Northern State University
Millicent Atkins School of Education
Teacher Education Program
CAEP Stipulation Visit

Stipulation
The EPP did not provide a CAEP sufficient phase in plan criteria to collect teacher effectiveness data. (Component 4.2)

Rationale
The EPP provided the following on-site evidence: Teacher Effectiveness, CAEP 4.2. It states that details will be worked out over the summer of 2021 in order to survey students in the classes of any P-12 teachers who participate in the SLO student impact project but does not provide a CAEP sufficient phase in plan. There is no evidence that the sample surveys provided on site as evidence align to InTASC Standards.

Following the CAEP Site Visit in the spring of 2021, the Millicent Atkins School of Education Teacher Education Program (TEP) began work on fleshing out the plan to collect P-12 student survey data. Unfortunately, it quickly became clear that the plan would not work due to privacy and data access concerns at the state level causing an overall "freezing effect" among teachers and administrators.

Concurrently, CAEP released revised standards that provided better clarity and focus regarding the intention of the standard. For both of these reasons, the TEP refocused its efforts on state-required P-12 assessment and state-created teacher evaluation data. The SLO Survey Project would speak to all aspects of the revised Standard 4

> Standard 4: Program Impact: The provider demonstrates the effectiveness of its completers' instruction on P-12 student learning and development, and completer and employer satisfaction with the relevance and effectiveness of preparation.
>
> R4.1 Completer Effectiveness The provider demonstrates that program completers:
> - effectively contribute to P-12 student-learning growth AND
> - apply in P-12 classrooms the professional knowledge, skills, and dispositions that the preparation experiences were designed to achieve.
>
> In addition, the provider includes a rationale for the data elements provided.
>
> R4.2 Satisfaction of Employers The provider demonstrates employers are satisfied with the completers' preparation for their assigned responsibilities in working with diverse P-12 students and their families.
>
> R4.3 Satisfaction of Completers The provider demonstrates program completers perceive their preparation as relevant to the responsibilities they encounter on the job, and their preparation was effective.

The SLO project went through several iterations, as explained in the evidence piece “Assessment Coordinator’s Narrative”. Evidence of the different versions of the survey, communications regarding the project, and relevant administrative rules/codified laws are provided to support that narrative. Furthermore, updated employer survey data, SLO project pilot survey data with completer satisfaction survey results, and preliminary P-12 state-required assessment data are also included in evidence.

Between now and the stipulation site visit, the TEP will complete gathering and organizing state-wide public P-12 assessment project data analysis. The faculty and staff of the TEP look forward to seeing what insights can be gleaned from the data when they finally get the chance to analyze the full data-set.

Evidence List:

AC Narrative	Privacy Rules Email.pdf
Administrative Rule 24_53_02_01.pdf	Report Card ASD and SD Snapshots.pdf
Administrative Rule 24_53_03.pdf	School Report Calculation Guide.pdf
Administrative Rule 24_53_05.pdf	School Report Card Guide.pdf
Administrative Rule 24_55_05.pdf	SD Teachers Project Instructions
Administrative Rule 24_55_06.pdf	SLO 2 Part Project update.pdf
Administrative Rule 24_57_02.pdf	SLO Survey - All SD EPPs Version.pdf
Administrative Rule Changes Procedure.pdf	SLO Survey - NSU only Version
Administrative Rules Promulgation Process.pdf	SLO Survey Data - NSU only.pdf
ASD Testing Transparency 22.pdf	SLO Survey Email to Administrators.pdf
Codified Law 13-3-51 .pdf	SLO Survey Emails to Alumni.pdf
Codified Law 13-42.pdf	SLO Survey Project Emails - SD EPPs.pdf
NSU Millicent Atkins SOE Employer Survey Data.pdf	SLO Survey Project SD EPP MOU.pdf
NSU Millicent Atkins SOE Employer Survey.pdf	SSR Evidence - SLO_2Part_Project.pdf

Formative Feedback Report

Page 1

Preliminary Analysis of Evidence Related to the Stipulation

Formative Review for Stipulation for R4.1 for Northern State University

Northern State University is located in Aberdeen, South Dakota. While South Dakota has a state-wide system to gather data on teacher effectiveness as completers begin their careers in the SD public schools, the EPP has persistently been stymied in its efforts to have access to those data, due to policy restrictions and concerns about privacy. Therefore, the Millicent Atkins School of Education at Northern State University set out to figure out a system to gather data as to how program completers effectively contribute to P-12 student learning growth and apply in P-12 classrooms the professional knowledge, skills, and dispositions that the preparation experiences were designed to achieve. The leadership team and, specifically the CAEP coordinator began considering how this CAEP standard would be met in the transition from NCATE to CAEP standards. The EPP had, at that time, alumni and employer surveys that, in their opinion did not give complete and specific data that provided sufficient evidence for component 4.1. They were looking for more specific data that would provide evidence for completer effectiveness that surveys or case studies might provide.

The EPP provided a chronology of its many efforts to obtain data on teacher effectiveness from that time to the present. From Fall 2016, the CAEP coordinator researched ways to gather effectiveness data without access to state level data. Two separate groups also met to discuss common interests for EPP's across the state. One was the Education Discipline Council (program dean, department chair, assessment coordinator, and field experiences coordinator from each SK Board of Regents institution) and a second group including the same stakeholder but for all EPPs from all institutions in the state including private and tribal EPPs. At each meeting through Fall 2017, the CAEP coordinator raised issues as to how to access data for completer effectiveness.

Subsequently, the state hired a consulting firm to look at the state data systems and suggestion possibilities for improving data collection, organization, and sharing. The EPPs asked for access to state data to show P-12 impact and data effectiveness. The consulting firm suggested it was possible, but up to the Dept. of Education to determine what information the EPPs could access.

By 2021 (at the time of the CAEP visit), the EPP shared a plan to use P-12 student surveys as a measure to provide evidence of teacher effectiveness. However, district and school administrators objected as NSU tried to implement its plan. So, NSU has continued to use the employer survey and includes two years of data with the report and a third year of data will be available at the time of the visit.

NSU indicates that that the DOE has always maintained that the relevant data could

not be shared with EPP due to an administrative rule established by the legislature. NSU presented an overview of relevant rules and laws regarding teacher effectiveness, P-12 learning, EPP responsibilities and general data access, as well as amending the full rules as evidence. The NSU report indicates that this means that for the state or districts/schools to share, the law and/or rules would have to change. Despite continuous requests from the EPP, there is no evidence that the legislature and Secretary of State are not inclined to consider changes to current rules and laws and share longitudinal data that would present averages for EPP completers and provide reliable and valid data to allow institutions to use data for continuous improvement.

Together with some other institutions, they then determined that the Student Learning Objectives that teachers submit each year could provide valid data on impact and effectiveness. The CAEP coordinator redesigned the alumni survey to include questions about the SLO and made plans to use a statewide summer mentor event to collect data. EPPs were not able to attend the event because it was oversubscribed by P-12 teachers. The CAEP coordinator subsequently redesigned the survey to make it generic for the state as well as an MOU as to how evidence would be collected and used.

The CAEP coordinator then received correspondence from a colleague at a fellow BOR EPP "explaining that they would not participate in the project and, furthermore, that by surveying all educators in the state, we were effectively forcing participation and risking an adverse impact to their own survey efforts." A second similar correspondence came soon thereafter, while other EPPs were hopeful and enthusiastic regarding this survey process. So, the survey was again revised to be used exclusively by NSU, but response rates were low, due to invalid emails and the EPP has found the data inadequate for those needs. Data from the surveys did indicate a high level of satisfaction with the preparation as measured by the InTASC standards. Eight respondents reported SLO data.

In Fall 2022, the CAEP coordinator and dean met to discuss other options. They discovered that, in a very labor-intensive process, they could use the P-12 State Report Card data that is published annually. The dean (a former P-12 administrator) demonstrated what data were available and how administrators use it. NSU would create a spreadsheet listing every teacher employed at every public school in the state and then look up each teacher through the publicly accessible Teacher 411 database to note their institution and certification date. Then the EPP could look as and grade/subject/school/group that has 100% NSU completers to analyze that group's assessment data for look for trends and correlations and make inferences as to completer impact. The report presents these data for the Aberdeen School District and the CAEP coordinator indicates that the evaluation team will have additional data and analysis at the time of the visit. Data will be tracked longitudinally and used for program improvement. It will enhance the data from surveys which have provided limited data that is useful.

While the EPP indicates it will continue to advocate for better data access, it has been successful in its pursuit for reliable and valid data for its completers.

Evidence that is consistent with the findings related to the stipulation

1. 1:AC Narrative.pdf 2:Administrative Rule 24_53_02_01.pdf 3:Administrative Rule 24_53_03.pdf 4:Administrative Rule 24_53_05.pdf 5:Administrative Rule 24_55_05.pdf 6:Administrative Rule 24_55_06.pdf 7:Administrative Rule 24_57_02.pdf 8:Administrative Rule Changes Procedure.pdf 9:Administrative Rules Promulgation Process.pdf 10:ASD Testing Transparency 22.pdf 11:Codified Law 13-3-51 .pdf 12:Codified Law 13-42.pdf 13:NSU Millicent Atkins SOE Employer Survey Data.pdf 14:NSU Millicent Atkins SOE Employer Survey.pdf 15:Privacy Rules Email.pdf 16:Report Card ASD and SD Snapshots.pdf 17:School Report Calculation Guide.pdf 18:School Report Card Guide.pdf 19:SD Teacher Project - Preliminary Data ASD all schools, all grades, all subjects.pdf 20:SD Teacher Project - Preliminary Data ASD avg.pdf 21:SD Teacher Project - Preliminary Data ASD NSU.pdf 22:SD Teacher Project - Preliminary Data Demographics ASD.pdf 23:SD Teachers Project Instructions.pdf 24:SLO 2 Part Project update.pdf 25:SLO Survey - All SD EPPs Version.pdf 26:SLO Survey - NSU only Version.pdf 27:SLO Survey Data - NSU only.pdf 28:SLO Survey Email to Administrators.pdf 29:SLO Survey Emails to Alumni.pdf 30:SLO Survey Project Emails - SD EPPs.pdf 31:SLO Survey Project SD EPP MOU.pdf 32:SSR Evidence - SLO_2Part_Project.pdf

Evidence that is inconsistent with the findings related to the stipulation

1. N/A

Preliminary Recommendation for Stipulation

- ○ Continue Stipulation
- ◉ Remove Stipulation
- ○ Continue as AFI (Area of Improvement)

Rationale for Continuing, Removing the Stipulation or Change to AFI

The EPP has made consistent efforts to collect data related to P-12 student impact and completer effectiveness. It has conscientiously pursued different avenues to get access to data and has, despite many roadblocks, figured out a way to access State Report Card data to sort the effectiveness of completers tied to NSU.

