



**2018-2019 Annual Report**

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## Introduction

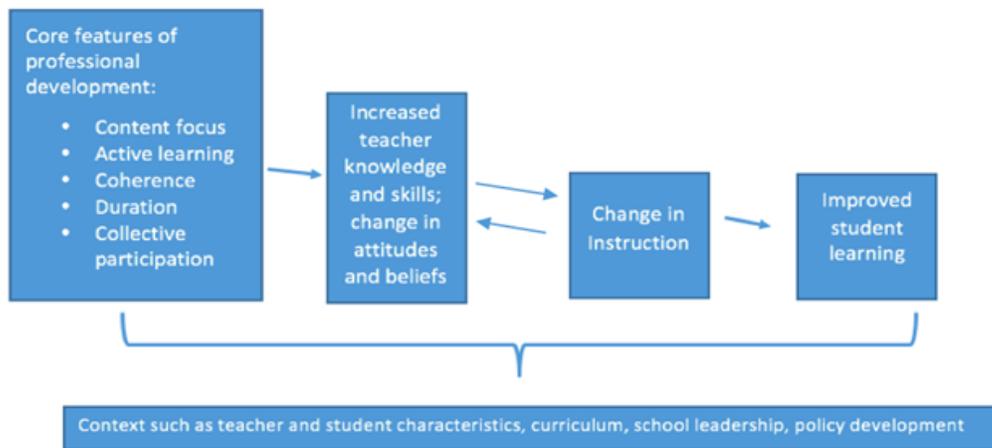
The 70th Session (1999) of the Nevada State Legislature passed Senate Bill 555, which, under Sections 16 and 17, authorized the establishment of four Regional Professional Development Programs (RPDPs) in the state. Since that 1999 session, the four programs have been reduced to three. Their collective charge is to support the state's teachers and administrators in implementing Nevada's academic content standards through regionally determined professional development activities. Although the essential mission has remained unchanged, legislative mandates and the pedagogical needs of teachers continue to broaden the program's scope and responsibilities; the programs' expertise is called upon to assist with district and statewide educational committees and assist in statewide efforts to improve instruction through the Nevada Educator Performance Framework (NEPF).

The planning and implementation of professional development services in each region is overseen by a governing body consisting of superintendents in the respective regions, master teachers appointed by the superintendents, representatives of Nevada's higher education system, and the State Department of Education. A nine-member Statewide Coordinating Council, consisting of members appointed by the Governor or legislators, the Superintendent of Public Instruction, and one member from each of the RPDP governing boards oversee the three regional programs.

As outlined in Standards for Professional Learning (Learning Forward, 2011), there is a relationship between professional learning and student results:

1. When professional learning is standards-based, it has greater potential to change what educators know, are able to do, and believe.
2. When educators' knowledge, skills, and dispositions change, they have a broader repertoire of effective strategies to use to adapt their practices to meet performance expectations and student learning needs.
3. When educator practice improves, students have a greater likelihood of achieving results.
4. When student results improve, the cycle repeats for continuous improvement (p. 16).

Figure 1 below is a visual representation of the relationship between professional learning based on the Professional Learning Standards and improved student learning. (Desimone, 2009).



**Figure 1:** *Conceptual Framework for Studying Effects of Professional Development on Teachers and Students*

The updated Standards for Professional Learning from the national professional development organization, Learning Forward, were adopted by the Regional Professional Development Programs in 2011. In 2017, Nevada included two additional standards to address equity and cultural competency to become the Nevada Professional Development Standards. These nine standards are used synergistically in order to increase educator effectiveness thereby improving students’ learning. The standards provide a framework for planning and leading professional learning opportunities.

**Part I: NRS 391A.190 1c Evaluation of Regional Training Program**

*(1) The priorities for training adopted by the governing body pursuant to NRS 391A.175 [391A.175 (a) Adopt a Training Model, taking into consideration other model programs, including, without limitation, the program used by the Geographic Alliance in Nevada.]*

After conversations with our service requestor to establish the outcome(s) of the professional learning and alignment with the standards for professional development adopted by the State Board, a training model that is best matched to the work is chosen. Training models may include, without limitation, action research, critical friends/professional learning communities, personal learning networks, coaching, mentoring, instructional rounds, lesson study, and educational courses.

