North Dakota Accountability Index Guide

North Dakota will display the required Every Student Succeeds Act (ESSA) annual accountability reports on the Insights Dashboard. The Dashboard allows schools and districts to showcase and highlight strengths in their buildings while providing transparency to the public. The Dashboard can be accessed from the North Dakota Department of Public Instruction (NDDPI) website and a separate website, Insights.

The NDDPI, in collaboration with the North Dakota Information Technology (NDIT), the North Dakota University System (NDUS) and other partners, has created an accountability report for every public school in the state. This guidance has been created to help explain the contents of the School Accountability Reports to educators.

General Guidance providing information and clarification on each of the indicators outlined on the School Accountability Reports is available on the department's website.

School Accountability Reports were created using an index that awards points to schools based on the various accountability elements at each building level (***K-8 and 9-12***). This guidance is intended to provide more in-depth information on the index and the technical components that generated the School Accountability Reports.

The North Dakota Accountability Index (NDAI) has a maximum composite value of 615 points on both the elementary and high school reports. Schools earn points based on individual student performance results using the defined measures in the areas of North Dakota State Assessment (NDSA) achievement, NDSA student growth, student engagement, and English learner language growth proficiency at the elementary level. For high schools, the measures include assessment achievement, on-time graduation rate, completer rate (traditional graduation rate adjusted for GED), student engagement, Choice Ready and English Learner proficiency at the high school level). The basic formula provides point values for each student who meets or exceeds defined performance targets, partial point values for nearly achieving defined performance targets, and zero-point values for not meeting defined performance targets. The charts included define the performance targets for each measure in the North Dakota Accountability Index.

ELEMENTARY AND MIDDLE SCHOOL LEVELS

Student Achievement: Accountability
Achievement is broken down by Reading (ELA) and Mathematics. The starting Maximum Points Value (MPV) is split in half and assigned to each subject. In this instance 185 is the MPV, thus we calculate half of 185, which is 92.5. ELA MPV is 92.5; Math MPV is 92.5.

Take the sum of the Full Academic Year (FAY) Students who are Proficient or Advanced and divide it by the number of FAY Total Students for the school to get the proficiency rate for a subject. This rate is multiplied by the number of points possible for that subject to get the Achievement Points Earned (by subject). The Achievement points are added to get the total.

Chart A – Achievement: Accountability (30% or 185 Maximum Point Value (MPV))

Level	Content Area	Number of FAY Students Proficient or Advanced	Number of FAY Students	Number of FAY Students P and A divided by total number of FAY Students	Maximum Point Value (MPV)	Totals
Elem	ELA	109	275	39.64%	92.5	36.66
Elem	Math	50	275	18.18%	92.5	16.82
					185	**53.48**

Formula:

Number of FAY P and A in ELA/Number of FAY Students = % X (MPV/2) = Achievement Points

Number of FAY P and A in Math/Number of FAY Students = % X (MPV/2) = Achievement Points

Add Achievement points in ELA and Math to get final number (53.48 in this example)

Student Achievement Levels: Used in Growth Accountability Calculations
Point values for each student are assigned based on the student's achievement level on the NDSA. The levels and correlating point values are:

1. Novice = 0 points
2. Partially Proficient = .35 points
3. Proficient = .70 points
4. Advanced = 1.0 point

Two years of NDSA performance data are used to calculate Growth. *Achievement Points Earned* (APE) data are collected and used in conjunction with *Growth Points Earned* (GPE) to arrive at the *Student Learning Index* (SLI) for the growth accountability formula.