Northern State University
Millicent Atkins School of Education
Teacher Education Program
CAEP Stipulation Visit – Onsite Report

Stipulation
The EPP did not provide a CAEP sufficient phase in plan criteria to collect teacher effectiveness data. (Component 4.2)

Rationale
The EPP provided the following on-site evidence: Teacher Effectiveness, CAEP 4.2. It states that details will be worked out over the summer of 2021 in order to survey students in the classes of any P-12 teachers who participate in the SLO student impact project but does not provide a CAEP sufficient phase in plan. There is no evidence that the sample surveys provided on site as evidence align to InTASC Standards.

Standard 4.2 has been replaced by R4.1:

R4.1 Completer Effectiveness: The provider demonstrates that program completers:

- effectively contribute to P-12 student-learning growth AND
- apply in P-12 classrooms the professional knowledge, skills, and dispositions that the preparation experiences were designed to achieve. In addition, the provider includes a rationale for the data elements provided.

Definition of Terms

NSU Northern State University
DOE Department of Education
SOE School of Education
TEP Teacher Education Program
UG Completed Undergraduate Degree
GR Completed Graduate Degree(s)
ASD Aberdeen School District
FMR Forty-Mile Radius (focus group area: public school districts within 40 miles radius of NSU)

Notes About the Data: what's real, what's not?

This dataset is a blend of reality and hypothetical assumption.

The data we collected on certified teachers in the forty-mile radius (FMR) focus group area is real, accurate, and current, based on the publicly available information on each school/district's websites and Educator 411, the DOE database of active certified teachers in South Dakota, formerly Teacher 411.

The P-12 assessment results are real, and for 2020-21 and 2021-22 at least, should be accurate. The annual assessment for the 2019-20 academic year was cancelled, due to COVID-19. Districts were required to enter the results from 2018-19 academic year to avoid a gap in reporting; at least 2 schools and/or districts entered incorrect data in copying over 2018-19 results into the 2019-20 system. These errors are of no consequence to this project but do highlight the importance of accurate and reliable data.

What is NOT real is the *implied correlation* between the two disparate sets of data. This analysis is a hypothetical exercise based on the unlikely assumption that ***all of the current teachers working in the FMR are the same individuals who taught each student cohort within the FMR for all of the three (actually 4) years of assessment data presented***.

We know, with absolute certainty, that the assumption is false; therefore, we know that we cannot derive any actionable evidence from this specific data, but we can use the data hypothetically to determine how best to proceed once we have fully accurate corresponding datasets. It will take at least 3 years of collecting and updating the data on teachers in the FMR before we will be able to correctly match each year's list of teachers to the corresponding academic year's assessment data and show trend data. In the meantime, the process can be developed and refined using the "fake" correlations.

Each fall, the list of certified and active teachers in the FMR will be updated with the help of TEP graduate assistants. Updating the list should take far less time than the initial data-mining project did. In the spring, after the state report card P-12 assessment data is released, the assessment coordinator will download and begin organizing all results for the cohorts in the FMR. Next, the results for each dataset will be added into the existing spreadsheets for comparison to the hypothetical data, which will drop off completely in the third year, and future results. Faculty will review the assembled data for inclusion in the annual reporting process.

Working with this hypothetical exercise has already revealed a number of insights, ideas, and questions that will help to drive this process forward, hopefully, to the point that we will be able use it to make data-informed decisions in teacher preparation. Some general points/questions stood out immediately:

- Which schools/districts in the FMR have special designations (low/high performing, demographics outliers) or other relevant factors that may impact performance data?

- How might we use this data along with school improvement plans in order to determine more specific performance patterns?

- How can we collaborate with FMR administrators to use this data to improve teacher preparation and P-12 education?

Regarding the many different presentations of the data throughout the following pages:

Since we do not yet know exactly how this data will be best organized, we have attempted to show numerous points of view of the hypothetical data. The idea is that as we move into working with "real" datasets, the arrangements that make the most sense will evolve organically.

Note: For this hypothetical exercise, we are using 3 separate years' P-12 assessment data with just one year's list of active certified teachers in the FMR; future iterations will compare each year's assessment results with the corresponding year's teachers. Therefore, the eventual visual representations of the data will look different than what is shown in this hypothetical exercise, but it helps to see the data in many different ways in order to spot trends, patterns, and anomalies.

There are several other potential data points we could have explored with this hypothetical exercise but chose to ignore due to time limitations and/or the fact that the data would be completely inaccurate at this time. Those points include:

- Demographics data: while some districts have Ns that are too small to display results, there is sufficient demographic data in the state assessment results that we could do an overall analysis based on gender, race/ethnicity, socio-economic markers, and disability status, once we have matching datasets.

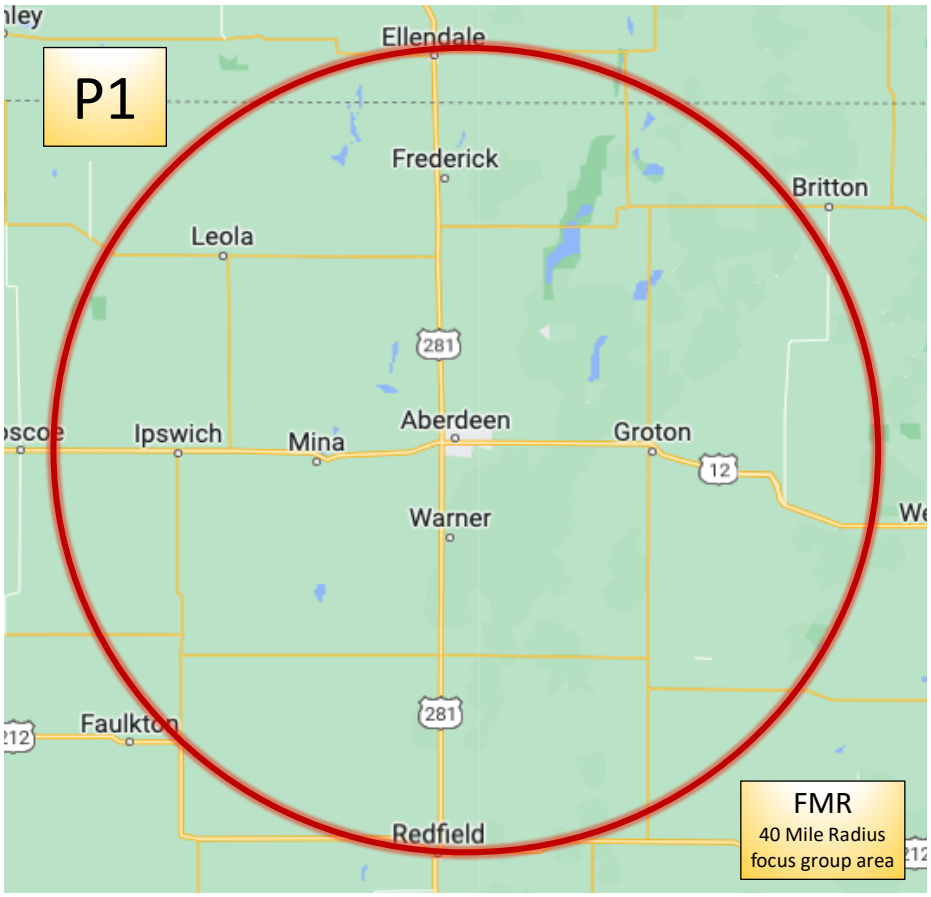
- Using certification dates (where available) to trace back to TEP graduation data: we attempted to do this during the initial data mining project but ran into significant issues with matching certification records to graduation data due to inconsistent tracking prior to 2012 and the fact that many of our completers have since gotten married, or otherwise underwent a name change. We use several different resources to track down previous names of completers (including social media, public marriage records, newspaper listings, etc) but it will take time to get through all of the missing records. We will continue to work toward completing this part of the project as time allows.

- More exploration of the data regarding UG and GR teachers:
    - Graduate degrees earned from other EPPs with performance data to compare to NSU GR teachers.
    - Teachers in the FMR that have both UG and GR preparations from NSU.
    - Breakdown of where non-NSU UG and GR teachers obtained their degree(s).

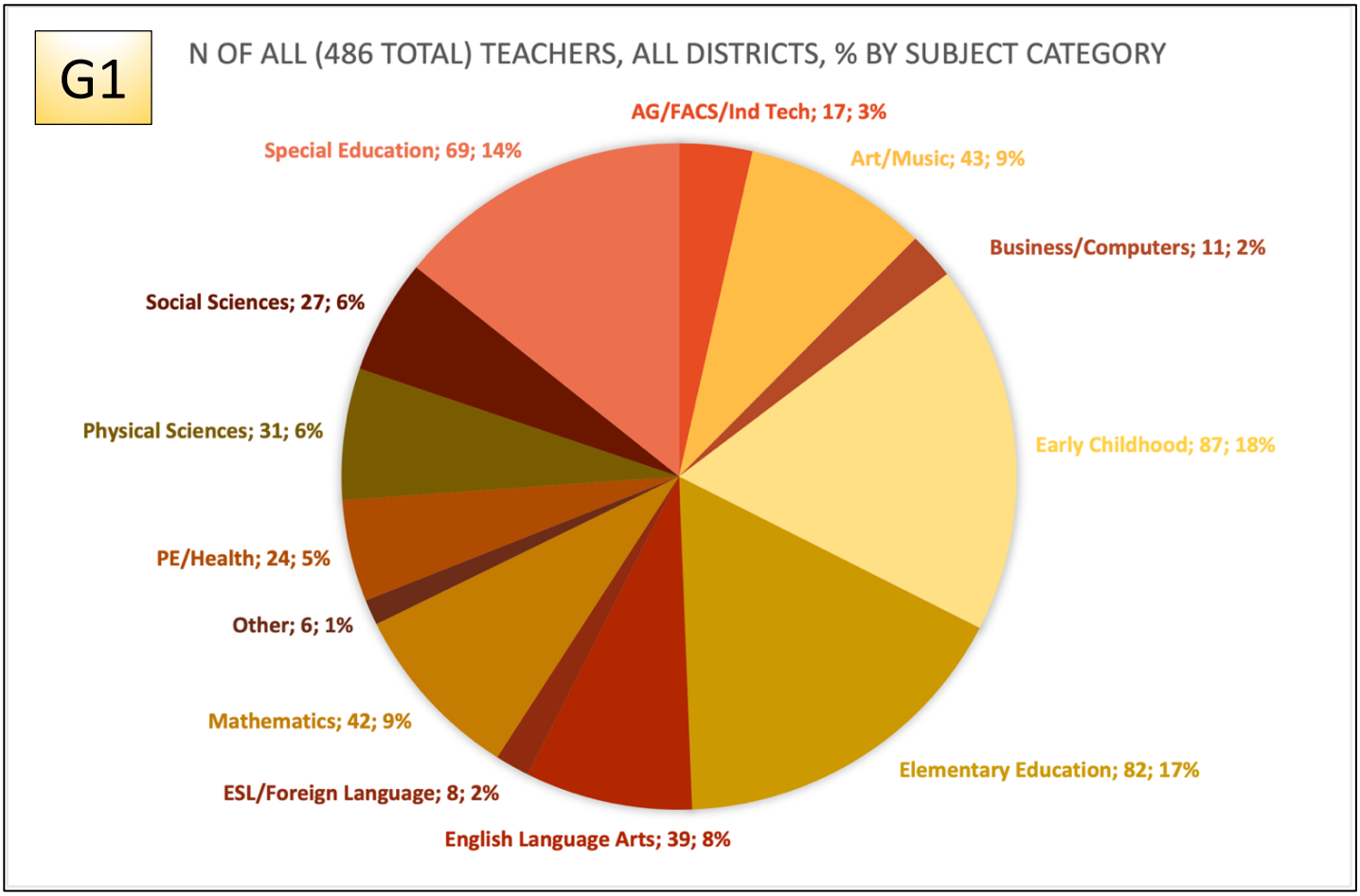
Originally, we wanted this project to include all teachers at all public schools in the state; ideally, that is still what will eventually develop, but due to time and resource limitations, we have restricted the project to just the ten closest districts, within a 40-mile radius of the NSU.

