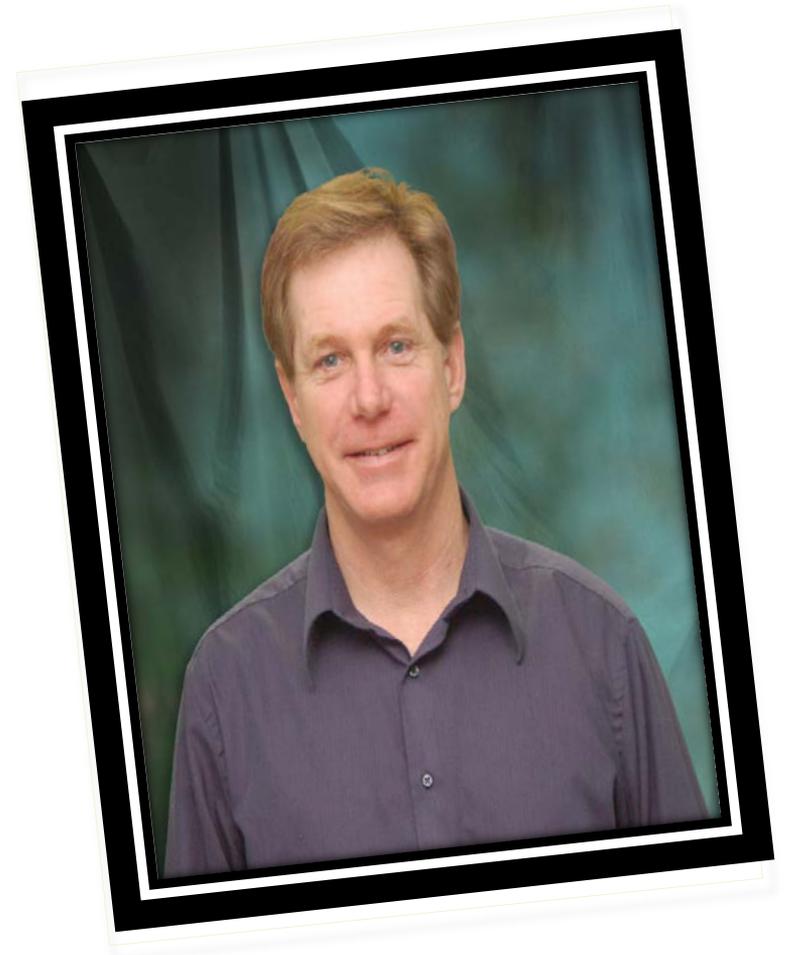


Tracy Korsmo

Business Intelligence
Enterprise IT Architect

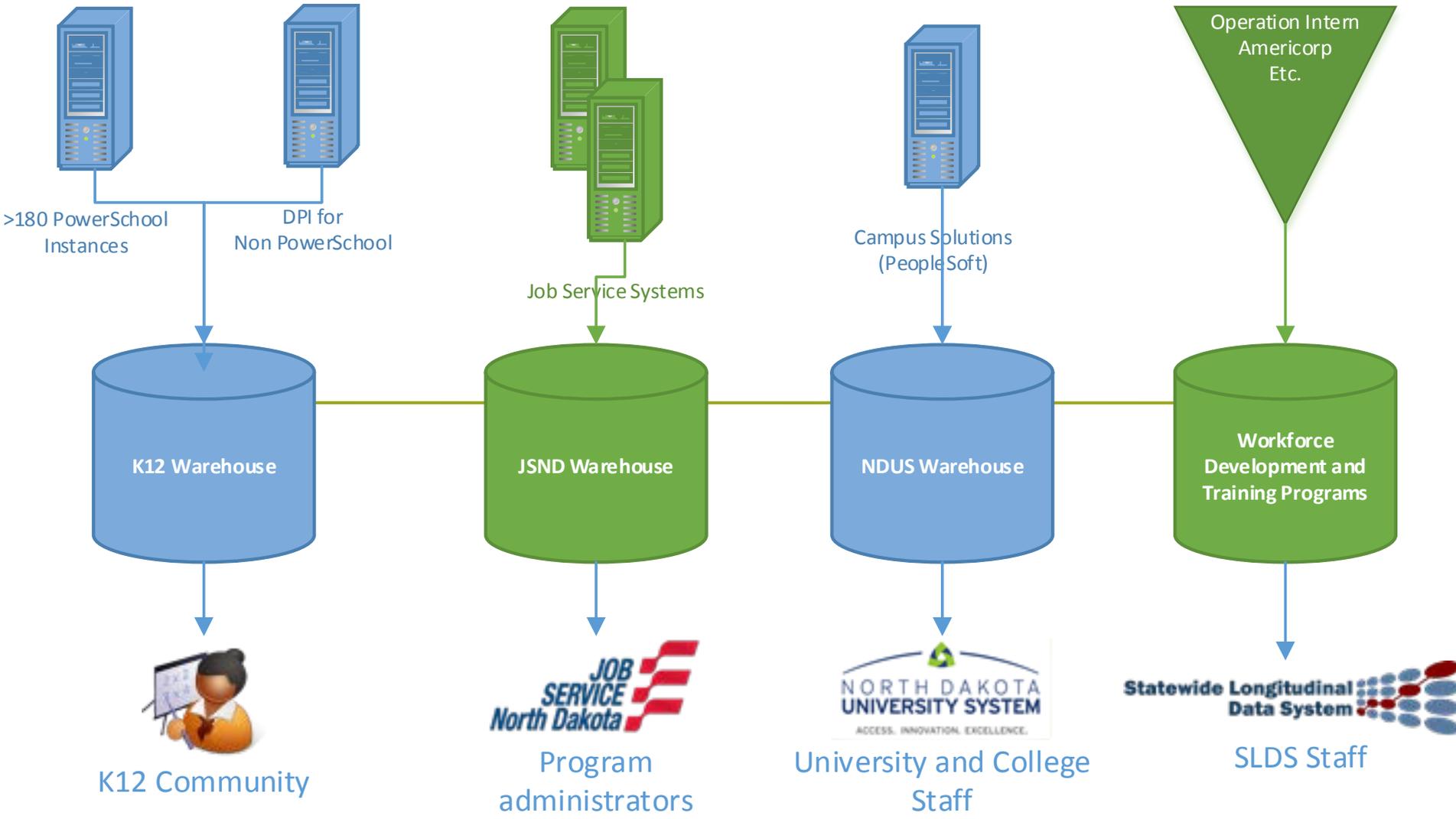


SLDS Governance

- Governed by the SLDS Committee members
 - Information Technology Dept. (ITD) maintains the SLDS
 - ITD is a neutral service provider of the member agencies contributing data
-

ND SLDS Environment

- What the SLDS is NOT
 - Not a single database where all data from contributors is placed
 - Data is Not accessible by any SLDS user without an authenticated interface
- Solving a Problem
 - Source Systems in Education do not historically preserve data well
 - To use historical data the SLDS Staff (ITD) needed to build systems for agencies which preserved history