CHART A1 – Achievement Results (Sample for school in 3rd Quartile) Used for Growth

Level	Content Area	Achievement Level 1	Achievement Level 2	Achievement Level 3	Achievement Level 4
		Novice	Partially Proficient	Proficient	Advanced
		Points = 0	Points = 0.35	Points = 0.7	Points = 1.0
Elem	ELA/Literacy	95	71	82	27
	Math	114	111	32	18

CHART A2 – Achievement Index (30% or 185 maximum point value (MPV)) Used for Growth

Level	Content Area	Achievement Points Earned (A.P.E.)	Proficient Points Possible (=total number of students)	Achievement Impact Quotient A.P.E./ # Students
Elem	ELA/Literacy	109.25	275	39.73%
	Math	79.25	275	28.82%
TOTAL		188.50	550	

*35% or 215 maximum point value if no ELP

Formula:
A.P.E. = #Novice(0) + #Partially Proficient(0.35) + #Proficient(.7) + #Advanced (1) for both ELA and Math

Student Growth Levels Used in Growth Accountability Calculations
The basic formula provides point values for each student's level of growth. The levels and correlating point values are:
1. does not meet growth expectations = 0 points
2. approaching growth expectations = .35 points
3. meets growth expectations = .70 points
4. exceeds growth expectations = 1.0 points

Point values assigned each student at each level are shown in Chart B1. The state assessment data provide growth achieved by each student based on prior year results.

Student Growth Value (SGV) compares performance of students over time. Percentile groupings are made based on prior year's student performance. To calculate a student's growth value, all students are assigned to a peer set based on their grade and achievement level. The changes in scores are based on the most current year's scale score relative to the prior year's scale score to create a difference. These differences are ordered from least to greatest within their appropriate peer group to calculate the percentile of growth experienced by a student. For example, a student within the 40th percentile performed at a level above 40% of the other grouped students and below 60% of students within the same grade level.

CHART B1 – Academic Progress Results

Level	Content Area	Growth Level 1	Growth Level 2	Growth Level 3	Growth Level 4
		Does Not Meet Expectations	Approaching Expectations	Meets Expectations	Exceeds Expectations
		SGV < 7	SGV 7 to 49	SGV 50 to 92	SGV > 92
		Points = 0	Points = .35	Points = .70	Points = 1
Elem	ELA/Literacy	44	71	119	41
	Math	71	95	98	11

Schools are awarded total point values based on a formula that measures progress earned towards expected benchmarks. Growth Points Earned (GPE) data is collected from Chart B2 below.

CHART B2 – Academic Progress (30% or 185 maximum point value)

Level	Content Area	Growth Points Earned	Growth Points Possible (=total number of students)	Growth Impact Quotient G.P.E. / Number of Students
Elem	ELA/Literacy	149.15	275	54.24%
	Math	112.85	275	41.04%
TOTAL		262.00	550	

*35% or 215 maximum point value if no ELP

Academic Progress Composite (Elementary/Middle Levels) calculates the relative growth in student performance on statewide assessments in ELA and Math. Each school will earn Student Growth Points as shown below:

Overall Growth Level Criteria	ELA	Math
Overall Growth Level 1 = 0% of the growth points by subject	0.000	0.000
Overall Growth Level 2 = 50% of the growth points by subject	46.250	46.250
Overall Growth Level 3 = 75% of the growth points by subject	69.375	69.375
Overall Growth Level 4 = 100% of the growth points by subject	92.500	92.500
Total Student Growth Points Possible = 185 (30% of the Elementary / Middle School NDAI		

Student Engagement Levels present in every school are determined by a research-based survey instrument. The instrument has been piloted in three states and tested for reliability and validity. In addition to the survey, every school has access to a research-based student engagement observation tool that provides every school with greater insight as well as strategies to improve student engagement levels in every classroom.

The survey is designed to measure the quality of student engagement in three domains: Cognitive Engagement, Behavioral Engagement, and Emotional (Affective) Engagement. For each school, the survey instrument provides the presence of engagement in each of the domains based on three defined levels of engagement based on research: Committed (Authentic Engagement), Compliant, and Disengaged.

The Student Engagement Survey was specifically designed to provide a useful summary of the detailed information represented in student responses and to provide information relative to a benchmark. There are 20 questions categorized under three domains of engagement (behavior, cognitive and emotional). These domains are broken down further by three components of engagement – committed, compliant and disengaged. Finally, each component is aligned to two levels. Thus, the committed component has an "invested" or "immersed" level; the compliant component has a "strategic" or "ritual" level; and the disengaged component has a "retreatism" or "rebellion" level.