These districts are Britton-Helca, Frederick, Groton, Ipswich, Langford, Leola, Northwestern, Redfield, Warner, and our largest partner-district, Aberdeen. The schools in these districts often serve as hosts to our candidates in field experiences, from pre-admission to student teaching. The administrators from these districts host our advanced candidates in graduate field experiences/internships. It makes sense to focus on these districts, especially as we build-out this process. Even if we are unable to cover the entire state, we will add other focus group areas in order to compare and contrast with the FMR data.

Picture 1: Forty-Mile Radius - Focus Group Area



Graph 1: Number of All Active Certified Teachers, All FMR Districts, by Subject Category, with Percentages



Note: Sixth and 9th grade vary among districts/schools as to whether they are categorized as middle school or as elementary and high school, respectively. We have listed those grades as they are specified on the individual school/district websites.

Graph 1, above, through Graph 7, page 12, as well as Tables 1-4, represent the current teacher-rosters in the FMR, as well as the Aberdeen School District (ASD) separately. Some notable points of interest in this data include:

- NSU UG Teachers represent 68% of all active, certified teachers in the FMR.
- NSU GR Teachers represent 25% of all active, certified teachers in the FMR.
- NSU UG Teachers represent 70% of all active, certified teachers in the ASD.
- NSU GR Teachers represent 31% of all active, certified teachers in the ASD.
- NSU UG Teachers represent 67% of all active, certified English Language Arts teachers in the FMR.

- NSU GR Teachers represent 41% of all active, certified English Language Arts teachers in the FMR.
- NSU UG Teachers represent 74% of all active, certified Math teachers in the FMR.
- NSU GR Teachers represent 33% of all active, certified Math teachers in the FMR.
- NSU UG Teachers represent 74% of all active, certified elementary teachers in the FMR.
- NSU GR Teachers represent 23% of all active, certified elementary teachers in the FMR. (recruitment opportunity for MSED LEAD, EDST, ELRN, or TELE programs?)
- NSU UG Teachers represent 84% of all active, certified special education teachers in the FMR.
- NSU GR Teachers represent 16% of all active, certified special education teachers in the FMR. (recruitment opportunity for MSED SPED program?)
- Of the 32 schools in the FMR, 6 (19%) are staffed (certified) 100% by NSU UG Teachers: Frederick Jr High/High, Langford Middle, Leola Elementary, Northwestern Elementary, Northwestern Middle, and Redfield Middle.
- Of the 32 schools in the FMR, 8 (25%) are staffed (certified) at least 50% by NSU GR Teachers: Britton-Hecla High, Groton Middle/High, Ipswich High Langford Middle, Langford High, Lincoln Elementary, Northwestern High, and Warner Middle.
- Of the 32 schools in the FMR, 2 (6%) are staffed (certified) less than 50% by NSU UG Teachers: Redfield High and Warner High.
- Of the 32 schools in the FMR, 12 (38%) are staffed (certified) 0% by NSU GR Teachers: Britton-Hecla Elementary, Frederick Elementary, Frederick Jr High/High, Ipswich Elementary, Ipswich Middle, Langford Elementary, Leola Elementary, Northwestern Elementary, Northwestern Middle, Redfield High, Warner Elementary, and Warner High.

Once we have a few years of this data, it will be interesting to model and track teacher retention and mobility rates in the FMR. We can also use the data to focus in on areas of need and possible recruitment opportunities. There is other assessment data that we could access and match to the correct cohort and teacher to further expand on the insights gleaned here. The potential uses are truly limitless, especially as we explore AI applications for collecting, organizing, and analyzing this sort of data.

Furthermore, the collaborative potential for our EPP and schools/districts administrators and teachers within the FMR is infinite; we know that the analysis of assessment data is not as well understood as it could be for teachers and administrators. That is an area where we could offer support through training workshops, for example.

Graph 2: Percentages of All Teachers in FMR, Prepared by NSU for Undergraduate (UG) or Graduate (GR) Degree(s), by District (see Table 1, below):

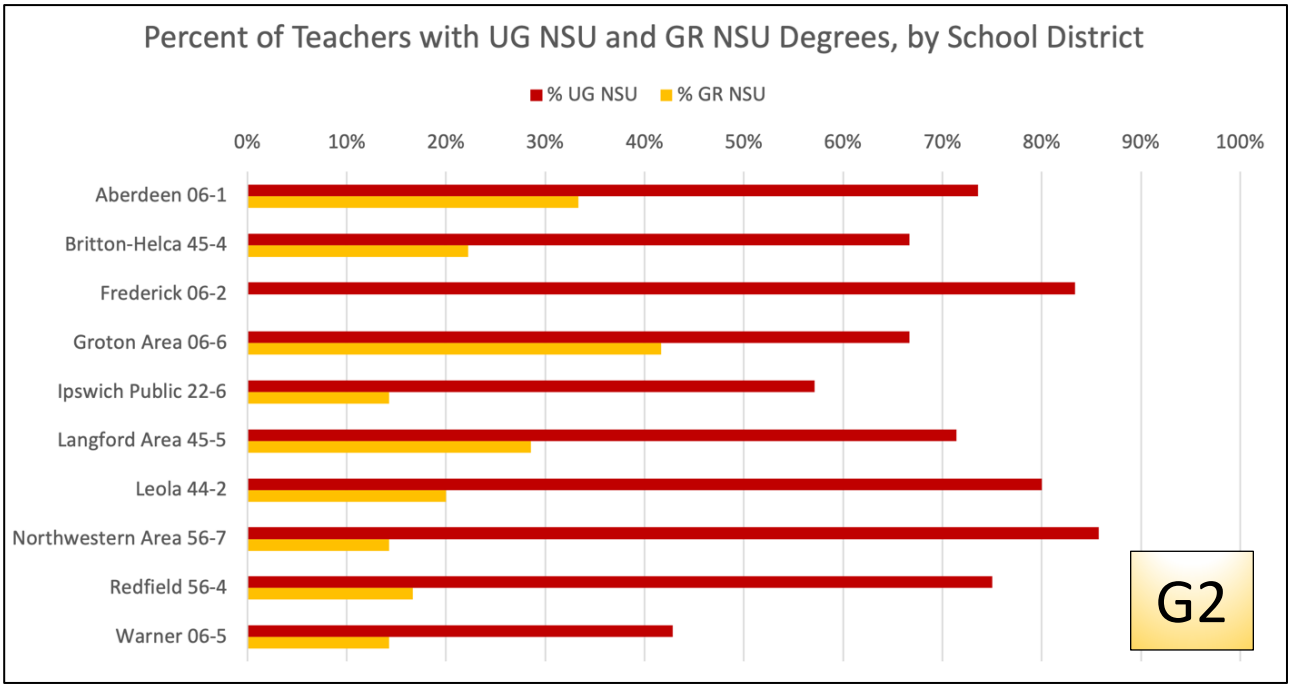


Table 1: Percent of NSU Prepared UG and GR, by District (represented in Graph 2, above)

School District	% UG NSU	% GR NSU
Aberdeen 06-1	74%	33%
Britton-Helca 45-4	67%	22%
Frederick 06-2	83%	0%
Groton Area 06-6	67%	42%
Ipswich Public 22-6	57%	14%
Langford Area 45-5	71%	29%
Leola 44-2	80%	20%
Northwestern Area 56-7	86%	14%
Redfield 56-4	75%	17%
Warner 06-5	43%	14%

T1

Table 2: Percent of All Teachers in the FMR Prepared by NSU at UG or GR level, by School. (see Graph 3, below)

School	% UG NSU	% GR NSU
Britton-Helca	60%	0%
Britton-Helca High	75%	50%
C. C. Lee Elementary	67%	33%
Central High	67%	22%
Frederick Elementary	75%	0%
Frederick Jr. High/High	100%	0%
Groton Elementary	83%	17%
Groton Middle/High	50%	67%
Holgate Middle	82%	36%
Ipswich Elementary	67%	0%
Ipswich High	50%	50%
Ipswich Middle	50%	0%
Langford Elementary	67%	0%
Langford High	50%	50%
Langford Middle	100%	50%
Leola Elementary	100%	0%
Leola Jr. High/High	67%	33%
Lincoln Elementary	83%	50%
May Overby Elementary	56%	44%
Mike Miller Elementary	83%	33%
Northwestern	100%	0%
Northwestern High	50%	50%
Northwestern Middle	100%	0%
O.M Tiffany Elementary	75%	25%
Redfield Elementary	83%	17%
Redfield High	33%	0%
Redfield Middle	100%	33%
Simmons Elementary	88%	25%
Simmons Middle	75%	42%
Warner Elementary	67%	0%
Warner High	0%	0%
Warner Middle	50%	50%

T2

Graph 3: Percentage of All Teachers in FMR, Prepared by NSU for Undergraduate (UG) and/or Graduate (GR) Degree(s), by School. (see Table 2, above)

