



NORTH DAKOTA DEPARTMENT OF
PUBLIC INSTRUCTION

North Dakota School Accountability Calculation Guide

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Foreword

This resource will answer frequently asked questions regarding North Dakota's accountability system for K-12 public schools. The following sections provide concise descriptions of the overall system and each underlying school performance indicator to inform continuous school improvement initiatives. These include establishing school improvement goals that are adjusted yearly to accommodate changes mandated by state and or federal guidelines.

NDDPI is committed to maintaining and protecting the privacy of North Dakota's students. Therefore, the following protocols are implemented in the entire accountability framework to protect against the identification of individual students or small student populations.

1. Individual student-level results are never reported to the public.
2. North Dakota does not publish or publicly report any data for student groups of less than ten members.
3. Public reports will acknowledge when data has been suppressed.
4. State and federal law prohibit the usage of this information and publicly reported school performance data for any purpose other than informing educational improvement initiatives.



Accountability Indicator Explainer: North Dakota School Accountability Reports

What is being measured?

The ND School Report Cards fulfill federal requirements for measuring and evaluating school performance under the Every Student Succeeds Act (ESSA). While accountability systems have traditionally functioned as a compliance measure, the current accountability system is designed to push beyond compliance and serve to provide meaningful information to education stakeholders as a means to inform continuous school improvement. Still, in order to meet federal requirements, the accountability system measures performance on annual state assessments, four-year graduation rates, and performance on English Language proficiency assessments for English Learners. Additionally, ND has incorporated student growth and student engagement measures to satisfy remaining requirements and emphasize the need to examine data beyond test scores to support all ND students.

Why is this important?

Accountability, at its core, is about transparency and equity. The ND School Accountability Reports publicly reports a myriad of education data, spanning academic achievement, engagement, student group performance, and longitudinal trends; all to ensure that students have access to equitable opportunities and are receiving the support they need. In addition to providing schools valuable insights into areas of strength and room for improvement, the accountability system identifies schools most in need of support and provides federal funding and state resources to identify and address improvement priorities. That said, the accountability system is one component of a continuous improvement cycle, in which all ND schools engage. The system measures student and school outcomes intended to inform school initiatives that ultimately improve outcomes for all students.

How is this calculated?

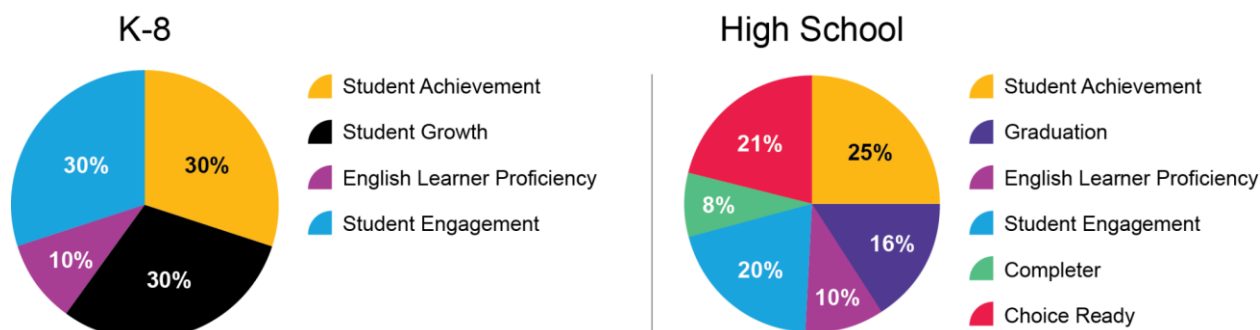
North Dakota's accountability system measures school performance leveraging multiple school performance indicators. Each indicator is designed to highlight student outcomes and answers the following questions (see individual indicator explainers for more information on each measure):

- Student Achievement: How are students demonstrating proficiency on statewide assessments?
- Student Growth: How are students growing compared to their performance in the previous year?
- English Learner Proficiency Growth: How are English Learners meeting their language-acquisition goals?
- Student Engagement: How are students demonstrating authentic engagement in school?
- Choice Ready (**High schools only**): How are schools preparing students for successful transition to post-secondary pathways?
- Graduation Rate (**High schools only**): How are students meeting graduation requirements within 4-years?
- Completer Rate (**High schools only**): How are students overall meeting graduation requirements or GED completion annually?