How the SLDS Works

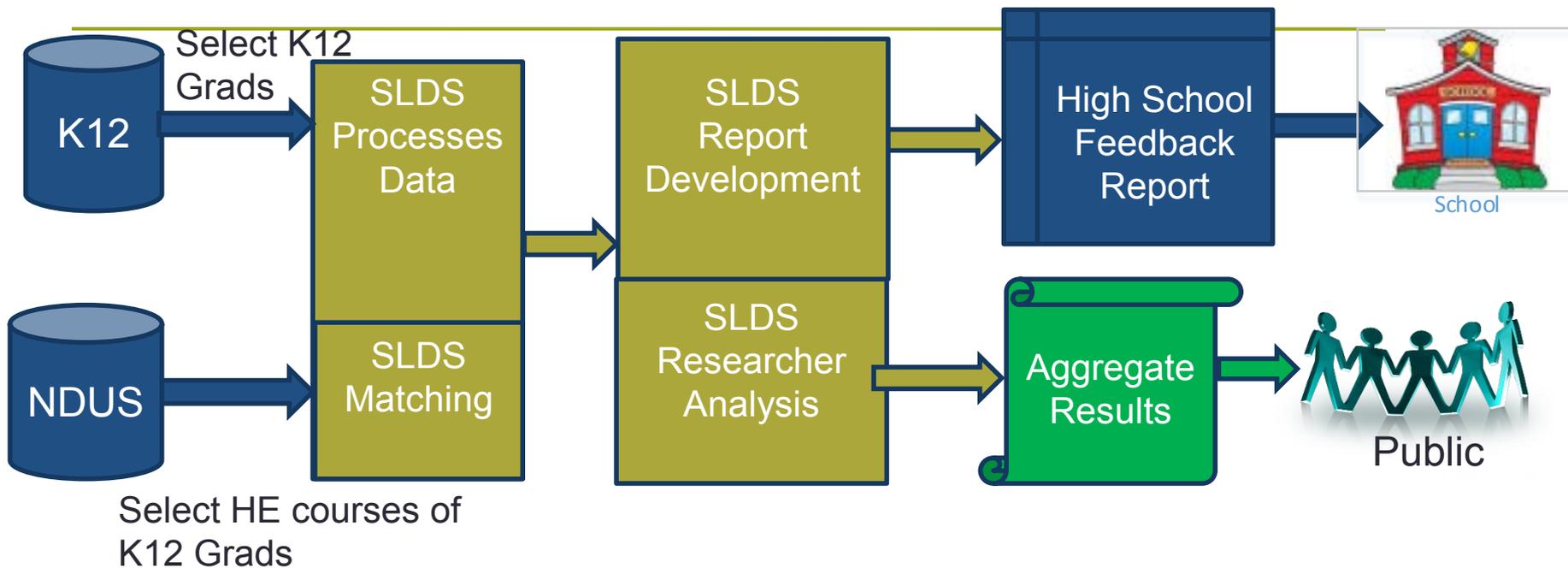


Policy Question:

“ How many ND high school graduates require remediation in ND higher education institutions”

- Data Sharing Agreement and Authorization in place

Answer: Performed by SLDS Staff



North Dakota Developmental Courses

Parameters: None

This report contains ND Public Post Secondary Institution enrollments of only high school graduates by cohort years. The cohort graduate year are students that all graduated in the same high school year in-state and out-of-state. It is important to understand that the Post Secondary S counts are limited to these cohort populations.

State	HS Grad Year	Enrolled at NDUS Campus	Enrolled in Developmental Classes	Pct	BSC01	MISUB	DSU01	LRSC1	MASU1	MISU1	NDSCS	NDSU1	UND01	VCSU1	WSC01
ND	2008-2009	4,317	1,327	30.7%	43.4%	33.6%	26.8%	19.4%	26.4%	32.8%	45.3%	15.9%	8.3%	23.4%	44.5%
	2009-2010	<u>4,212</u>	<u>1,237</u>	<u>29.4%</u>	<u>40.4%</u>	<u>49.0%</u>	<u>21.0%</u>	<u>24.3%</u>	<u>30.8%</u>	<u>24.2%</u>	<u>43.4%</u>	<u>15.0%</u>	<u>7.6%</u>	<u>26.4%</u>	<u>40.8%</u>
	2010-2011	4,046	1,250	30.9%	42.2%	61.8%	28.8%	25.3%	23.8%	31.8%	42.6%	16.1%	10.8%	24.2%	43.7%
	2011-2012	3,854	1,291	33.5%	39.6%	72.5%	41.3%	29.0%	41.1%	26.0%	45.1%	20.9%	16.5%	40.9%	38.6%
	2012-2013	3,433	984	28.7%	39.5%	77.2%	26.1%	51.7%	47.8%	21.5%	36.7%	17.1%	17.3%	17.1%	47.1%
	Total	19,862	6,089	30.7%	1952	351	218	401	178	496	1107	903	490	210	243
OutOfState	2008-2009	4,681	1,007	21.5%	37.1%	52.6%	31.7%	19.0%	44.1%	29.9%	63.0%	16.6%	9.6%	33.7%	56.0%
	2009-2010	4,684	1,032	22.0%	40.0%	89.7%	30.8%	22.3%	51.3%	30.5%	60.4%	17.3%	9.6%	38.4%	54.5%
	2010-2011	4,594	1,069	23.3%	45.7%	87.1%	40.8%	36.6%	56.7%	32.1%	63.6%	16.7%	9.4%	32.3%	58.7%
	2011-2012	4,454	1,373	30.8%	37.0%	77.3%	43.5%	52.2%	64.7%	34.6%	63.4%	25.1%	22.5%	56.4%	51.7%
	2012-2013	3,696	1,002	27.1%	40.0%	85.7%	54.5%	70.6%	74.2%	40.2%	55.6%	20.7%	18.9%	28.8%	53.3%
	Total	22,109	5,483	24.8%	196	111	220	203	234	233	1126	1806	1109	165	190
Unknown	2008-2009	128	40	31.3%	44.4%	0.0%	100.0%	35.7%	0.0%	42.9%	70.6%	16.7%	11.4%	0.0%	66.7%
	2009-2010	109	27	24.8%	33.3%	100.0%	0.0%	25.0%	100.0%	14.3%	56.3%	21.1%	0.0%	7.1%	40.0%
	2010-2011	99	22	22.2%	25.0%	0.0%	0.0%	40.0%	0.0%	30.0%	33.3%	17.5%	18.8%	10.0%	100.0%
	2011-2012	74	18	24.3%	100.0%	0.0%	50.0%	33.3%	0.0%	16.7%	36.4%	23.8%	0.0%	16.7%	50.0%
	2012-2013	74	15	20.3%	20.0%	0.0%	50.0%	0.0%	0.0%	22.2%	28.6%	21.1%	17.4%	0.0%	0.0%
	Total	484	122	25.2%	13	1	5	9	1	14	30	30	11	3	7