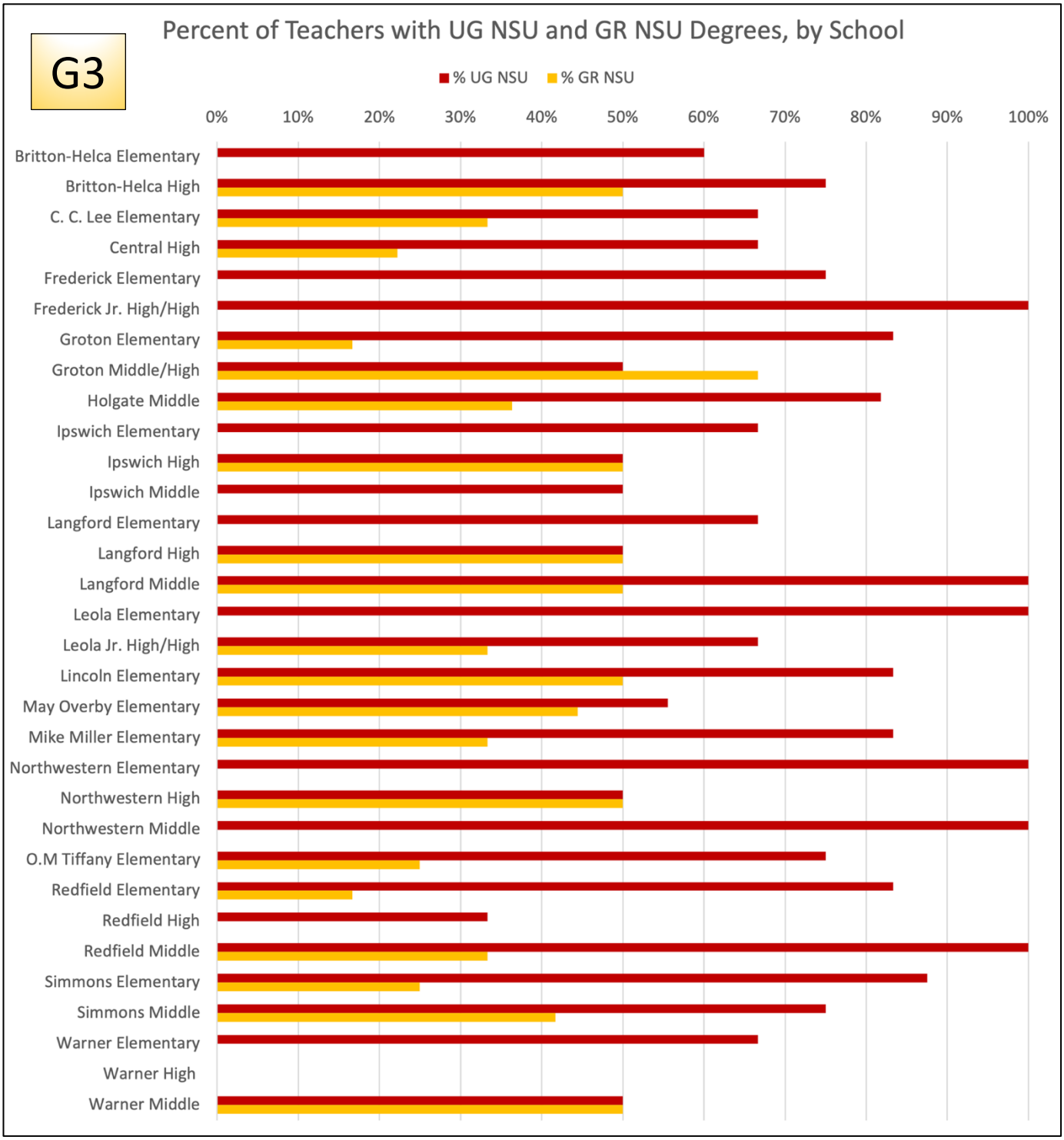
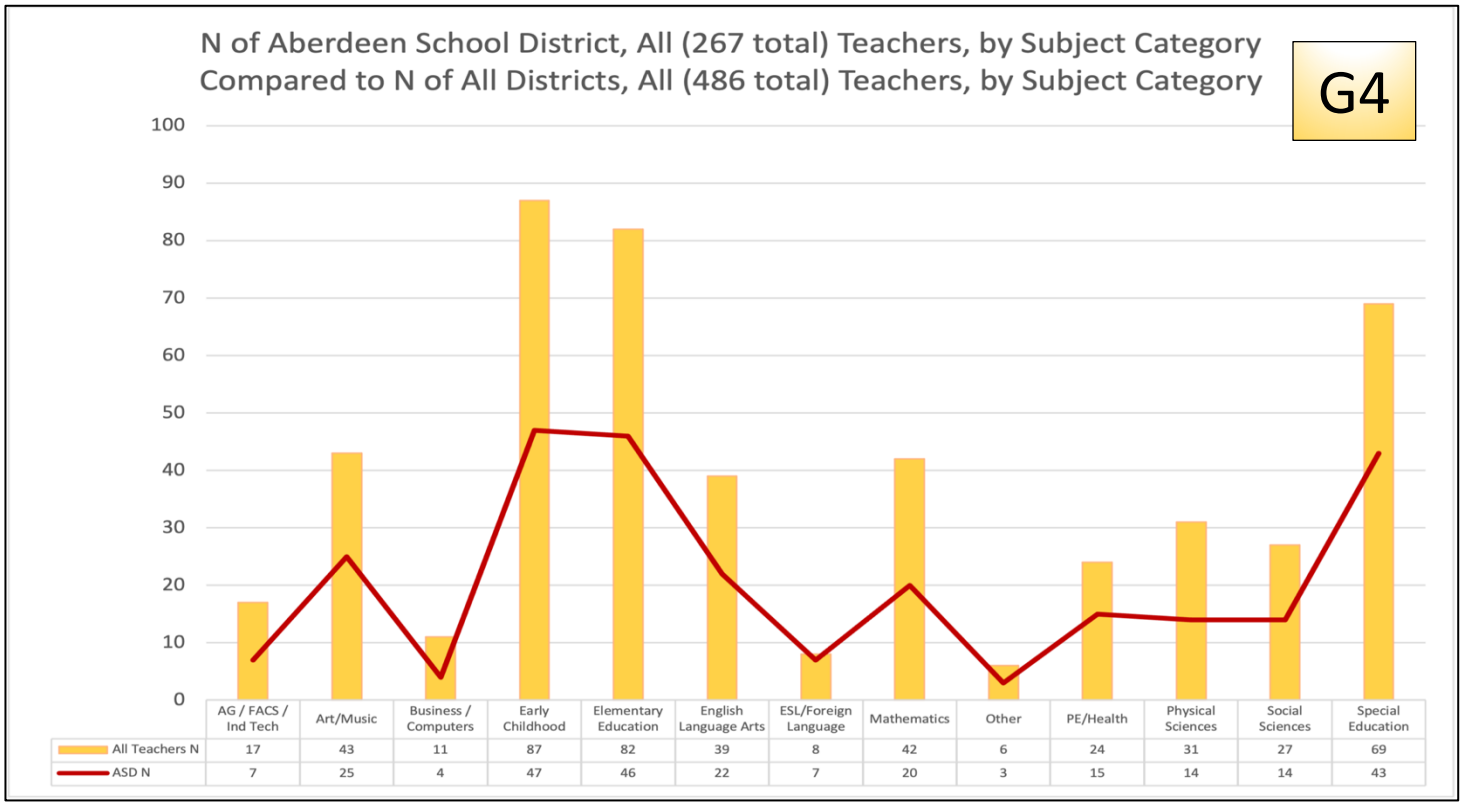


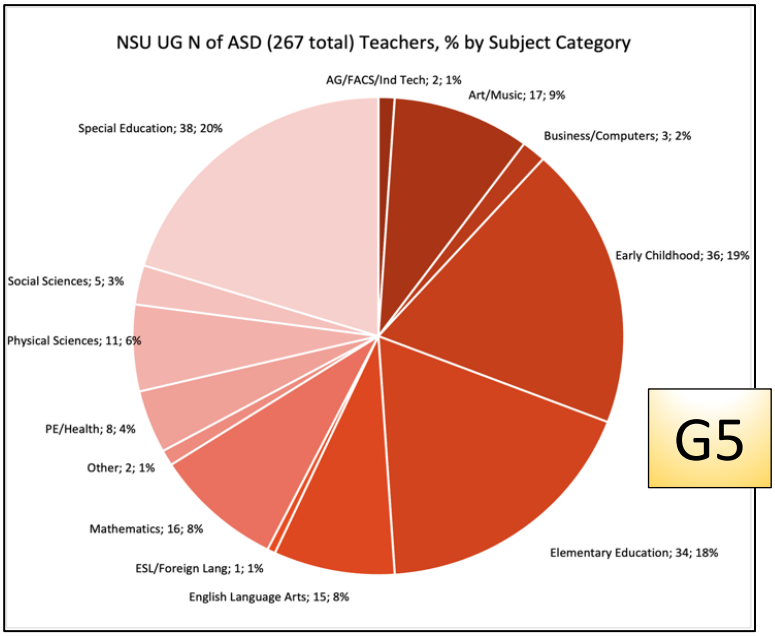
Table 3: Number of Active Certified Teachers in the Aberdeen School District (ASD), Compared to the Overall FMR Group, by Subject Category.

All School Districts vs Aberdeen School District, All Teachers, by Subject Category T3		
	All N	ASD N
AG / FACS / Ind Tech	17	7
Art/Music	43	25
Business / Computers	11	4
Early Childhood	87	47
Elementary Education	82	46
English Language Arts	39	22
ESL/Foreign Language	8	7
Mathematics	42	20
Other	6	3
PE/Health	24	15
Physical Sciences	31	14
Social Sciences	27	14
Special Education	69	43
Total	486	267

Graph 4: Visual Representation of Table 3, above.



Graphs 5 & 6: Percentages of All Teachers in the Aberdeen School District, Prepared by NSU for UG or GR Degrees, by Subject Category.