*391A.175 (b) Assess the training needs of teachers and administrators who are employed by the school districts within the primary jurisdiction of the regional training program and adopt priorities of training for the program based upon the assessment of needs. The board of trustees*

*of each school district may submit recommendations to the appropriate governing body for the types of training that should be offered by the regional training program.*

*391A.175 (c) In making the assessment required by paragraph (b) and as deemed necessary by the governing body, review the plans to improve the achievement of pupils prepared pursuant to NRS 385A.650 for individual schools within the primary jurisdiction of the regional training program.*

The assessment of training needs of teachers and administrators is determined through a request for service model. This model takes into consideration the needs of our districts and includes a combination of planning tools and strategies, including but not limited to the following:

- Request for services from district personnel or principals based on School Performance Plans (SPP) and needs of teachers on staff;
- Collaborative meetings with superintendents and/or key district personnel to identify priorities and needs on an annual basis guided by District Performance Plans (DPP);
- Collaborative planning meetings with principals and leadership teams to determine goals and objectives for designing a professional development plan;
- Formal and informal needs assessments as needed with districts, departments, and/or schools;
- Input from the RPDP Governing Boards; and/or
- Collaborative work with the Nevada Department of Education on initiatives to design and implement support or roll-out plans for the NVACS as well as other state initiatives.

*Table 1. 391A.190 1c (8) An evaluation of the effectiveness of the regional training program, including, without limitation, the Nevada Early Literacy Intervention Program, in accordance with the method established pursuant to paragraph (a), and (10) an evaluation of the effectiveness of training on improving the quality of instruction and the achievement of pupils:*

**Table 1: RPDP State Approved Evaluation**

<b>RPDP State Approved Evaluation (5-point scale)</b>	<b>2018-19</b>
1. The training matched my needs.	4.62
2. The training provided opportunities for interactions and reflections.	4.83
3. The presenter’s/facilitator’s experience and expertise enhanced the quality of the training.	4.79
4. The presenter/facilitator efficiently managed time and pacing of activities.	4.80
5. The presenter/facilitator modeled effective teaching strategies.	4.69

<b>RPDP State Approved Evaluation (5-point scale)</b>	<b>2018-19</b>
6. This training added to my knowledge of standards and/or my subject matter content.	4.56
7. This training will improve my teaching skills.	4.62
8. I will use the knowledge and skills from this training in my classroom or professional duties.	4.69
9. This training will help me meet the needs of diverse student populations.	4.49

*Table 2. 391A.190 1c (2) Type of training offered through the regional training program in the immediately preceding year.*

**Table 2: Type of Training**

	<i>Aggregate</i>	<i>Elko</i>	<i>Eureka</i>	<i>Humboldt</i>	<i>Lander</i>	<i>Pershing</i>	<i>White Pine</i>	<i>Regional</i>
<i>Total Trainings</i>	152	48	1	36	7	1	34	26
<i>Instructional<sup>1</sup></i>	34% n=64	40% n=19	0% n=6	36% n=13	14% n=1	0%	27% n=9	46% n=12
<i>Observation and Mentoring<sup>2</sup></i>	11% n=16	8% n=4	0%	14% n=5	29% n=2	0%	6% n=2	12% n=3
<i>Consulting<sup>3</sup></i>	51% n=78	52% n=25	0%	47% n=17	14% n=1	100% n=1	68% n=23	42% n=11

<sup>1</sup>Presentations, workshops, in-service, and university courses

<sup>2</sup>Coaching, classroom observations and feedback, modeling, co-teaching

<sup>3</sup>School/district committee or task-force work, email advice, professional conversations, planning for PL with schools/districts

*Table 3. 391A.190 1c (3) The number of teachers and administrators who received training through the regional training program in the immediately preceding year.*

**Table 3: Number of Teachers and Administrators Who Received Training**

	<i>Aggregate</i>	<i>Elko</i>	<i>Eureka</i>	<i>Humboldt</i>	<i>Lander</i>	<i>Pershing</i>	<i>White Pine</i>
<i>Total Teachers Employed in District</i>	1,169	708	33	212	63	60	93
<i>Unduplicated</i>	361	237	8	63	15	0	36