Each indicator is weighted (see graphic below) to provide a more complete view of academic and non-academic measures in reporting overall school quality. All public schools are ranked based upon appropriate school levels with different measures for elementary and secondary schools. The accountability index consists of 615 possible points. For schools with less than 10 students in a given



measure, the school performance index equitably redistributes points possible to other applicable performance indicators where applicable. The lowest performing schools are designated as either Comprehensive Support and Improvement (CSI) or Targeted Support and Improvement (TSI), eligible for additional federal funds and state support for improvement activities.



Accountability Explainer: Student Achievement

What is being measured?

The Student Achievement indicator measures student success on annual academic assessments in English Language Arts (ELA) and Mathematics. Under the Every Student Succeeds Act (ESSA), states must annually measure and report student performance on assessments aligned to state academic standards as a measure of readiness for the next course or grade. Assessments are designed to inform students, families, and educators on student content mastery identifying areas of strength and improvement.

Why is this important?

Academic assessments provide valuable information on student readiness for academic progression, and eventually, workforce or college success. By annually measuring student performance, educators and families may identify and address gaps in understanding, and support students furthest behind. This indicator informs schools on where students are struggling and demonstrating greatest success. Further, performance is reported both at the aggregate level and by student groups. This reporting allows transparency in potential achievement gaps between students, resulting in more informed, targeted interventions and support to increase equity.

How is this calculated?

The Student Achievement indicator measures the degree to which students within a school are demonstrating proficiency (scoring “Proficient” or “Advanced”) on North Dakota State Assessments (NDSA) in English Language Arts (ELA) and Math. A student’s results are only included in this indicator if he or she was continuously enrolled for the full academic year at the school (e.g., the student was enrolled for at least 120 days or “FAY”). Points are allocated separately but equally for each subject, ELA and Math. For elementary and middle schools, this indicator is worth 30% (185 points) and for high schools this indicator is worth 25% (154 points) of the school’s composite value.



Step 1: Calculate points earned for ELA (out of 92.5 for Elementary or 77 for High School)

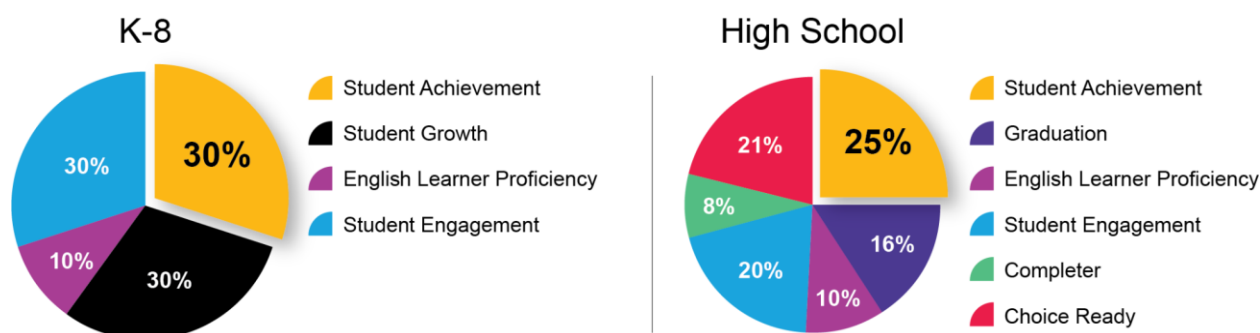
$$\frac{\text{number of FAY students scoring Proficient or Advanced in ELA}}{\text{number of FAY students}} \times 92.5 \text{ or } 77$$

Step 2: Calculate points earned for Math (out of 92.5 or 77)

$$\frac{\text{number of FAY students scoring Proficient or Advanced in Math}}{\text{number of FAY students}} \times 92.5 \text{ or } 77$$

Step 3: Calculate total indicator points (out of 185 or 154)

Points earned: *total points from step 1* + *total points from step 2*



Accountability Explainer: Student Growth

What is being measured?