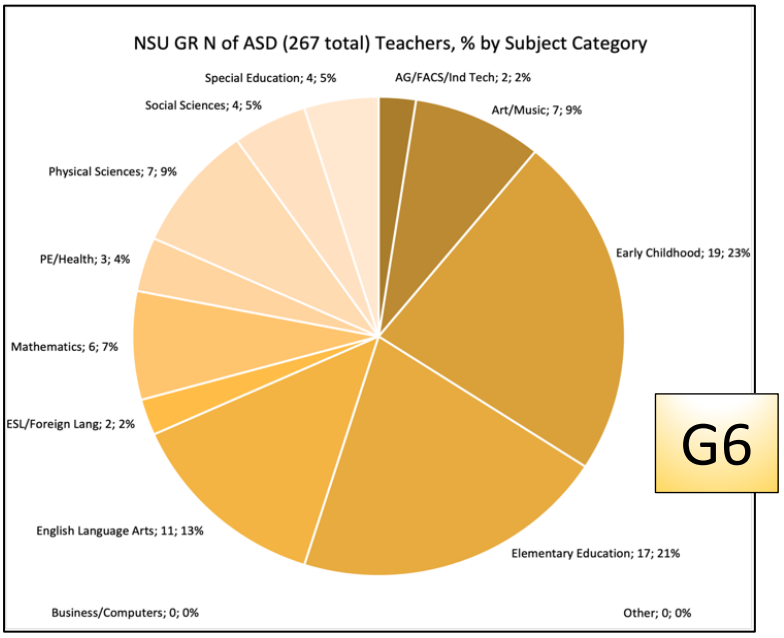
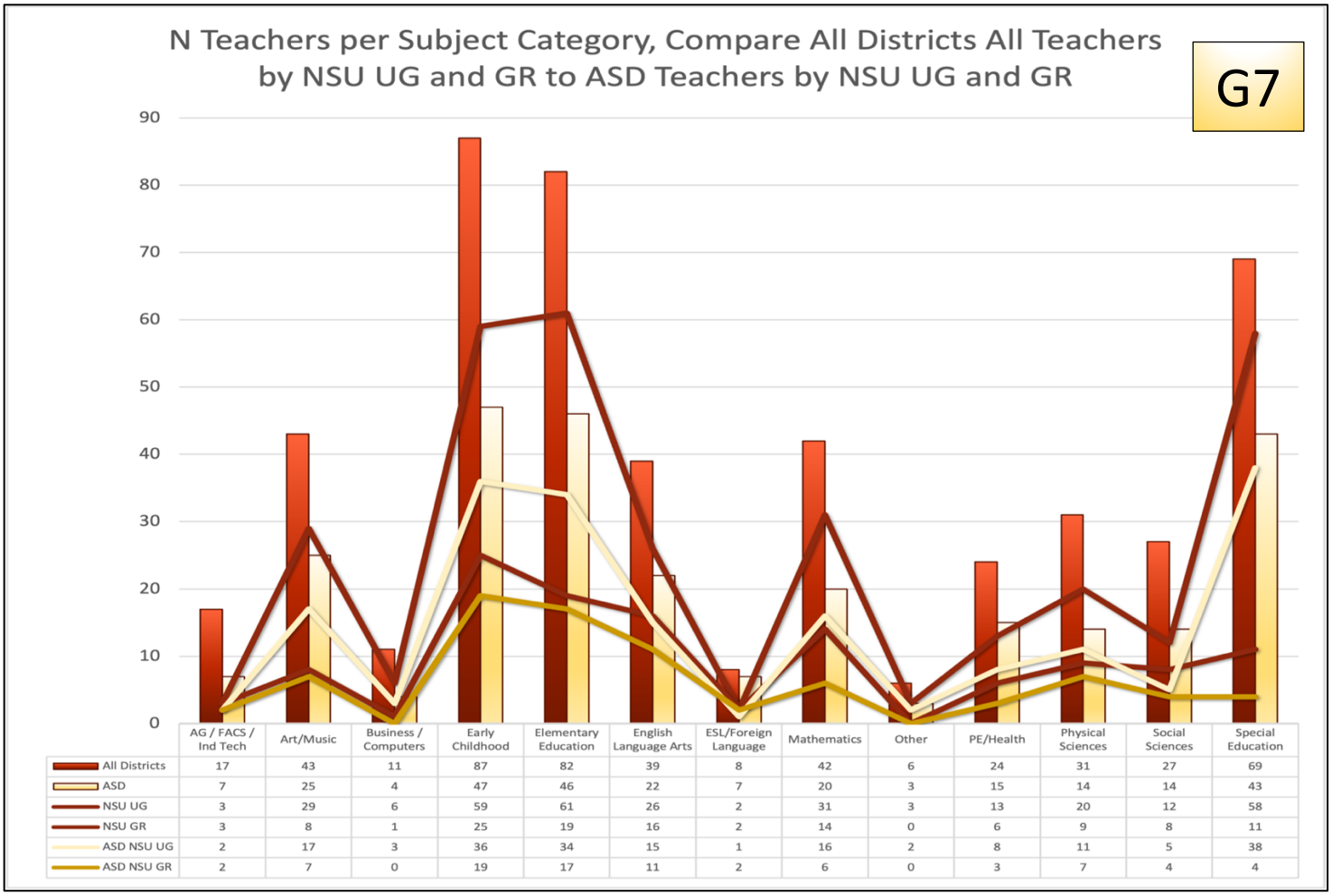


Table 4: Numbers and Percentages of All Teachers in the FMR, Prepared by NSU at the UG or GR Level.

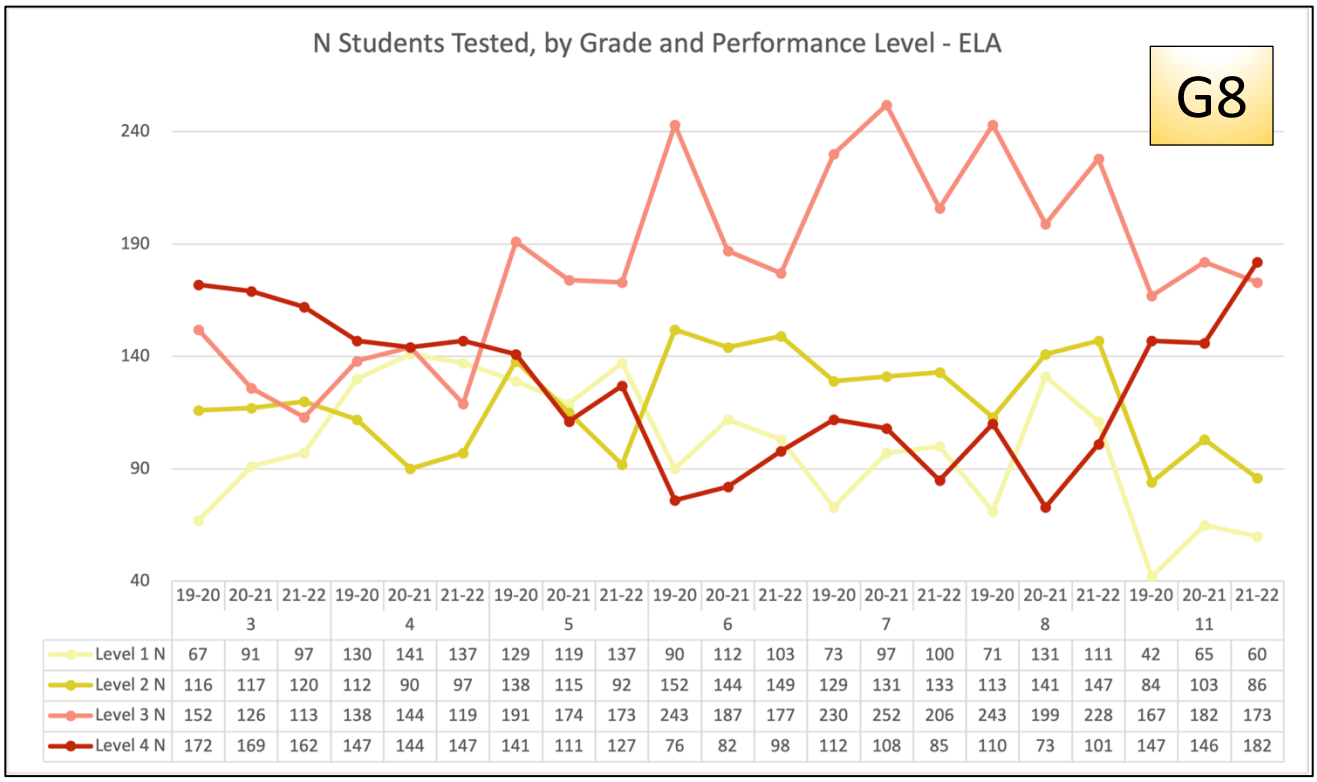
N Teachers per Subject Category, All Districts Teachers, by NSU UG & GR vs ASD Teachers, by NSU UG & GR											
	All Districts	NSU UG	% of All	NSU GR	% of All	ASD	% of All	NSU UG	% of ASD	NSU GR	% of ASD
AG / FACS / Ind Tech	17	3	18%	3	18%	7	41%	2	29%	2	29%
Art/Music	43	29	67%	8	19%	25	58%	17	68%	7	28%
Business / Computers	11	6	55%	1	9%	4	36%	3	75%	0	0%
Early Childhood	87	59	68%	25	29%	47	54%	36	77%	19	40%
Elementary Education	82	61	74%	19	23%	46	56%	34	74%	17	37%
English Language Arts	39	26	67%	16	41%	22	56%	15	68%	11	50%
ESL / Foreign Language	8	2	25%	2	25%	7	88%	1	14%	2	29%
Mathematics	42	31	74%	14	33%	20	48%	16	80%	6	30%
Other	6	3	50%	0	0%	3	50%	2	67%	0	0%
PE / Health	24	13	54%	6	25%	15	63%	8	53%	3	20%
Physical Sciences	31	20	65%	9	29%	14	45%	11	79%	7	50%
Social Sciences	27	12	44%	8	30%	14	52%	5	36%	4	29%
Special Education	69	58	84%	11	16%	43	62%	38	88%	4	9%
Total	**486**	**323**	**66%**	**122**	**25%**	**267**	**55%**	**188**	**70%**	**82**	**31%**

T4

Graph 7: Visual Representation of the Data in Table 4, above.

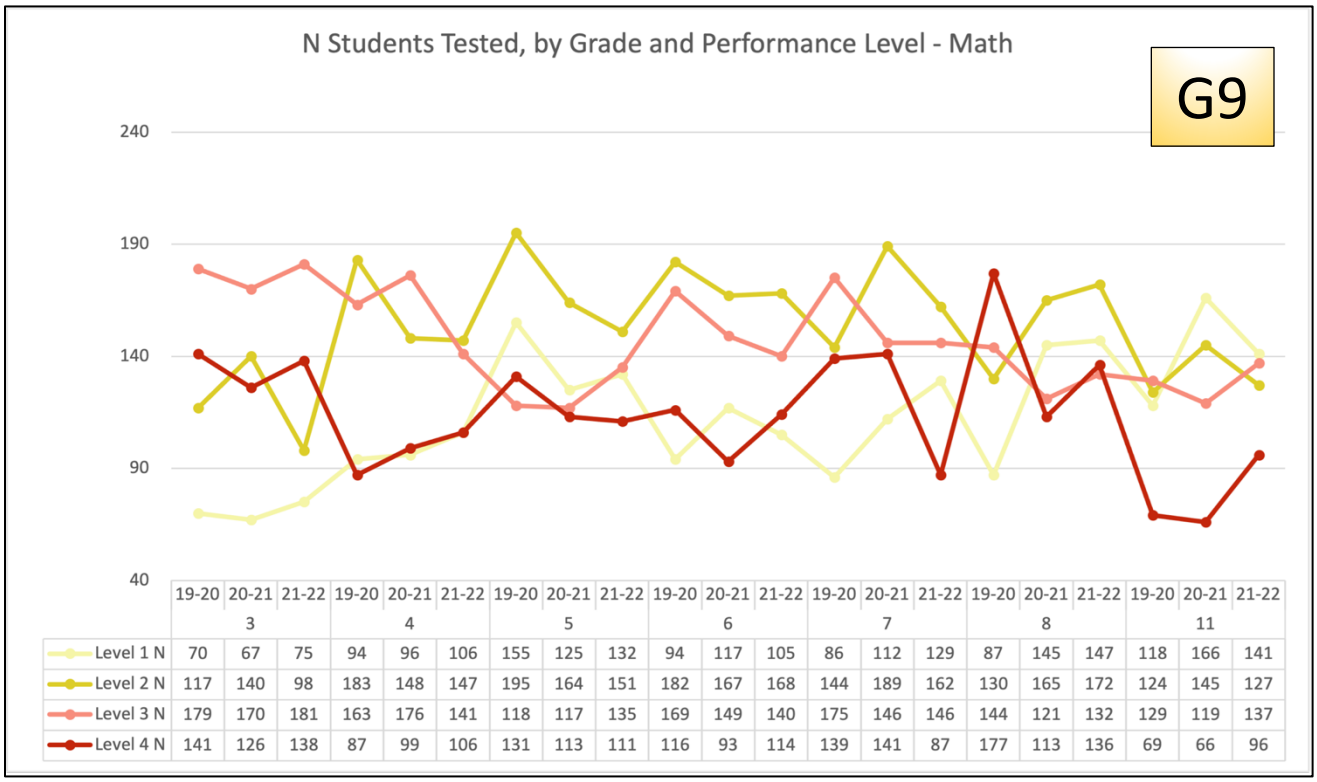


Graph 8: Number of All Students Tested in English Language Arts in FMR Districts, Regardless of Where Teacher Prepared, by Grade and Performance Level.