A student who finishes the survey will be labeled as Committed, Compliant, or Disengaged for each of the three domains. This label is based on which component of engagement the student answers the majority of the time within each factor. It should be noted that the Behavioral domain has six items, which means it is possible that a respondent has an even number of responses across two or more components. In these cases, the student would be labeled as having a "mixed" engagement type. The percentage reported for each domain is calculated by counting the number of students in each domain out of the total number of students taking part in the survey. The percentage reported for each component of engagement is calculated in the same way. Student Engagement points are awarded based upon the overall number of students who are Committed and Compliant, with Committed students counting for full credit and Compliant students counting for half credit. Schools do not receive points based upon the percentage of students completing the survey.

CHART C – Student Engagement (30% or 185 maximum point values)

Engagement	Levels of Engagement						
Domains	Committed		Compliant		Disengaged		Total
	Number	Percent	Number	Percent	Number	Percent	
Behavioral	376	37.60%	394	39.40%	230	23.00%	1000
Cognitive	191	19.10%	590	59.00%	219	21.90%	1000
Emotional	254	25.40%	413	41.30%	333	33.30%	1000
Avg Total	274	27.37%	466	46.57%	261	26.07%	
Students	1000						
Total Points Possible	185						

Committed	Compliant	Credited%	Points Earned
27.37%	23.28%	50.65%	93.7025

Formula:
Student Engagement Points = (Percent Committed / MPV for Student Engagement) + (Percent Compliant*.5 / MPV for Student Engagement)

English Learner Proficiency Levels are measured by using growth as the uniform progress measure of English Language Proficiency (ELP). Growth is measured for all EL students in K-12 by using the growth to target method. Students start on the growth trajectory at the composite proficiency level (PL) of their first annual ELP assessment (ACCESS 2.0) in North Dakota or the 2016-2017 ELP assessment, if the first ELP assessment was prior. The first school year is considered year 0 or the base score. Annual growth is determined after each consecutive year of the assessment administration. The students' trajectories are constructed from their starting point proficiency level to the 5.0 target proficiency level over a period of years according to Table 1.0 below.

Level	Years to Attain PL (exit)
1.0-1.9	6 years

2.0-2.9	5 years
3.0-3.9	4 years
4.0-4.9	3 years
5.0-5.9	2 years

The interim progress goal of EL students in North Dakota is to annually increase their composite language proficiency level of the annual ELP assessment and remain at or above their established trajectory line.

The percentage of students meeting the growth target for the school is converted based on the maximum 60-point value (or 10% NDAI).

CHART D – English Language Proficiency Levels (10% or 60 maximum point values)

Sample Calculation

Grade	Number of EL Students	Number of EL Students Meeting Expectations	Percent Proficient	School Index Value
3	32	19	59.4	35.63
4	41	26	63.4	38.05
5	15	11	73.3	44.00
School Total	**88**	**56**	**63.64**	**38.18**

Formula:
ELP School Index Value = (%Proficient) (ELP Maximum Point Value)

The long-term goal for EL students is to attain English language proficiency and qualify for reclassification (exit) within the timeframes in Table 1.0 above. Reclassification may be determined by one of the following options:
1. Composite ELP 5.0 **and** ELP 3.5 in each domain
2. Proficient or Advanced level on NDSA in ELA **and** 4.0-5.0 composite ELP **and** 3.5 in each domain
3. P2 composite on ALT ACCESS **and** documented approval of the ILP/IEP teams
4. Documented high-quality ELD with no ELP growth for three consecutive years, minimum composite ELP of 4.0 **and** ILP/IEP teams agree to reclassify.