Please
Read

* Totals for Enrolled at NDUS Campus and Enrolled in Developmental Classes are unique student counts. The specific campus numbers may contain the same student across multiple campuses.



High School Feedback

School Name	HS Grad Year	Enrolled at Campus	Enrolled in Developmental Classes	Pct	BSC01	MISUB	DSU01	LRSC1	MASU1	MISU1	NDSCS	NDSU1	UND01	VC SU1	WSC01
SENIOR HIGH SCHOOL	2008-2009	<u>85</u>	<u>42</u>	<u>49.4%</u>	<u>100.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>25.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>57.8%</u>	<u>15.8%</u>	<u>12.5%</u>	<u>0.0%</u>	<u>0.0%</u>
	2009-2010	<u>74</u>	<u>25</u>	<u>33.8%</u>	<u>100.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>33.3%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>46.9%</u>	<u>11.5%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>
	2010-2011	<u>53</u>	<u>19</u>	<u>35.8%</u>	<u>50.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>39.5%</u>	<u>23.1%</u>	<u>25.0%</u>	<u>0.0%</u>	<u>0.0%</u>
	2011-2012	<u>66</u>	<u>29</u>	<u>43.9%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>56.0%</u>	<u>0.0%</u>	<u>10.0%</u>	<u>0.0%</u>	<u>0.0%</u>
	2012-2013	<u>68</u>	<u>29</u>	<u>42.6%</u>	<u>0.0%</u>	<u>100.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>46.0%</u>	<u>33.3%</u>	<u>0.0%</u>	<u>50.0%</u>	<u>0.0%</u>
	Total		346	144	41.6%	3	1	0	2	0	0	128	13	3	1
		346	144	41.6%	3	1	0	2	0	0	128	13	3	1	0

* Totals for Enrolled at NDUS Campus and Enrolled in Developmental Classes are unique student counts. The specific campus numbers may contain the same student across multiple campuses.

High School results – by institution enrolled. Remember a student may be enrolled in multiple institutions and taking remediation



Drill (click) on any underlined number will take you to the details of the students representing the number or percent



Teachers Roster of students with remediation predictions

Teacher Student Roster				ATTENDANCE		GRADES		NWEA - National Percentile				
Student :	Grade Level :	Classifications	CCR	Last Four Weeks Class Absences	# Grades Below C	Grades Failing or down >= 10%	Combined Science	Language	Mathematics	Reading		
	Ninth Grade			0.0 %	0	0	226		222		228	
	Tenth Grade			8.3 %	4	3	219		235		210	
	Eleventh Grade			0.0 %	1	1	230		230		241	
	Tenth Grade			8.3 %	0	0	236		249		247	
	Tenth Grade			0.0 %	0	0	217		245		233	
	Tenth Grade			4.2 %	0	0	223		258		243	
	Tenth Grade			0.0 %	1	0	214		238		220	
	Tenth Grade			7.1 %	0	0	228		264		227	

Individual students prediction

NDSA - North Dakota State Assessment

Predicting the Need for Remedial Coursework

Math Remediation (2011 8th grade, Fall - 10/25/2011)



English Remediation (2011 8th grade, Fall - 10/25/2011)



NWEA - Northwest Evaluation Association

Predicting the Need for Remedial Coursework

Math Remediation (2013 10th grade, Spring - 4/1/2014)