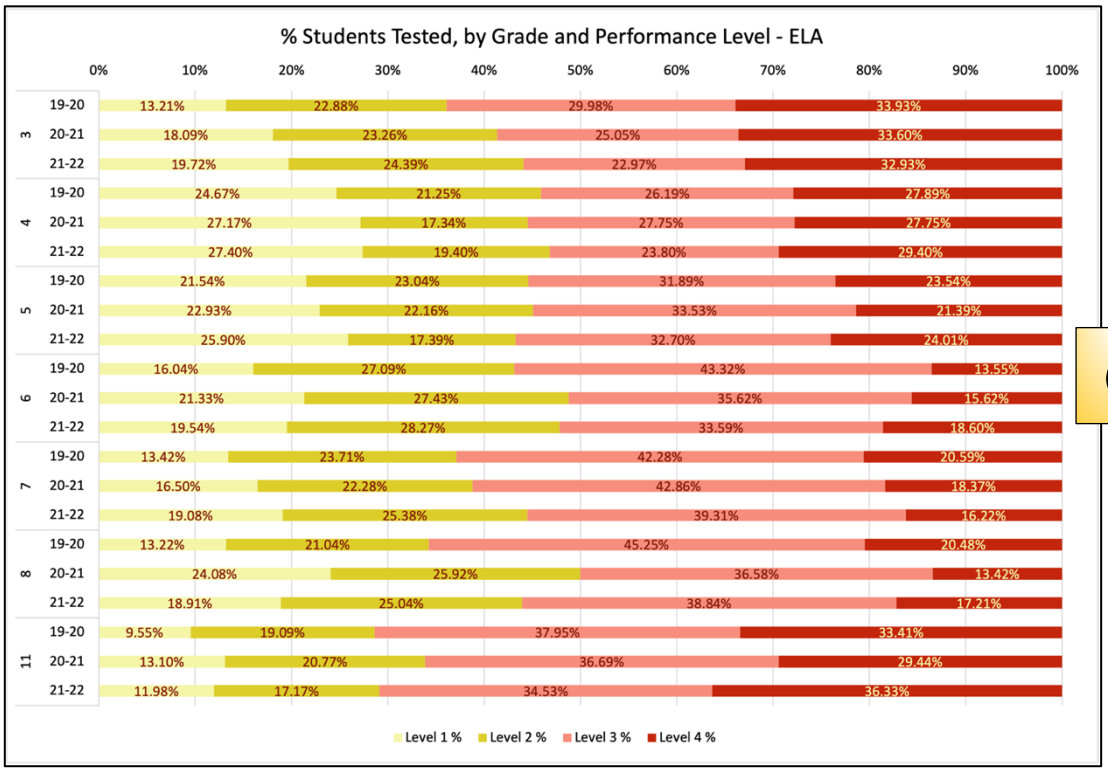
	19-20	20-21	21-22	19-20	20-21	21-22	19-20	20-21	21-22	19-20	20-21	21-22	19-20	20-21	21-22	19-20	20-21	21-22	19-20	20-21	21-22
	3			4			5			6			7			8			11		
Level 1 N	67	91	97	130	141	137	129	119	137	90	112	103	73	97	100	71	131	111	42	65	60
Level 2 N	116	117	120	112	90	97	138	115	92	152	144	149	129	131	133	113	141	147	84	103	86
Level 3 N	152	126	113	138	144	119	191	174	173	243	187	177	230	252	206	243	199	228	167	182	173
Level 4 N	172	169	162	147	144	147	141	111	127	76	82	98	112	108	85	110	73	101	147	146	182

Graph 9: Number of All Students Tested in Mathematics in FMR Districts, Regardless of Where Teacher Prepared, by Grade and Performance Level.



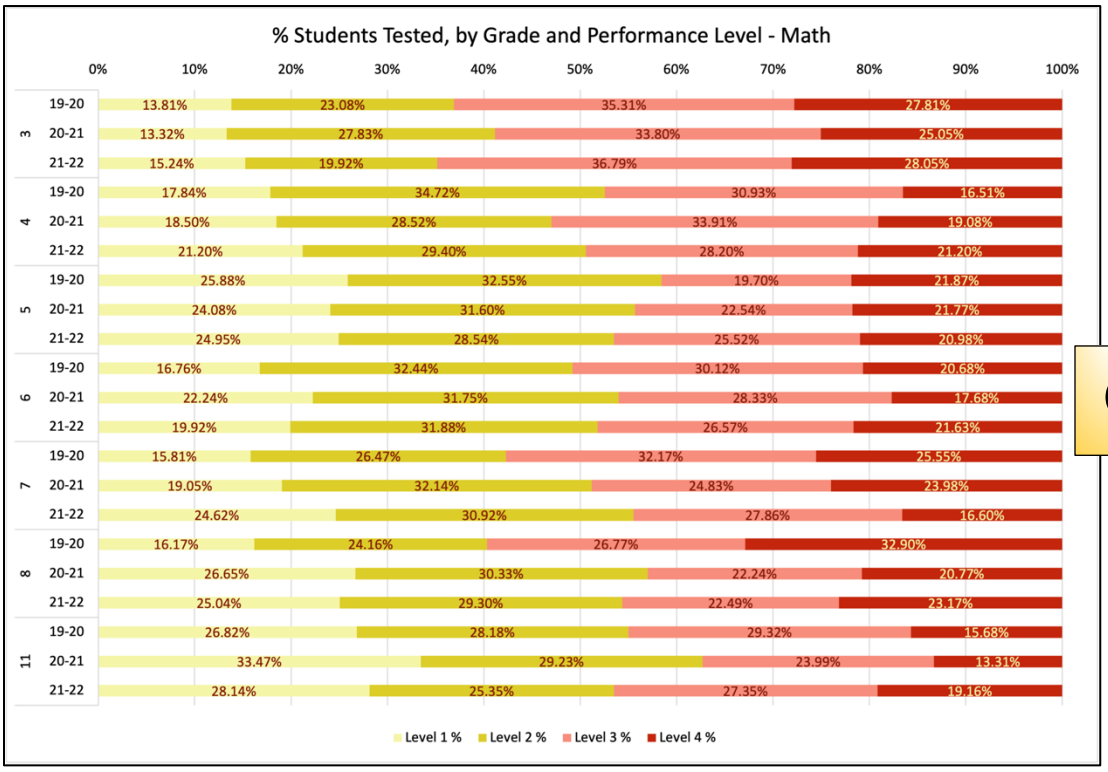
	19-20	20-21	21-22	19-20	20-21	21-22	19-20	20-21	21-22	19-20	20-21	21-22	19-20	20-21	21-22	19-20	20-21	21-22	19-20	20-21	21-22
	3			4			5			6			7			8			11		
Level 1 N	70	67	75	94	96	106	155	125	132	94	117	105	86	112	129	87	145	147	118	166	141
Level 2 N	117	140	98	183	148	147	195	164	151	182	167	168	144	189	162	130	165	172	124	145	127
Level 3 N	179	170	181	163	176	141	118	117	135	169	149	140	175	146	146	144	121	132	129	119	137
Level 4 N	141	126	138	87	99	106	131	113	111	116	93	114	139	141	87	177	113	136	69	66	96

Graph 10: Percentage of All Students Tested in English Language Arts in FMR Districts, Regardless of Where Teacher Prepared, by Grade and Performance Level.



G10

Graph 11: Percentage of All Students Tested in Mathematics in FMR Districts, Regardless of Where Teacher Prepared, by Grade and Performance Level.



G11

HYPOTHETICAL Table 5: Breakdown of Numbers and Percentages of Teachers for Specified Student Cohorts Tested, Based on Current Active Certified Teacher Records, within the FMR, by Grade/Subject, School, and District.