Under the Every Student Succeeds Act (ESSA), states are required to include an academic indicator in addition to achievement at the elementary and middle school levels. In North Dakota, this indicator is Student Growth and is measured and reported for schools containing students in grades 4-8. Two years of NDSA results are required for test takers in 3-8 to calculate growth. The Student Growth indicator uses individual Student Growth Values (SGVs), which describe students' performance over time (e.g., across two years) to determine a school's growth level. Growth values and levels are determined for each content area (ELA/Literacy and Math) separately. By examining a student's progress across multiple years, this indicator captures more than simple performance on state assessments, rather, relative growth and improvement toward meeting state expectations for academic success.

Why is this important?

All students can grow. North Dakota believes in using multiple measures to provide a deeper and more complete view of student understanding and progress. Students may enter the classroom at different starting points, but all are capable of progressing and growing over the course of a school year. This indicator captures additional information not present in the Student Achievement indicator, by revealing how students in a given school are demonstrating academic growth compared to their peers.



How is this calculated?

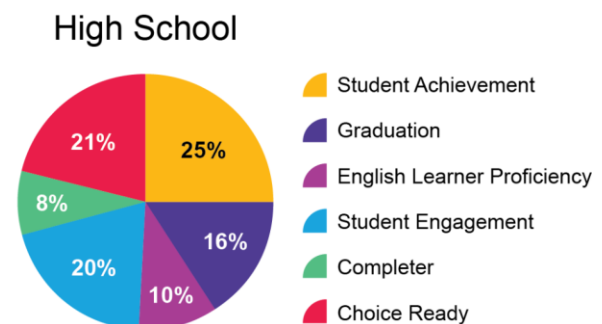
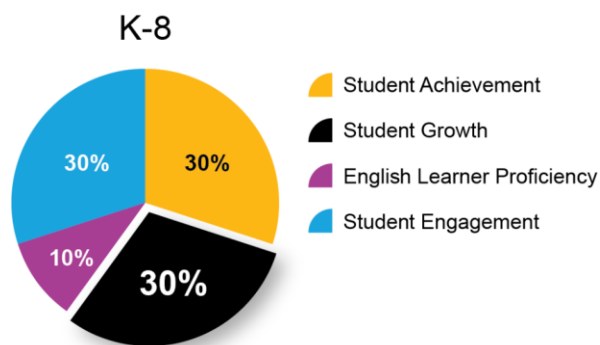
The Student Growth indicator uses individual student growth to determine a school's overall growth level. This indicator is calculated in two parts. First, Student Growth Values (SGVs) are calculated for each student with a valid test score in both testing years. SGVs are calculated separately for each content area and reflect the percentile rank of growth for an individual student compared to their peers (i.e., students with the same prior achievement). Once the SGVs are calculated for all individual students, the median SGV per content area is used to determine the school's Overall Growth Value (OGV). This OGV identifies the school's growth level per the table below. Each growth level (1-2-3-4) corresponds to points earned (0%-50%-75%-100%), respectively.

Step 1. Calculate individual SGVs by assigning a peer group (i.e., students with the same prior year achievement level) and rank ordering the difference between current and prior scores to determine relative growth. For example, a student at the 40th percentile (SGV=40) performed at a level at or above 40% of other students in their peer group.

Step 2. Identify the median SGV for all students in a school, in each content area. This is the Overall Growth Value (OGV).

Step 3. Use the table below to determine the total points earned per content area based on the school's OGV.

Overall Growth Value	School Growth Level	Points Earned (per content area)
OGV<7	1	0
7≤OGV≤49	2	46.25
50≤OGV≤92	3	69.375
92<OGV	4	92.5



Accountability Explainer: English Language Learner Proficiency Growth

What is being measured?

The Every Student Succeeds Act (ESSA) requires that all states include in their accountability system a measure of progress for English Learners in their language acquisition program. Based on initial language proficiency, all English Learners have an individual expected timeline to exit their language program. Using the student's baseline proficiency, anticipated exit year and yearly targets are set to ensure the student is on-track to exit his or her program. This indicator demonstrates the degree to which all English Learners in a school are making progress toward attaining English Language proficiency.