ELEMENTARY AND MIDDLE SCHOOL LEVELS SAMPLE NORTH DAKOTA ACCOUNTABILITY INDEX SYSTEM

Indicator	Measure	Description	Maximum Composite Value	Sample School Results
Academic Achievement	Proficiency in ELA Proficiency in Math	Statewide Assessment	185 points (30%)	53.48
Academic Progress	Student Learning Index	Academic Progress measure using achievement and growth results	185 points (30%)	82.13
ELP Progress	ACCESS 2.0	Growth model	60 points (10%)	38.18
School Quality	Student Engagement	Individual student surveys on engagement	185 points (30%)	107.86
NDAI	**Composite Value**		**615 points**	**281.66**

HIGH SCHOOL LEVEL

Student Achievement Levels

Achievement Results are broken down by English Language Arts (ELA) and Mathematics. To measure student achievement at the high school level North Dakota uses the NDSA for 10th graders or that ACT at the 11th grade. The ACT has been as a locally selected nationally recognized assessment under ESSA. School districts have the option to use the ACT (grade 11) for accountability in lieu of the grade 10 NDSA for ELA and Mathematics. The starting Maximum Points Value (MPV) is split in half and assigned to each subject. In this instance 154 is the MPV, we calculate half of 154, which is 77. ELA MPV is 77; Mathematics MPV is 77.

Take the sum of the FAY Students who are Proficient or Advanced and divide it by the number of FAY Total Students for the school to get the proficiency rate for a subject. That rate is multiplied by the number of points possible for that subject to get the Achievement Points Earned (by subject). The Achievement points are added to get a total.

Chart E1 - Achievement for Accountability (25% or 154 MVP)

Level	Content Area	Number of FAY Students Proficient or Advanced	Number of FAY Students	Number of FAY Students P and A divided by total number of FAY Students	Maximum Point Value	Totals
Elem	ELA	352	715	49.23%	77	37.91
Elem	Math	301	715	42.10%	77	32.42
Total					154	70.32

Formula:
Number of FAY P and A in ELA/Number of FAY Students = % X (MPV/2) = Achievement Points

Number of FAY P and A in Math/Number of FAY Students = % X (MPV/2) = Achievement Points

Add Achievement points in ELA and Math to get final number (84.48 in this example)

Student Engagement Levels present in every school are determined by a research-based survey instrument. The instrument has been piloted in three states and tested for reliability and validity. In addition to the survey, every school has access to a research-based student engagement observation tool that provides every school with greater insight as well as strategies to improve student engagement levels in every classroom.

The survey is designed to measure the quality of student engagement in three domains: Cognitive Engagement, Behavioral Engagement, and Emotional (Affective) Engagement. For each school, the survey instrument provides the presence of engagement in each of the domains based on three defined levels of engagement based on research: Committed (Authentic Engagement), Compliant, and Disengaged.

The Student Engagement Survey was specifically designed to provide a useful summary of the detailed information represented in student responses and to provide information relative to a benchmark. There are 20 questions categorized under three domains of engagement (behavior, cognitive and emotional). These domains are broken down further by three components of engagement – committed, compliant and disengaged. Finally, each component is aligned to two levels. Thus, the committed component has an "invested" or "immersed" level; the compliant component has a "strategic" or "ritual" level; and the disengaged component has a "retreatism" or "rebellion" level.

A student who finishes the survey will be labeled as Committed, Compliant, or Disengaged for each of the three domains. This label is based on which component of engagement the student answers the majority of the time within each factor. It should be noted that the Behavioral domain has six items, which means it is possible that a respondent has an even number of responses across two or more components. In these cases, the student would be labeled as having a "mixed" engagement type. The percentage reported for each domain is calculated by counting the number of students in each domain out of the total number of students taking part in the survey. The percentage reported for each component of engagement is calculated in the same way. Student Engagement points are awarded based upon the overall number of students who are Committed and Compliant, with Committed students counting for full credit and Compliant students counting for half credit. Schools do not receive points based upon the percentage of students completing the survey.