English Remediation (2013 10th grade, Spring - 4/1/2014)



SLDS Statute Changes

- Established terms and conditions for authorized access through the SLDS
 - Terms and Conditions exist today
 - Data owners authorize staff to reports containing their data
 - School districts will validate that a data sharing agreement is in place for other entities when required (REA)
-

SLDS Statute

- Other Educational Entities
 - Security being developed for districts to release an individual student record to educational providers that have a legitimate education need for the record
 - Career and Distance Ed, Special Education Units
-

SLDS Statute

- System administrators implement data protection
 - ITD staff take annual training on security and privacy
 - ITD Enterprise Environment provides Encryption
 - Data at rest (hard drives)
 - All Network traffic is encrypted
 - Implementing encryption of certain PII elements such as the SSN within the database (must be ITD SLDS staff to use SSN)
-

SLDS Statute

- Biennial privacy and security audits
 - Application Scanning (security tests) run against eTranscripts and SLDS. Checks for known security vulnerabilities
 - ITD Ethical hacking is being performed
 - ITD taking secure coding training classes
 - State Auditor
 - policy and procedures regarding privacy
-

SLDS Statute

- Data Breach protocol and procedure
 - Framework is being developed
 - Data Retention
 - Investigating other state policies and best practices
-

SLDS Statute

- Annual Training on data protection
 - Users that log into the SLDS portal will be required to take online training annually. Electronic notification on training completion is being developed.
 - NDUS and JSND has policy and procedure to access data in its own warehouse
 - All other users receiving data not considered de-identified will be required to take data privacy training for information generated by SLDS
-

Current Status of K12

- Over 4000 school administrators and teachers have access to their students in the SLDS and growing.
 - Research has allowed for high school and college readiness warnings
 - Capacity to answer policy questions has grow significantly
 - Producing more research and assisting efforts such as School Improvement (AdvancED)
-

Year to Date (2014)



DAYS MISSED

20

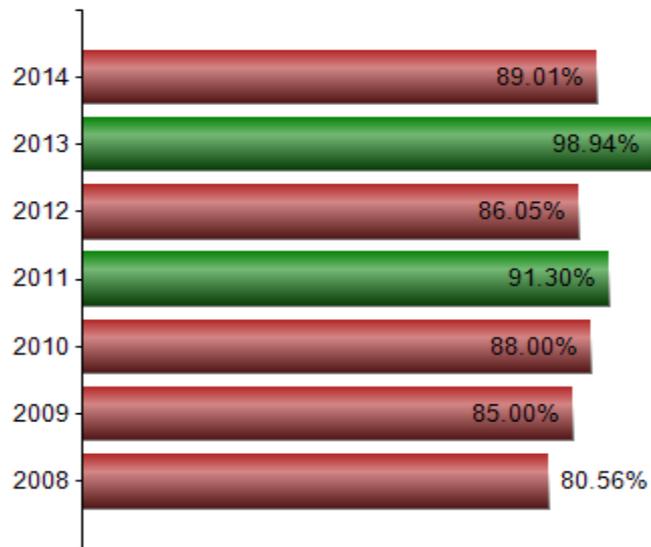
Cumulative 2008 to 2014



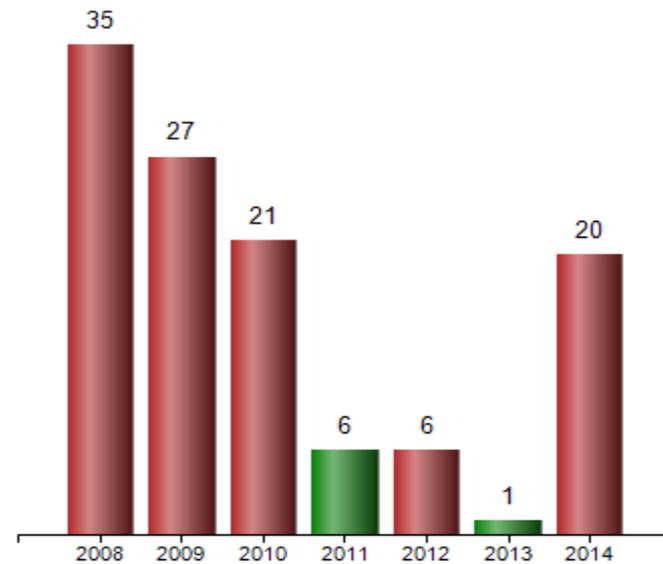
DAYS MISSED

116

Daily Attendance Rate Comparison



Days Missed Comparison



K12 SLDS Plans

- Develop a more interactive interface for teachers and school administrators
 - Data visualization and more interactive data sets
 - Develop a training site
 - Allowing data use scenarios to be developed
 - Available for teacher preparation programs
 - Expand on data
 - Career and Technical, Adult Education, Teacher licensure
-