Why is this important?

Students who attain language proficiency and become bilingual often outperform other student subgroups on academic measures. Program exit and reclassification as English Language Proficient is an important milestone for many students and supports their academic success K-12 and beyond. The English Learner Growth indicator provides valuable information to districts, schools, and families regarding the effectiveness of language programs and services, as well as identifying areas in need of additional support for students.

How is this calculated?

Progress in a student's language acquisition program requires two parts. Upon entry into the English language program, a student participates in the WIDA ACCESS 2.0 assessment. Based on initial proficiency level, the student has an anticipated number of years to exit (see table below). Based on the years to exit and statewide exit criteria, a trajectory is set to ensure the student meets expected growth each year, leading to an on-time exit. Points are earned under this indicator based on the percentage of English Learners who meet or exceed their target scores (e.g., stay on-trajectory) in a given school year. This indicator is worth 10% of a school's overall accountability determination.

Step 1: Calculate anticipated years to exit from baseline WIDA ACCESS 2.0 score.

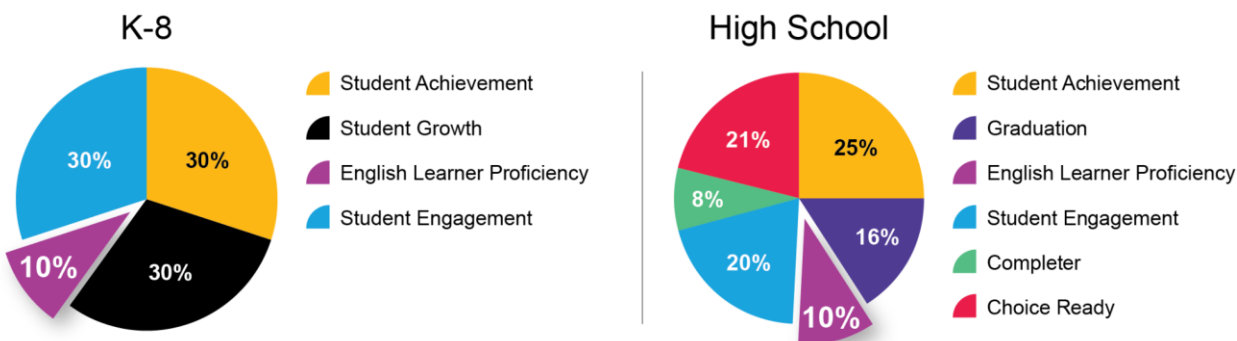
Initial Proficiency Level (WIDA ACCESS 2.0)	Years to Exit
1.0-1.9	6
2.0-2.9	5
3.0-3.9	4
4.0-4.9	3
5.0-5.9	2



Step 2: Based on years to exit from Step 1, establish student trajectory using baseline score and state exit criteria (e.g., ACCESS 2.0 composite score of 5.0 *and* 3.5 in each domain).

Step 3: Calculate the percentage of students meeting target score (e.g., staying on-trajectory) and multiply by possible points (60 for elementary and middle schools, 62 for high schools).

$$\text{Points earned: } \frac{\text{students meeting trajectory target}}{\text{number of English Learners}} \times 60 \text{ (or 62)}$$



Accountability Explainer: Student Engagement

What is being measured?

The Student Engagement indicator is North Dakota's non-academic measure for determining school quality. It measures the degree to which students are exhibiting authentic engagement in school activities. This indicator reports information from the Cognia Student Engagement Survey, measuring student engagement quality in three domains, behavioral, cognitive, and emotional. The Behavioral domain refers to a student's efforts in the classroom, the Cognitive domain examines a student's investment in learning, and the Emotional domain measures a student's feelings about the classroom and school. Each domain provides specific insights into areas of strength and improvement for overall student engagement within a school.

Why is this important?