	<i>Aggregate</i>	<i>Elko</i>	<i>Eureka</i>	<i>Humboldt</i>	<i>Lander</i>	<i>Pershing</i>	<i>White Pine</i>
<i>Teachers</i>							
<i>Duplicated Teachers</i>	254	130	0	50	6	0	68
<i>Total Administrators Employed in District</i>	88	45	3	18	5	5	12
<i>Unduplicated Administrators</i>	20	8	0	6	0	4	2
<i>Duplicated Administrators</i>	18	4	0	3	0	1	10

Table 4. 391A.190 1c (4) *The number of administrators who received training pursuant to [NEPF] in the immediately preceding year.*

**Table 4:** *Number of Administrators Receiving Training*

	<i>Aggregate</i>	<i>Elko</i>	<i>Eureka</i>	<i>Humboldt</i>	<i>Lander</i>	<i>Pershing</i>	<i>White Pine</i>
<i>Unduplicated Administrators</i>	19	7	0	7	0	4	1
<i>Duplicated Administrators</i>	14	3	0	1	0	0	10

Table 5. 391A.190 1c (5) *The number of teachers, administrators, and OLEP who received training [specific to correct deficiencies in performance identified per NEPF evaluation] in the immediately preceding year.*

**Table 5:** *Number of Teachers, Administrators, and OLEP*

	<i>Aggregate</i>	<i>Elko</i>	<i>Eureka</i>	<i>Humboldt</i>	<i>Lander</i>	<i>Pershing</i>	<i>White Pine</i>
<i>Teachers, Admin, OLEP</i>	1	0	0	1	0	0	0

Table 6. 391A.190 1c (6) *The number of teachers who received training in [family engagement] in the immediately preceding year.*

**Table 6: Teacher Training in Family Engagement**

	Aggregate	Elko	Eureka	Humboldt	Lander	Pershing	White Pine
<i>Unduplicated Teachers</i>	219	128	0	30	2	0	59
<i>Duplicated Teachers</i>	35	9	0	7	0	0	19

*Table 7. 391A.190 1c (7) The number of paraprofessionals, if any, who received training in the immediately preceding year.*

**Table 7: Paraprofessional Training**

	Aggregate	Elko	Eureka	Humboldt	Lander	Pershing	White Pine
<i>Para-professionals</i>	24	16	0	0	0	0	8

*Table 8. 391A.190 1c (9) I & II Trainings that included NVACS in the immediately preceding year; III Trainings that included NEPF in the immediately preceding year; IV Trainings that included culturally relevant pedagogy in the immediately preceding year.*

**Table 8: NVACS, NEPF, and Culturally Relevant Pedagogy Trainings**

	Aggregate	Elko	Eureka	Humboldt	Lander	Pershing	White Pine	Regional
<i>Total Trainings</i>	153	56	1	33	7	1	33	22
<i>NVACS</i>	82% n=131	77% n=43	100% n=6	82% n=27	86% n=6	100% n=1	61% n=20	65% n=13
<i>NEPF</i>	61% n=92	54% n=30	0%	67% n=22	100% n=1	100% n=1	52% n=17	32% n=7
<i>Culturally Relevant Pedagogy</i>	16% n=25	18% n=10	0%	12% n=4	0%	0%	23% n=9	9% n=2

*391A.190 1c (12) The 5-year plan for the regional training program prepared pursuant to NRS 391A.175 and any revisions to the plan made by the governing body in the immediately preceding year.*



## **Five Year Plan**

### **Establishment**

The Northeastern Nevada Regional Professional Development Program (NNRPDP) is one of three state-funded professional development programs in the state. The 70th Session (1999) of the Nevada State Legislature passed Senate Bill 555, which, under Sections 16 and 17, authorized the establishment of four Regional Professional Development Programs (RPDPs) in the state; since that 1999 session, the four programs have been reduced to three. Their collective charge is to support the state's teachers and administrators in implementing Nevada's academic content standards (NVACS) through regionally determined professional development activities. The planning and implementation of professional development services in each region must be overseen by a governing body consisting of superintendents in the respective regions, master teachers appointed by the superintendents, and representatives of Nevada's higher education system and the State Department of Education (Section 16.1-16.8).