			Subject/Grade					School					District				
School District	School	Grade	Total N	N NSU UG	% NSU UG	N NSU GR	% NSU GR	Total N	N NSU UG	% NSU UG	N NSU GR	% NSU GR	Total N	N NSU UG	% NSU UG	N NSU GR	% NSU GR
Britton-Helca 45-4	Britton-Helca Elementary	3rd	1	1	100%			5	3	60%	0	0%	9	6	67%	2	22%
		4th	2	2	100%												
		5th	2	0	0%												
	Britton-Helca High	ELA	2	1	50%	1	50%	4	3	75%	2	50%					
		Math	2	2	100%	1	50%										
Aberdeen 06-1	C. C. Lee Elementary	3rd	3	3	100%	1	33%	9	6	67%	3	33%	87	64	74%	29	33%
		4th	3	2	67%	2	67%										
		5th	3	1	33%												
	Lincoln Elementary	3rd	2	2	100%	1	100%	6	5	83%	3	50%					
		4th	2	2	100%	1	50%										
		5th	2	1	50%	1	50%										
	May Overby Elementary	3rd	3	2	67%	1	33%	9	5	56%	4	44%					
		4th	3	3	100%	2	67%										
		5th	3	0	0%	1	33%										
	Mike Miller Elementary	3rd	2	2	100%			6	5	83%	2	33%					
		4th	2	1	50%	1	50%										
		5th	2	2	100%	1	50%										
	O.M Tiffany Elementary	3rd	3	3	100%	1	33%	8	6	75%	2	25%					
		4th	3	2	67%	1	33%										
		5th	2	1	50%												
	Simmons Elementary	3rd	3	2	67%	1	33%	8	7	88%	2	25%					
		4th	2	2	100%												
		5th	3	3	100%	1	33%										
	Holgate Middle	ELA	5	4	80%	2	40%	11	9	82%	4	36%					
		Math	6	5	83%	2	33%										
	Simmons Middle	ELA	6	4	67%	2	33%	12	9	75%	5	42%					
		Math	6	5	83%	3	50%										
	Central High	ELA	10	6	60%	3	50%	18	12	67%	4	22%					
		Math	8	6	75%	1	13%										
Frederick 06-2	Frederick Elementary	3rd	1	1	100%			4	3	75%	0	0%	6	5	83%	0	0%
		4th	1	1	100%												
		5th	1	0	0%												
		6th	1	1	100%												
	Frederick Jr. High/High	ELA	1	1	100%			2	2	100%	0	0%					
		Math	1	1	100%												
Groton Area 06-6	Groton Elementary	3rd	2	2	100%	1	50%	6	5	83%	1	17%	12	8	67%	5	42%
		4th	2	1	50%												
		5th	2	2	100%												
	Groton Middle/High	ELA	2	1	50%	1	50%	6	3	50%	4	67%					
		Math	4	2	50%	3	75%										
Ipswich Public 22-6	Ipswich Elementary	3rd	1	0	0%			3	2	67%	0	0%	7	4	57%	1	14%
		4th	1	1	100%												
		5th	1	1	100%												
	Ipswich Middle	ELA	1	1	100%			2	1	50%	0	0%					
		Math	1	0	0%												
	Ipswich High	ELA	1	1	100%	1	100%	2	1	50%	1	50%					
		Math	1	0	0%												
Langford Area 45-5	Langford Elementary	3rd	1	1	100%			3	2	67%	0	0%	7	5	71%	2	29%
		4th	1	0	0%												
		5th	1	1	100%												
	Langford Middle	ELA	1	1	100%			2	2	100%	1	50%					
		Math	1	1	100%	1	100%										
	Langford High	ELA	1	1	100%			2	1	50%	1	50%					
		Math	1	0	0%	1	100%										
Leola 44-2	Leola Elementary	3rd-5th ELA	1	1	100%			2	2	100%	0	0%	5	4	80%	1	20%
		3rd-5th Mat	1	1	100%												
	Leola Jr. High/High	Math	2	1	50%	1	50%	3	2	67%	1	33%					
		ELA	1	1	100%												
Northwestern Area 56-7	Northwestern Elementary	3rd	1	1	100%			3	3	100%	0	0%	7	6	86%	1	14%
		4th	1	1	100%												
		5th	1	1	100%												
	Northwestern Middle	ELA	1	1	100%			2	2	100%	0	0%					
		Math	1	1	100%												
	Northwestern High	ELA	1	0	0%	1	100%	2	1	50%	1	50%					
		Math	1	1	100%												
Redfield 56-4	Redfield Elementary	3rd	2	2	100%	1	50%	6	5	83%	1	17%	12	9	75%	2	17%
		4th	2	1	50%												
		5th	2	2	100%												
	Redfield Middle	ELA	2	2	100%			3	3	100%	1	33%					
		Math	1	1	100%	1	100%										
	Redfield High	ELA	1	0	0%			3	1	33%	0	0%					
		Math	2	1	50%												
Warner 06-5	Warner Elementary	3rd	1	1	100%			3	2	67%	0	0%	7	3	43%	1	14%
		4th	1	1	100%												
		5th	1	0	0%												
	Warner Middle	ELA	1	0	0%	1	100%	2	1	50%	1	50%					
		Math	1	1	100%												
	Warner High	ELA	1	0	0%			2	0	0%	0	0%					
		Math	1	0	0%												
Grand Totals			**159**	**114**	**72%**	**44**	**28%**	**159**	**114**	**72%**	**44**	**28%**	**159**	**114**	**72%**	**44**	**28%**

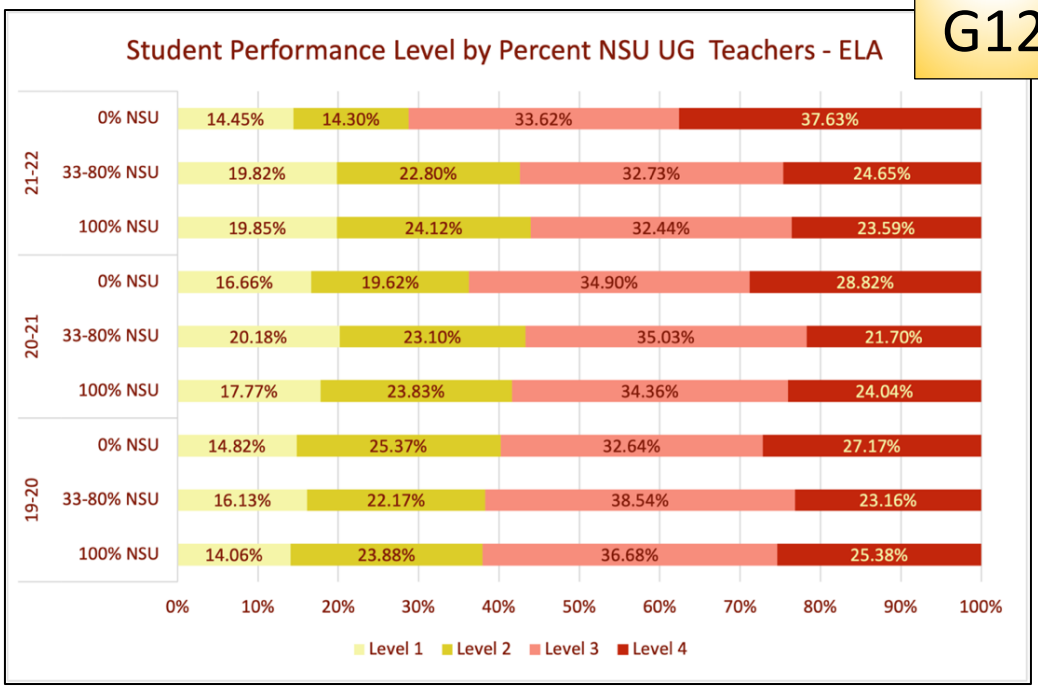
T5

The data from Table 5, above, will be displayed in the remaining (numbered 12-31) graphs below, from several potential diagnostic angles.

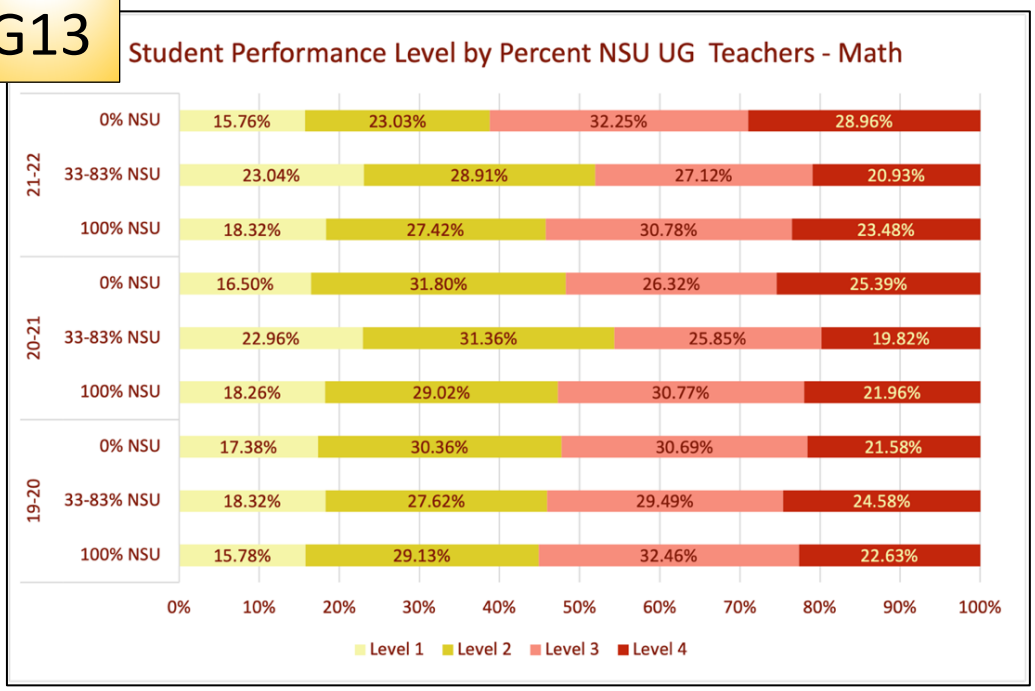
Please note: as an EPP, we had to resist the urge to analyze the hypothetical data as though it were truly accurate; instead, remember that these graphs serve as models for how we may tease out the correlative strands hidden within the results once we have the "real" data.

HYPOTHETICAL Graphs 12 & 13: Percentages of FMR Tested Students Taught by NSU UG Teachers, by Performance Level, for ELA and Math, respectively.

G12

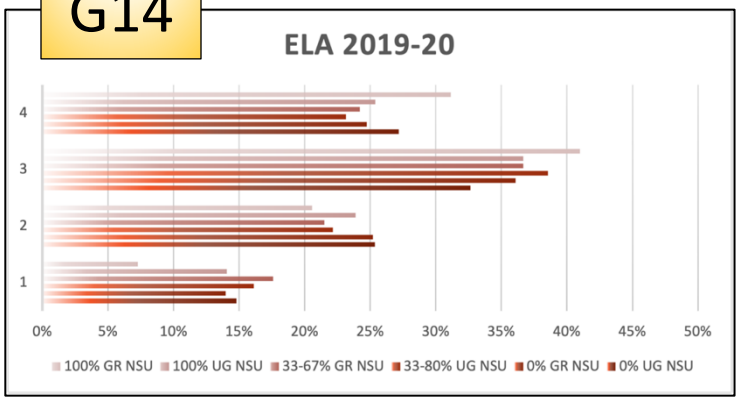


G13

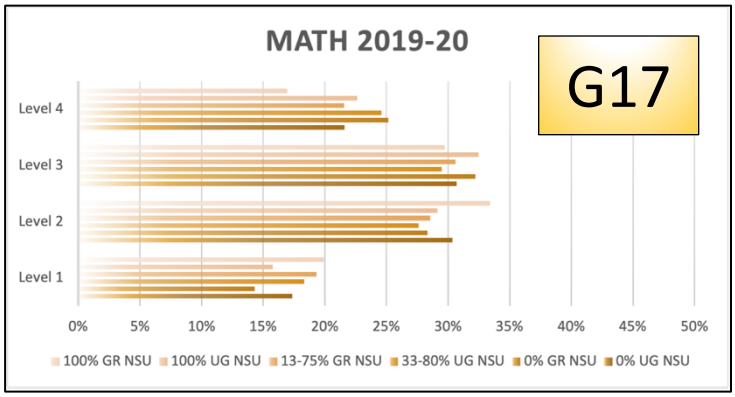


HYPOTHETICAL Graphs 14, 15, & 16 show another view of the performance data, for ELA; Graphs 17, 18, & 19 show another view of the performance data, for Math.