Under the Every Student Succeeds Act (ESSA), states are required to implement at least one indicator of School Quality or Student Success into their accountability system for public schools. While several states opted to include attendance measures as a proxy for student engagement, ND elected to directly assess student engagement. While attendance may be influenced by factors outside of a school's control, educators resoundingly agree that authentic student engagement is desirable and influenced by teacher relationships, learning environments, and school experiences. Research indicates that students demonstrating authentic student engagement exhibit greater persistence and report higher successful outcomes (both academic and non-academic) than their peers. Insights provided by collecting and reporting student engagement data enable educators to better understand student experiences and respond to the needs of their students.



How is this calculated?

The Student Engagement indicator measures the degree to which students in a school are demonstrating high levels of student engagement (e.g., “Committed”) using the Cognia Student Engagement Survey. The survey is produced in three forms (Elementary: grades 3-5, Middle: grades 6-8, and High grades 9-12) to ensure grade-appropriate text and questions to evaluate student engagement across the three domains. Survey results report the number and percentage of students within a school demonstrating each of three quality levels of engagement (e.g., Disengaged, Compliant, Committed) within each of the three domains. To calculate the overall Student Engagement points for a school, NDDPI uses the average number of “Committed” students across all domains and half of the average number of “Compliant” students across all domains, divided by the number of students completing the survey. This indicator is worth 30% (185 points) for elementary and middle schools and 20% (123 points) for high schools.

Step 1:

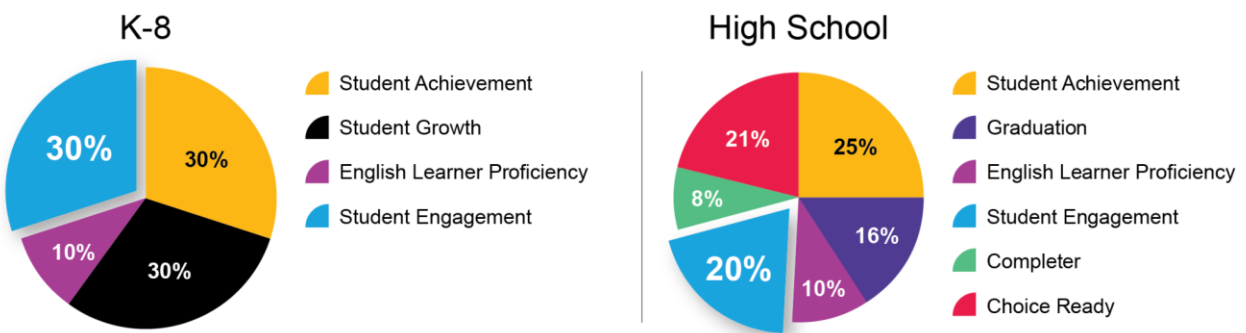
$$\frac{\text{sum of students "Committed" across each domain (Behavioral,Cognitive,Emotional)}}{3} = \text{Percent Committed for SPI}$$

Step 2:

$$\frac{\text{sum of students "Compliant" across each domain (Behavioral,Cognitive,Emotional)}}{3} \times 0.5 = \text{Percent Compliant for SPI}$$

Step 3:

$$\text{Points Earned: } \frac{\text{Sum (value from Step 1+value from Step 2)}}{\text{number of completed surveys}} \times 185 \text{ (or 123)}$$



Accountability Explainer: Choice Ready Growth

What is being measured?

A core tenet of North Dakota stakeholders is to ensure students leave schools Choice Ready. This means that students exit North Dakota schools with the knowledge, skills, and abilities to pursue a postsecondary pathway of their own choosing. Specifically, this indicator measures how schools are preparing students to be post-secondary-ready, workforce-ready, and military-ready. Further emphasizing



the notion that students should be prepared for multiple pathways to postsecondary success, the Choice Ready indicator expects that students not only possess essential skills but demonstrate readiness in two of the three aforementioned areas (post-secondary, workforce, military). Finally, this indicator measures not only the degree to which students in a school are demonstrating choice readiness, but also the improvement or growth a school shows in increasing the percentage of Choice Ready students.

Why is this important?