CHART F – Student Engagement (20% or 123 maximum point values)

Engagement	Levels of Engagement						
Domains	Committed		Compliant		Disengaged		Total
	Number	Percent	Number	Percent	Number	Percent	
Behavioral	376	37.60%	394	39.40%	230	23.00%	1000
Cognitive	191	19.10%	590	59.00%	219	21.90%	1000
Emotional	254	25.40%	413	41.30%	333	33.30%	1000
Avg Total	274	27.37%	466	46.57%	261	26.07%	
Students	1000						
Total Points Possible	123						

Committed	Compliant	Credited%	Points Earned
27.37%	23.28%	50.65%	62.2995

Formula
Student Engagement Points = (Percent Committed / MPV for Student Engagement) + (Percent Compliant*.5 / MPV for Student Engagement)

English Learner Proficiency Levels are measured using growth as the uniform progress measure of English Language Proficiency (ELP). Growth is measured for all EL students in K-12 by using the growth to target method. Students start on the growth trajectory at the composite

proficiency level (PL) of their first annual ELP assessment in North Dakota (currently ACCESS 2.0). This is considered year 0 or base score. Year one growth is determined after the second annual ELP assessment. The students' trajectories are constructed from their starting point proficiency level to the 5.0 target proficiency level over a period of years according to Table 1.1 below.

Table 1.1

Level	Years to Attain PL (exit)
1.0-1.9	6 years
2.0-2.9	5 years
3.0-3.9	4 years
4.0-4.9	3 years
5.0-5.9	2 years

EL students in North Dakota will annually increase their composite language proficiency level of the annual ELP assessment and remain at or above their established trajectory line. The annual percentages expected are determined by the ELPAC. EL students in North Dakota will attain English proficiency (exit the program) by receiving a 3.5 proficiency level in each domain of listening, speaking, reading and writing and a 5.0 composite proficiency level. The percentage of students meeting the growth target for the school are converted based on the maximum 62-point value (or 10% NDAI).

CHART G – English Language Proficiency Levels (10% or 62 maximum point value)

Grade	Number of EL Students	Number of EL Students Meeting Expectations	Percent Proficient	School Index Value
9	17	11	64.71%	40.12
10	12	10	83.33%	51.67
11	10	9	90.00%	55.80
School Total	**39**	**30**	**76.29%**	**47.69**

Formula
ELP School Index Value = (%Proficient) (ELP Maximum Point Value)

To calculate the students Choice Ready data is collected on all the students in a school who meet the essential skills and two of the "Ready" factors outlined above. In the chart below the school had 30% of their students Choice ready and with a seven 7% growth from year one to year two with the correlating points awarded. Chart H1 will explain the awarded points for this school.

CHART H – Percent of Students Choice Ready

Year	Total Students	Percent who Met Essential Skills	Percent who Met Postsecondary Ready	Percent Met Workforce Ready	Percent who Met Military Ready	Percent Choice Ready	Points Options	
Year 1	100	60%	25%	30%	10%	23%		
Year 2	100	75%	30%	40%	60%	30%	32.25	Points based total students CR
Growth percent points						7%	64.5*	Points based on growth points

Choice Ready Point Descriptors – The points for Choice Ready Growth are awarded in a "Hold Harmless" fashion as some schools may have tremendous growth and low overall Choice Readiness, and vice versa, some schools may have a very high Choice Readiness and low growth. For example, in Chart H the school had 30% of their students Choice Ready which would give them 32.25 percent of the total points of 129; however, the growth in this school is 7% which allot them 64.5* points. See specific Choice Ready point allotment and explanation in Chart H1.

Chart H1 – Choice Ready Point Descriptors and Points Awarded

School Choice Ready Annual Target	Criteria for School Choice Ready Growth	Points
100% of points	10.00% increment above the previous year percentage or 90-100% of students are Choice Ready	129
75% of points	7.50% - 9.99% increment above the previous year percentage or 75% of students are Choice Ready	96.75
50% of points	5.00% - 7.49% increment above than the previous year percentage or 50% of students are Choice Ready	64.5
25% of points	0.01% - 4.99% increment above the previous year percentage or 25% of students are Choice Ready	32.25
0 points	0 % increment above the previous year percentage or less than the previous year percentage or 0-24.99% of students are Choice Ready	0

Graduation Rate – The four-year (on-time) graduation is used for school accountability reports while the six-year graduation rate is used for identification for comprehensive and/or targeted schools. The next paragraph provides information on graduation rate in regards to state goals and Targeted and Comprehensive Support schools.

