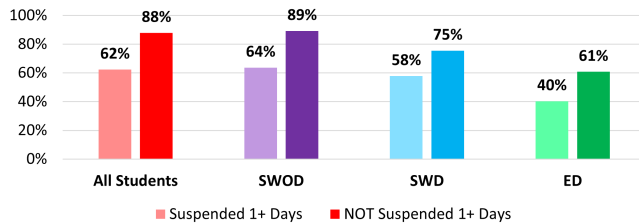
GRADUATION RATES BY ATTENDANCE RATE GROUPING

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

■ All Students   ■ SWOD   ■ SWD   ■ ED

E X P L A N A T I O N

BEST PREDICTORS

- Attendance rate
- Race/ethnicity
- Special Ed Status
- Free/reduced lunch status
- Suspension rate of 1+ days
- Reading/Math proficiency
- Engagement status
- Emotional Engagement

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.
- White students are more likely to graduate than students of other race/ethnicities.
- 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. Further, students who are emotionally engaged are more likely to graduate than students who are emotionally disengaged.

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 one 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.

2 units had graduation rates higher than 95%.	2 units had SWD graduation rates higher than 90%*.	5 units had higher than expected graduation rates for SWD*.	3 units 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.

DATA DRIVEN ENTERPRISES