Education Portal - eTranscripts

- Positive feedback from high schools (over 3500 transcripts sent)
 - All ND public and private colleges participating
 - MN/SD out of state
 - DPI receives for Scholarship
 - Expand to more out of state colleges
 - Interface with Nation Student Clearing House
 - Enabled high school transcript exchanges
 - Future project to translate courses between high schools
 - Power of State Course Codes!
-

Education Portal - eTranscripts

- Continue student and parent pilot (PowerSchool SSO)
- Interfaces to NDUS warehouse
 - Allow for dual credit and early entry (scholarship and transcript)
 - Official college transcript for Dual Credit courses

Dual Credit / Early Entry

Course	Course Description	Course No.	Type	Grade	Credit Hours	University	Term
COMM 110	Fund of Public Speaking	24861	ERE	A	3.00	Bismarck State College	2015 Spring
MATH 210	Elementary Statistics	25009	ERE	A	3.00	Bismarck State College	2015 Spring

Education Portal - ND Scholarship

- Apply online through the portal
- Monitoring progress to achieving the scholarship
- Automatic determination of meeting criteria

Scholarship Rules:

Rule Name	Pass/Fail	Detail
Must be Resident	Passed	
High School Graduate	Failed	You must be a High School Graduate.
Must have 4 units English	Failed	You are lacking 4 credits in English. You need 4.00.
Must have Algebra II	Passed	
Algebra II as prerequisite	Passed	
Additional Math units	Passed	
Physical Science	Passed	
Biology	Passed	
Additional Science units	Passed	
US History	Passed	
Problems of Democracy	Failed	You are missing Problems Of Democracy Or 1/2 Unit Of Us Government And 1/2 Unit Of Economics.
Additional Social Science units	Passed	
Physical Education	Passed	
Same Foreign Language	Passed	
Additional Foreign Language unit	Passed	
Additional 5 units	Passed	
Replacement of Any Rule	Passed	
Minimum Grade	Failed	You must have a "C" in each unit or 1/2 unit in all courses enrolled
ACT Composite score	Failed	You must have at least 24 on the ACT.

Education Portal

- Investigating using portal for college application
- Potential for determining admissions
 - Admissions Index calculation

	Status	Value
NDUS Admission Index		
Admission standards into ND public postsecondary institutions		
Admission Tier	Research University	
ACT composite		26
High School GPA (weighted)		3.81
HS Core Courses Completed (hours)		14.00



GPA - School Defined

Description	Value
Un-Weighted GPA	1.6604
Weighted GPA	1.6604

Dual Credit / Early Entry

Course	Course Description	Course No.	Type	Grade	Credit Hours	University	Term
COMM 110	Fund of Public Speaking	24861	ERE	A	3.00	Bismarck State College	2015 Spring
MATH 210	Elementary Statistics	25009	ERE	A	3.00	Bismarck State College	2015 Spring

Credit Totals

9th	10th	11th	12th	Total Earned	Total Attempted
8.000	7.500	7.500	6.000	29.000	29.000

NDUS Core Course Credit Totals

ENGLA	Math	Sci	SocSt
4.500	4.500	3.000	5.500

Subject Area	Course Name	Type	Semester 1 Grade	Semester 1 Credit	Semester 2 Grade	Semester 2 Credit
ENGLA 	AP English 12	AP	A	0.500	A	0.500
ENGLA 	Speech (Dual Credit)	DC			A	0.500
FPArt	Wind Ensemble		A	0.500	A	0.500
Math	Intro To Discrete Math		A	0.500		
Math 	Probability & Stats (Dual Credit)	DC			A	0.500
SocSt 	AP Government	AP	A	0.500	A	0.500
SocSt 	Sociology		A	0.500		

Higher Education

- Continue building NDUS SLDS Warehouse
 - Currently funded by Dept. of Education grant
 - Building an enterprise reporting system for NDUS
-