The NNRPDP work targets three broad categories: 1) Meeting district requests for services (e.g., NVACS, differentiation, student engagement), 2) Fulfilling legislated mandates (e.g., NVACS, NEPF, Parent Engagement), and 3) Supporting individual teachers (e.g., coaching, credit classes, modeling, instructional rounds).

### **Service Area**

The NNRPDP serves over 1200 teachers and administrators in schools across six counties in Northeastern Nevada, an area of 51,385 square miles. Schools range in size from fewer than 10 students to over 1,600. The NNRPDP services Elko, Eureka, Humboldt, Pershing, Lander, and White Pine School Districts. Among districts there is considerable disparity in the number of students, ranging from under 300 in Eureka County to over 9,000 in Elko County.



## **Mission**

The NNRPDP provides high-quality professional learning opportunities to enhance student learning within the context of Nevada Professional Development Standards by recognizing and supporting research-based instruction and by facilitating instructional leadership.

## **Professional Development Standards**

The goals, strategies, and outcomes in this five-year plan are couched within the professional learning standards outlined by the Learning Forward organization and two standards legislated in 2017. When professional learning is also standards-based, the increase in educator effectiveness has greater potential for change.

## **Goals**

The mission and governance structure of the NNRPDP guide the goals of the organization by providing a framework around which services are provided. An important aspect of the goals is to meet our organization's charges while continuing to honor and respect the individual regional districts' initiatives, strategic plans, and identities. Ultimately, there are five major goals to improve our performance and meet the needs of our region along with bulleted strategies identified to meet these goals:

- **Provide professional learning opportunities for teachers that strengthens their pedagogical content knowledge.**
  - *Develop positive relationships and trust with teachers*
  - *Create robust professional development and implementation plans with specific outcomes*
  - *Provide professional development for NNRPDP coordinators in order to stay current in their expertise*
  - *Communicate opportunities for professional learning to teachers*
- **Partner with administrators to improve instructional leadership and support teacher content knowledge and pedagogy.**
  - *Develop positive relationships and trust with administrators*

- *Create robust professional development plans and implementation with specific outcomes*
- *Participate on district level planning as appropriate*
- *Communicate opportunities for professional learning to administrators*
- **To provide leadership in interactive and integrative technology.**
  - *Integrate technology within our work, making it explicit*
  - *Use current software platforms for regional professional learning opportunities*
  - *Provide professional development for NNRPDP coordinators in order to stay current in their expertise*
- **Measure the impact of professional development on teacher effectiveness and student achievement.**
  - *Strategically collect and use data to provide direction for the work*
  - *Strategically collect and use data to assess our work*
  - *Apply the model of measurement required for evidence*
  - *Plan time for measurement within the work*
- **Enhance our public profile**
  - *Communicate opportunities for professional learning*
  - *Publicize national presentations*
  - *Create a comprehensive web presence*

## **Measurement**

In order to measure progress of the plan, multiple measures will be used. First the statewide evaluation form will continue to be collected and reported. Second, the five-level evaluation of professional development framework (Guskey, 2002) will guide the assessment of the professional development provided in our region. Third, qualitative documentation of stakeholders and specifically created as-needed surveys will provide measures of progress and success.

The Statewide Council approved an outline structure for RPDP evaluation purposes to include the number of teachers and administrators affected by professional development in the region according to requirements set forth in NRS 391A.190.

## **A Two-Year Focus (2017-2019)**

### **NRS 391A.175 section 1**

**(d) (1) An assessment of the training needs of teachers and administrators who are employed by the school districts within the primary jurisdiction of the regional training program;**

The assessment of training needs of teachers and administrators is determined through a request for service model. This model takes into consideration the needs of our districts and includes a combination of planning tools and strategies, including but not limited to the following:

- Request for services from district personnel based on School Performance Plans (SPP) and needs of teachers on staff;
- Collaborative meetings with superintendents and/or key district personnel to identify priorities and needs on an annual basis guided by District Performance Plans (DPP);
- Collaborative planning meetings with principals and leadership teams to determine goals and objectives for designing a professional development plan;
- Formal and informal needs assessments as needed with districts, departments, and/or schools;
- Input from the RPDP Governing Boards; and/or
- Collaborative work with the Nevada Department of Education on initiatives to design and implement support or roll-out plans for the NVACS as well as other state initiatives.