In order for students to experience success, they must first demonstrate readiness for life after high school. The Choice Ready indicator acknowledges and celebrates that students have different goals after graduation. However, regardless of the path a student intends to go down, he or she should be equipped with the skills and disposition to do so with confidence and success. Federal education requirements have reinforced the notion of a “well-rounded” education, that is, one that extends beyond the traditional confines of proficiency in certain content-areas. The Choice Ready indicator directly ties to students’ lives by emphasizing the importance of preparation in multiple areas given the current and evolving workforce landscape. In addition to all students demonstrating essential skills, this measure expects that students meet criteria in at **least two components**, showing they are primed for post-secondary education, workforce, or military. The criteria for demonstrating readiness in each component can be found [here](#).

How is this calculated?

In order to recognize schools’ efforts in ensuring Choice Readiness, ND has created two opportunities for schools to earn points under the indicator. Schools receive credit for either the total percentage of Choice Ready seniors (i.e., students meeting [criteria](#) for essential skills and at least two of the three components), or for the demonstrated growth in Choice Ready seniors compared to the previous year. The school receives whichever point allocation would be **higher** (percentage or growth). The maximum points possible under this indicator is 129 and the indicator is worth 21% of the high school rating.

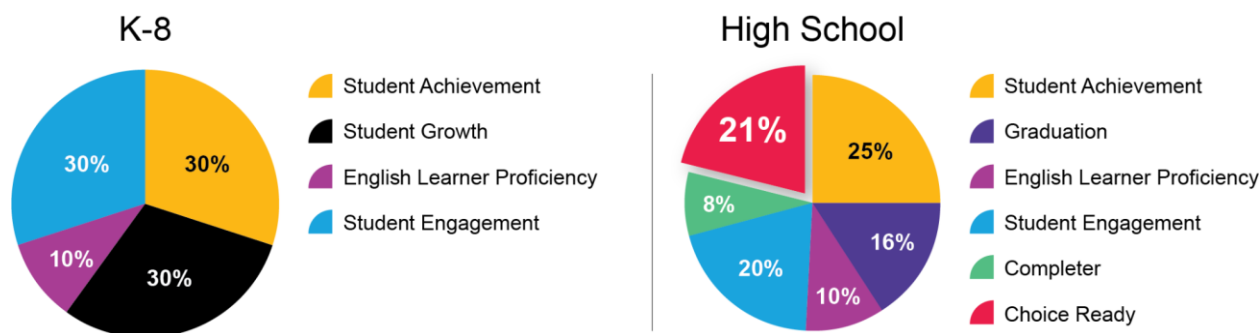
Step 1:

$$\frac{\text{number of seniors meeting essential skills and two component criteria}}{\text{number of seniors}} = \% \text{ Choice Ready}$$

Step 2:

Percentage of seniors that are Choice Ready	Growth in Choice Ready percent compared to prior year	Points Earned (out of 129)
90-100%	10% or more	129
75-89.99%	7.5-9.99%	96.75
50-74.99%	5-7.49%	64.5
25-49.99%	0.01-4.99%	32.25
<25%	0%	0





Accountability Explainer: Graduation Rate

What is being measured?

The graduation rate indicator measures the four-year adjusted cohort graduation rate for the most recent cohort year. The calculation uses the federally required method of determining cohort class and graduates. This means that the indicator reports the percentage of students attaining a high school diploma within four years of entry into 9th grade in a ND public high school. Additionally, NDDPI reports extended year graduation rates (five-, six-, and seven-year) as well as a “completer rate” that includes extended cohort graduates and GED recipients. For more information on the “completer rate” see Accountability Explainer: Completer Rate.

Why is this important?

High school graduation is an important milestone for students. Attainment of a high school diploma enables students to pursue a postsecondary path aligned with their talents, goals, and skills, ranging from higher education to workforce or military pathways. Further, while the U.S. Department of Education requires four-year adjusted cohort rates to be reported for each school, NDDPI understands that not all students are able to meet graduation requirements within the federally prescribed four-year timeframe. As such, NDDPI collects and reports data on extended cohort graduation rates to celebrate schools continuing to serve students who may need longer to graduate.