Higher Education - Research

- Retention
 - Research retention indicators
 - Support Institutions implementing retention systems
 - Reverse Transfer
 - Support NDUS efforts (NDSU and UND)
 - Complete a degree/certificate from the transferred school
 - SLDS training system for teacher preparation colleges
 - Work with colleges to include data use in curriculum
-

ADMISSIONS - NDUS



	Status	Value	Alert
NDUS Admission Index			
Admission standards into ND public postsecondary institutions			
Admission Tier	Research University		
ACT composite		30	
High School GPA (weighted)		3.97	
HS Core Courses Completed (hours)		17.50	

☐ North Dakota University System Student Access List

Institution Name (Hover over name for entry requirements)	Tier
✓ Bismarck State College	Community College
✓ Dakota College at Bottineau	Community College
✓ Dickinson State College	Regional University
✓ Lake Region State College	Community College
✓ Mayville State University	Regional University
✓ Minot State University	Masters University
✓ North Dakota State College of Science	Community College
✓ North Dakota State University	Research University
✓ University of North Dakota	Research University
✓ Valley City State University	Regional University
✓ Williston State College	Community College

Workforce Development

- JSND WIA to WIOA reauthorization
 - Redesign warehouse
 - Eligible Training provider measures
 - Tribal WFD grants
 - Performance Accountability Reporting
 - WF Development programs measured
 - Working with Commerce WF Development
 - Supply and Demand
 - High demand Occupations mapped to degrees/certificates
(**Education Pipeline**)
-

Workforce Development

- Supply and Demand
 - High demand occupations mapped to degrees/certificates
(**Education Pipeline**)
 - Graduate outcomes of high school and college programs
-