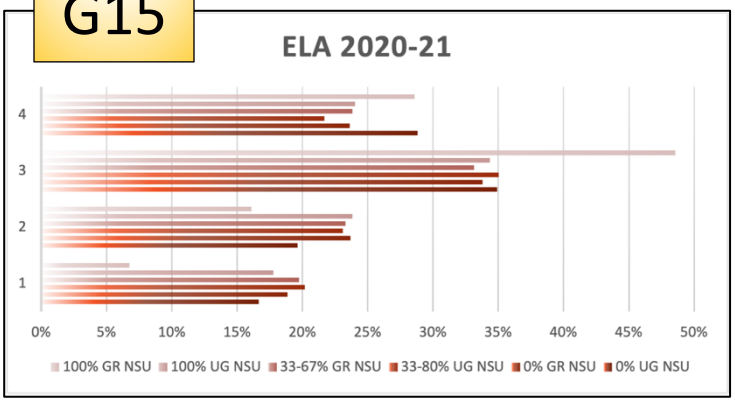
G14



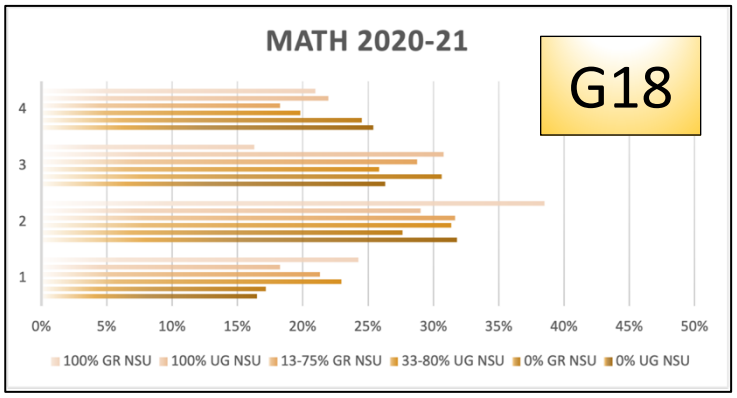
G17



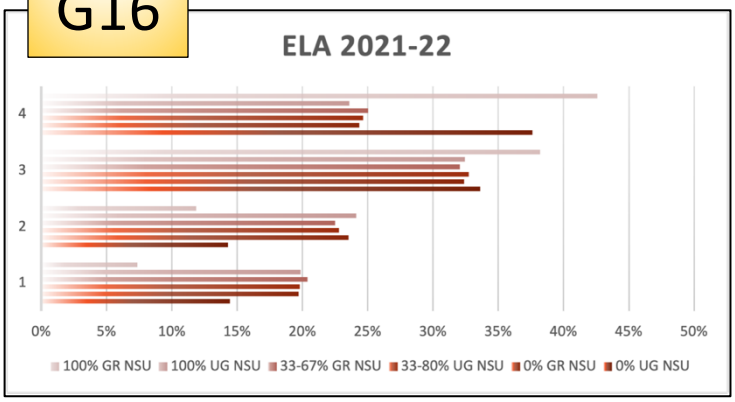
G15



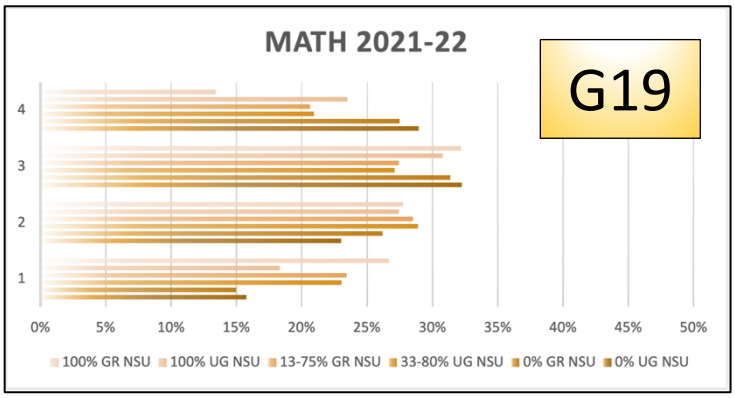
G18



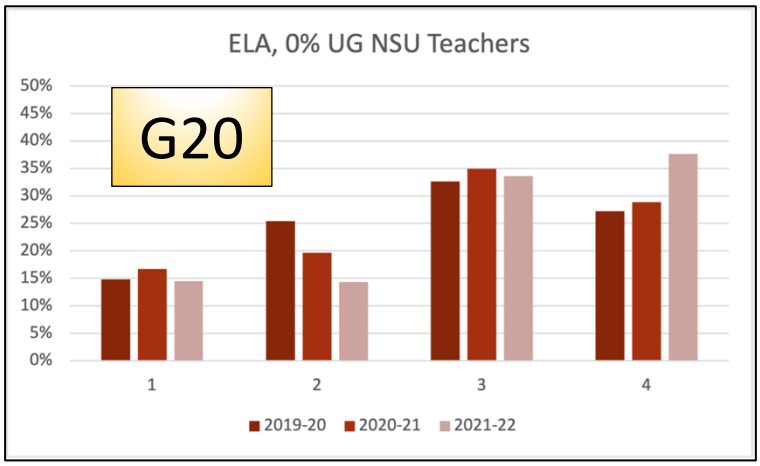
G16

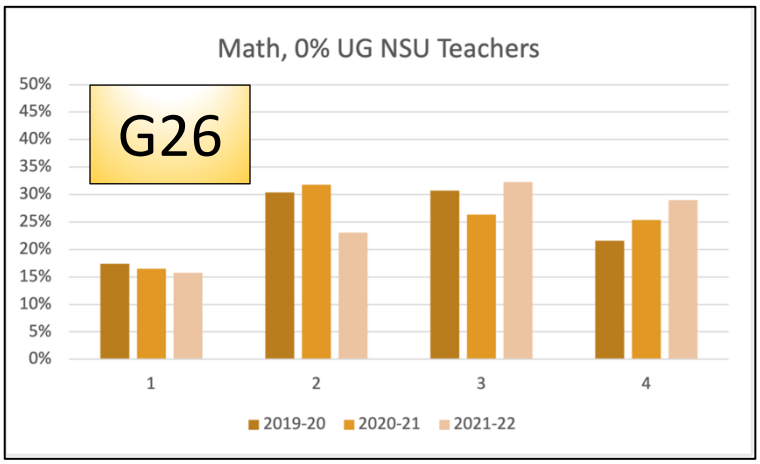


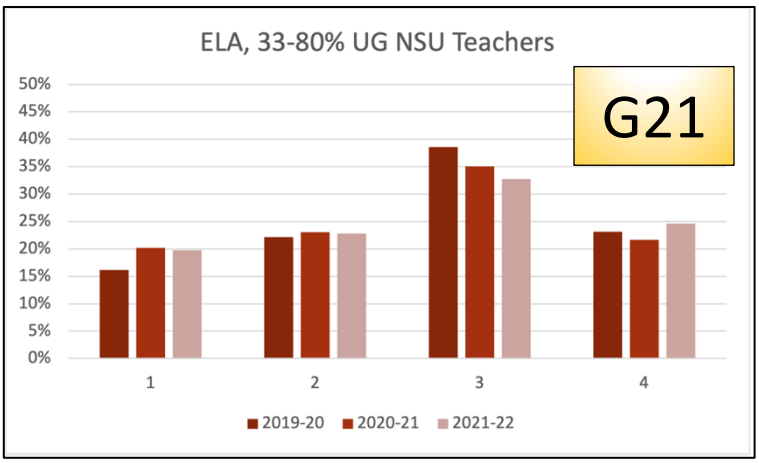
G19

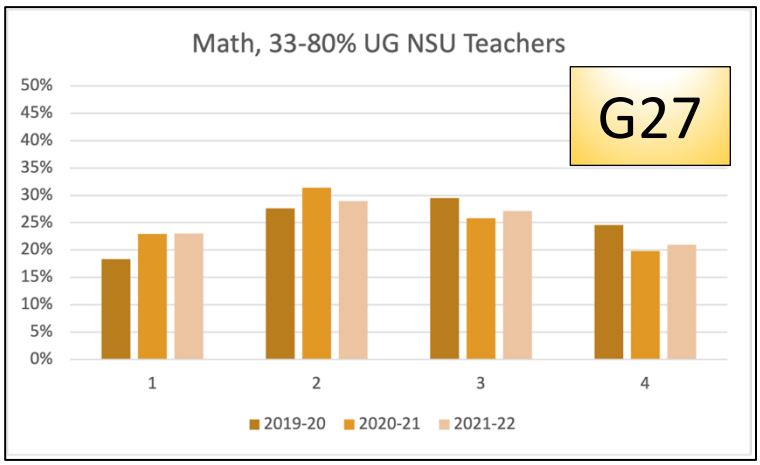


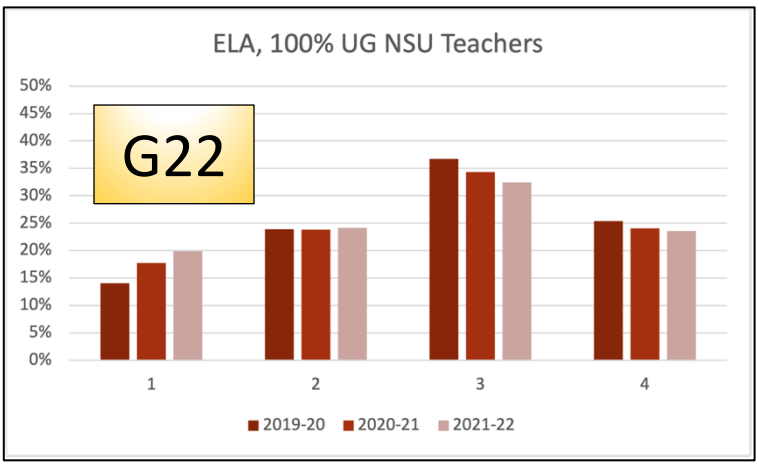
HYPOTHETICAL Graphs 20-22 show another view of the performance data, for ELA; Graphs 26-28 show another view of the performance data, for Math. These graphs show the overall performance levels for students taught by teachers prepared by NSU at the UG level, by year.

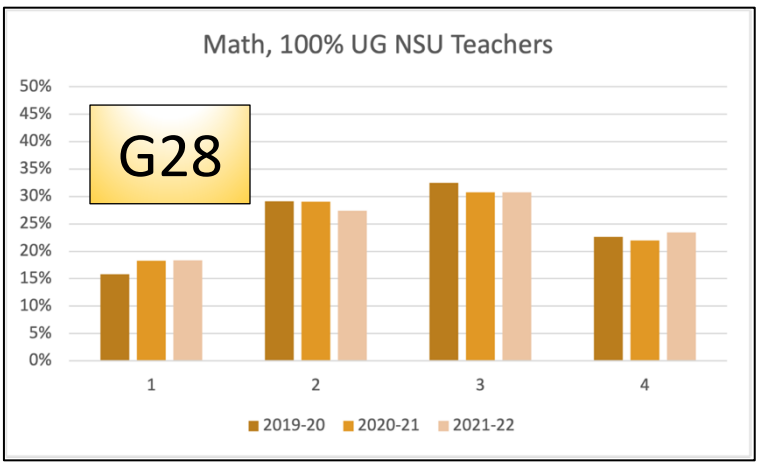












HYPOTHETICAL Graphs 23-25 show another view of the performance data, for ELA; Graphs 29-31 show another view of the performance data, for Math. These graphs show the overall performance levels for students taught by teachers prepared by NSU at the GR level, by year.