North Dakota will retain its current growth criteria for determining sufficient graduation rate achievement. The state will establish unique targets each of the respective years: the four-year on-time extended cohort graduation rate will use a 12.5% growth target (a 25% increase in expectation from the four-year target base); and the six-year extended cohort graduation rate will use a 21% growth target (a 50% increase in expectation from the four-year target base). The target measured as the percent reduction of non-graduates from the preceding year against the 90% (10% reduction in non-graduates against the goal (90%) from the previous year's rate) for the four-year graduation rate. If it did not, the state would determine whether the school or district had met the six-year extended year graduation rate target (21% reduction in) or non-graduates against the goal (90%) from the previous year's rate. Meeting the targets for any of the four-year, five-year extended, or six-year extended graduation rates would mean the school or district met its absolute or growth goal.

CHART I – Graduation Rate (16% or 98 maximum point value)

Grade	Number of Eligible Students	Number of Students Meeting Expectations	Percent Proficient	School Index Value
Graduates	219	166	75.80%	74.28
School Total	**219**	**166**	**75.80%**	**74.28**

*21% of NDAI or 129 maximum point value if no ELP

Formula: Grad Rate School Index Value = (%Proficient) (Grad Rate Maximum Point Value)

Completer Rate/Traditional Graduation Rate adjusted for GED – North Dakota's plan also includes the GED as an indicator of graduation for schools that administer a GED program. Specifically, North Dakota's plan includes the incorporation of the General Education Development/Diploma (GED) along with traditional high school diplomas obtained in measuring graduation rates over time. This measure is referred to as the Completer Rate, and it is built upon the Traditional Graduation Rate.

The Traditional Graduation Rate is not cohort-based. Instead, it is uncertain as to when someone started high school and is based upon graduating seniors. Students in their senior year form the denominator of the Traditional Graduation Rate, and those who ultimately graduated within the year form the numerator of the Traditional Graduation Rate. This rate is then used in create the Completer Rate by the addition of GED recipients within the same 12-month period to both the numerator and denominator.

In creating the Completer Rate for GEDs, only dropouts who are awarded a North Dakota GED prior to the 22nd birthday can be credited to the providing school as a completer. All schools and students can access the GED program through the Adult Learning Centers. The GED completer is awarded to the student's last enrolled high school in North Dakota that had an exit code of dropout. If no students are GED graduates, index values are applied equally to other indicators.

CHART J – GED Completion (8% or 49 maximum point value)

Grade	Number of Eligible Students	Number of Students Meeting Expectations	Percent Proficient	School Index Value
GED Completion	21	15	71.43%	35.00
School Total	**21**	**15**	**71.43%**	**35.00**

Formula:
School Index Value = (%Proficient) (GED Maximum Point Value)

HIGH SCHOOL LEVEL SAMPLE NORTH DAKOTA ACCOUNTABILITY INDEX SYSTEM

Indicator	Measure	Description	Maximum Composite Value	Sample School Results
Academic Achievement	Proficiency in ELA Proficiency in Math	Statewide Assessment	154 points (25%)	70.32
School Quality	Student Engagement	Individual student surveys on engagement	123 points (20%)	71.45
ELP Progress	ACCESS 2.0	Growth model	62 points (10%)	47.69
College and Career Ready	ND Choice Ready Framework	Percent of students' Choice Ready growth	129 (21%)	64.50
Graduation Rate	4-year Adj Cohort Rate	Percentage of students who graduated on time based on start of ninth grade	98 points (16%)	74.28
GED Completion	GED / HS Completers	Percentage of GED and completers up to age 22	49 points (8%)	35.00
NDAI	**Composite Value**		**615 points**	**363.25**

Questions:

Anyone with questions on their School Accountability Report should send an email request for assistance to NDDPI (dpiaccountability@nd.gov) with the subject line, "Requesting Assistance with School Accountability Report". Confirm your status as the designated district representative, specify your questions or need for assistance, and provide your phone number and email address. The NDDPI has an established ticketing process and will answer all requests for assistance in the order received.