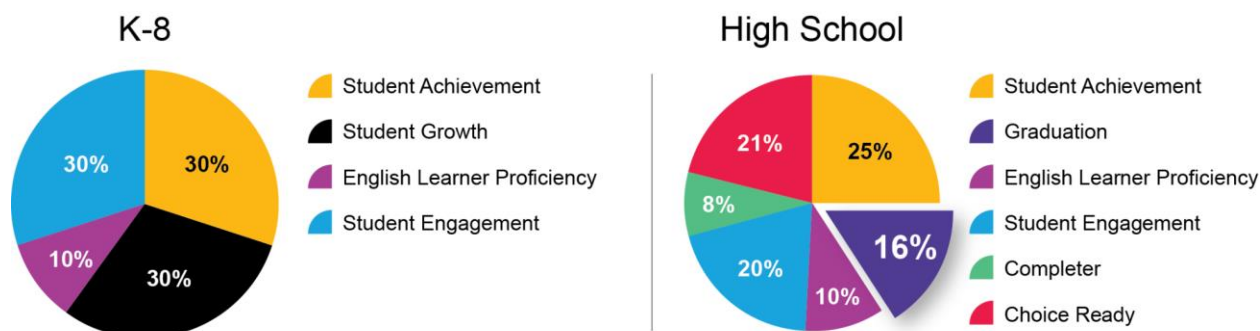
How is this calculated?

The four-year adjusted cohort graduation rate uses the federally required definition of cohort class and graduates. That is, the denominator of the school graduation rate is comprised of all enrolled students entering 9th grade for the first time four years prior to the current cohort year (e.g., the graduation rate for cohort 2019 would be comprised of first-time 9th graders in fall 2015). **Students may only be exited from the cohort (the denominator) under specific reporting categories outlined in federal guidance (e.g., transfer to another diploma-issuing institution, emigration). The numerator is composed of students attaining a high school diploma in or prior to the cohort year (i.e., “graduates”).



The graduation rate indicator is worth 16% of school accountability determinations (or 21% if the school does not have the English Learner Progress “ELP” indicator). Thus, the indicator is scored out of 98 points (129 if no ELP indicator).

$$\text{Points earned: } \frac{\text{Students in cohort attaining diploma by cohort year}}{\text{Students in most recent cohort year}} \times 98 \text{ (or 129)}$$



Accountability Explainer: Completer Rate

What is being measured?

The North Dakota Department of Public Instruction understands that there are many pathways to postsecondary success for students. Further, not all students are able to attain a high school diploma, or do so within four years. While the Graduation Rate indicator measures the four-year on-time graduation rate (as required by federal law), the Completer Rate indicator highlights and celebrates students attaining their high school diploma in the current school year (regardless of cohort year). Further, the Completer Rate provides credit back to schools for students who previously dropped out but attained a North Dakota General Education Diploma (GED) by their 22nd birthday.

Why is this important?

While the U.S. Department of Education requires that states collect, report, and include four-year graduation rates for the purposes of school accountability, ND recognizes that schools continue to serve their students who may not meet diploma requirements in four years. As such, the Completer Rate indicator captures students that either meet graduation requirements outside of the four-year timeframe or attain their ND GED, both of which are significant milestones for students and strengthen readiness for post-secondary education, workforce, and military pathways. By measuring and reporting these measures, the accountability indicator tells a more complete story of students preparing for postsecondary success.

How is this calculated?

The Completer Rate is calculated in two steps. The first step takes the Traditional Graduation Rate and adjusts for GED completion. The Graduation Rate includes all graduating seniors, regardless of cohort year. This includes five-, six-, and seven-year graduates. This rate is adjusted by adding in students who



dropped out and have met ND GED requirements within the current academic year. The combined Completer Rate is then multiplied by the points possible for the indicator, 49 (8% of the high school rating).

Step 1:

$$\frac{\text{number of graduates} + \text{number of students earning GED}}{\text{number of seniors in current academic year}} =$$

Traditional Graduation Rate adjusted for GED Completion (i.e., "Completer Rate")

Step 2:

$$\text{Completer Rate} \times 40 \text{ points} = \text{Points Earned by School}$$