Continue research on ND Graduates placement and expand to high school

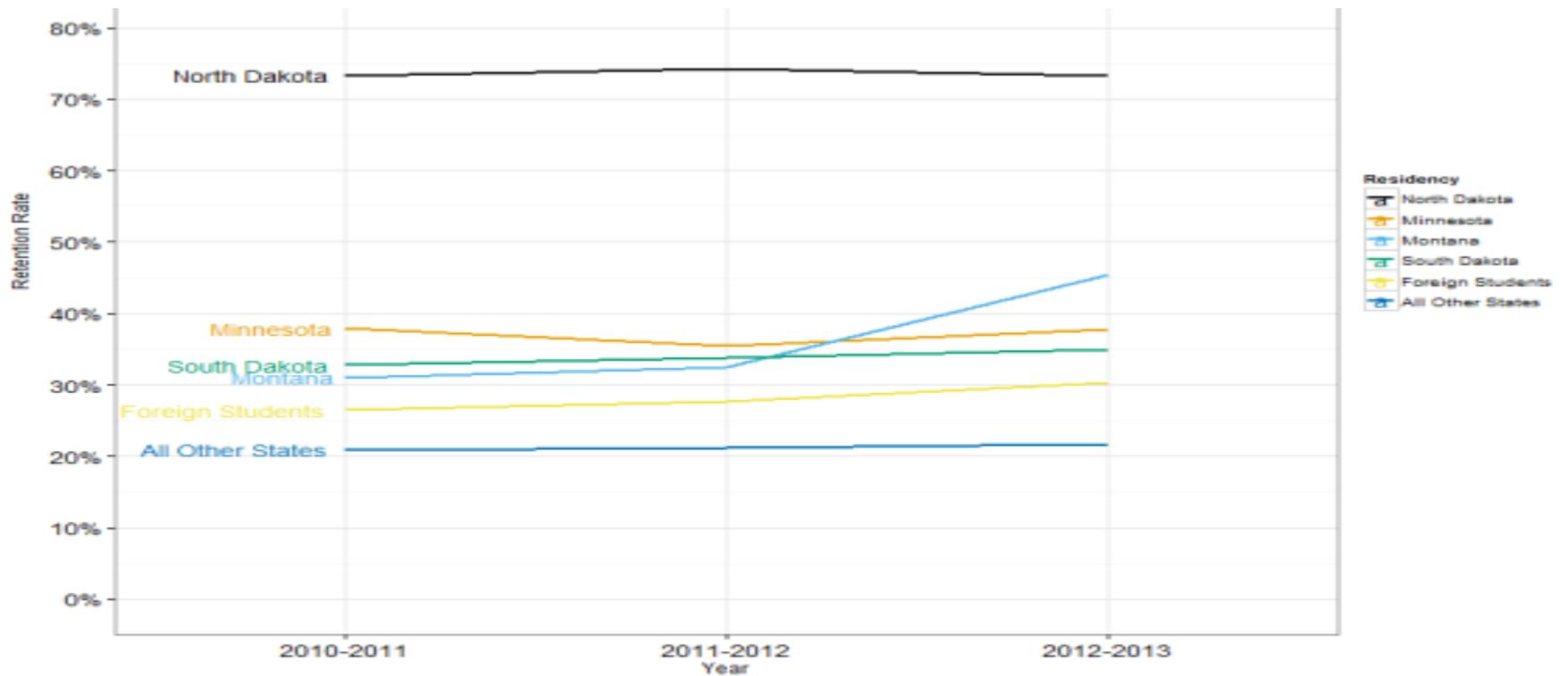


Figure 2: Overall Retention Rates of NDUS Graduates by Year and Residency

Origination of the ND Statewide Longitudinal Data System (SLDS)

ND's requirement for a SLDS was driven by two primary initiatives in 2007; The Governor's Commission on Education Improvement and the ND Department of Commerce Workforce Development Division. In 2009 ND's acceptance of State Fiscal Stabilization Funds further required that each state build an SLDS and create several public reports proving the system was functioning.

Governor's Commission on Education Improvement

In 2007 legislative session the Governor's Commission on Education Improvement injected over 100M into K12 school districts and also provided mandates:

- ND State Scholarship and graduation requirements
- ACT for all 11th grade or WorkKeys
- Interim assessment (NWEA MAP at 90%) grades 2-10 aligned with state standards
- Career interest inventory that accompany the PLAN or Pre-SAT
- Funded Pearson PowerSchool student information systems statewide

Recommendations from the Commission were to build a State Longitudinal Data System housing K-12 student information, high education and workforce data to produce a comprehensive picture of the effectiveness of state education programs and workforce development initiatives

ND Department of Commerce

The ND Department of Commerce responding to ND's growing workforce demand introduced an SLDS system in the 2007 legislature for **Workforce Intelligence** with goals to:

- Identify what workforce exists
- Where it is located
- Identify gaps in existing workforce
- Identify methods to fill these gaps
- Develop a method to disseminate to all partners and stakeholders qualitative and quantitative workforce intelligence information

As a result of these two initiatives the 2007 legislative assembly created the SLDS Committee to Plan for and Budget for the SLDS. During the 07-09 biennium the Committee created Roadmap Recommendations through a consultant with an estimated cost of 12M to build the system. The recommendations were to build foundational data warehouses for:

- Primary and Secondary (K12)
- Postsecondary (NDUS)
- Workforce (JSND & Economic Development)

2009 America Recovery and Reinvestment Act

A condition of accepting State Fiscal Stabilization Funds all states were required to build educational outcome and workforce longitudinal data systems containing K12, Pre-K, Higher Ed and Workforce linkages.

Publically report requirements

- Aggregate information on high school graduates enrolling in postsecondary within 16 months
- Aggregate information high school graduates receiving 1 year of college credit within 2 years of college enrollment
- Aggregate information on graduates requiring remediation in college

SLDS Funding

- 2009
 - NCES grant (Department of Education) award to DPI for K-12 (6.8M)
 - Grant ended June 2014
 - State funding for initial phase of SLDS (2.2M)
- 2011 Workforce Data Quality Initiative Grant JSND (1M)
 - Grant ended Nov 2013
- 2012 NCES (Department of Education) Grant Postsecondary (4M)
 - Currently building
- 2015-2017 Budget
 - 5.5M base budget general funds
 - 1.25M one-time funding
 - 490K roll-over

SLDS Governance

The SLDS is managed and governed by the SLDS Committee

The statewide longitudinal data system committee consists of:

- The commissioner of the board of higher education
- The superintendent of public instruction

- The chief information officer
- The director of the department of career and technical education
- The director of job service North Dakota
- The commissioner of commerce
- The director of the department of human services
- The director of the North Dakota educational technology council
- The executive director of the North Dakota council of educational leaders
- The director of the North Dakota workforce development council
- Two members of the legislative assembly appointed by the chairman of the legislative management
 - Representative Mike Nathe
 - Senator Don Schaible