**(d) (2) Specific details of the training that will be offered by the regional training program for the first 2 years covered by the plan including, without limitation, the biennial budget of the regional training program for those 2 years.**

The Northeastern Nevada Regional Professional Development (NRPDP) is a service organization providing professional learning opportunities to districts and schools within our region. Training programs offered each year vary depending upon the needs and requests of the districts we serve; the NRPDP does not solely determine those training programs without significant input from our stakeholders. In addition to serving the requests of our districts and schools, the NRPDP has developed the training programs listed below for teachers and administrators.

### **Biennial Budget 2017-2019**

\$2,487,472

### **NRPDP Sponsored Training Programs**

#### **Teacher Academy Cohort Five**

Building on the previous years' successes, Cohort Five of the Teacher Academy focuses on improving instructional pedagogy through Nevada Educator Performance Framework standards. The NRPDP accepts applications from teachers who want to attend and targets deep learning of the instructional standards. Each full day, whole group learning opportunity is accompanied by a small group Critical Friends Group (CFG) in which connections are made between content and classroom implementation by de-privatizing practice.

#### **Courses for Credit**

NRPDP creates and provides courses for teachers interested in particular topics. These courses are available for credit and provide teachers seeking recertification an avenue for increasing their

learning. In addition, the NNRPDP provides facilitation of courses related to a particular school's desire for content upon request.

### **National Boards Certification**

The National Boards Certification Project supports a cohort of educators over two years to receive their National Board Certification. The purpose of the support is to examine teaching practice, analyze results of that practice, and implement necessary change. Participating in this project allows for personalized professional learning that is ongoing, classroom-embedded, and learner focused. Grant funded (\$90,250).

### **Focus Goals**

**1. Measure the impact of professional development on teacher effectiveness and student achievement.**

- *Strategically collect and use data to provide direction for the work*
- *Strategically collect and use data to assess our work*
- *Apply the model of measurement required for evidence*
- *Plan time for measurement within the work*

A minimum of seven projects each year are reported within the context of the work to include with extensive measures of teacher and student learning affected by the professional learning provided. Each report is included in the final evaluation of the NNRPDP submitted to stakeholders for accountability purposes.

**2. To provide professional learning opportunities for teachers that strengthens their pedagogical content knowledge.**

- *Develop positive relationships and trust with teachers*
- *Create robust professional development and implementation plans with specific outcomes*

Each long-term professional development request will require an outcomes-based plan developed with the NNRPDP coordinator, requesting administrator, and/or teacher leader team. This plan is built within the constructs of the Nevada Professional Development Standards. Relationships are established through a common understanding of outcomes and relevance to teachers' practice in addition to frequent communication and support.

**3. To partner with administrators to strengthen instructional leadership and support teacher content knowledge and pedagogy.**

- *Develop positive relationships and trust with administrators*
- *Create robust professional development plans and implementation with specific outcomes*

Each long-term professional development request will require an outcomes-based plan developed with the NNRPDP coordinator, requesting administrator, and/or teacher leader team. This plan is built within the constructs of the Nevada Professional Development Standards. Relationships are established through a common understanding of outcomes and relevance to teachers' practice in addition to frequent communication and support.

## **Part Two: Individual RPDP Information**

*391A.190 1c (11) A description of the gifts and grants, if any, received by the governing body in the immediately preceding year and the gifts and grants, if any, received by the Statewide Council during the immediately preceding year on behalf of the regional training program. The description must include the manner in which the gifts and grants were expended.*

NNRPDP received a two-year Great Teaching and Leading Fund (GTLF) grant in 2017 to support National Board Certification in the northeast region. The 2018-19 academic year was the second year of the National Board Certification Project in which teachers were provided the opportunity for support in examining their teaching practice, analyzing results of that practice, and implementing necessary change in accordance with National Board Certification component requirements. Grant funds were expended as stipends for teachers who submitted up to three components for National Board consideration. Teachers in the first-year cohort returned to complete the final two components and the second-year cohort began their first two components.

A thorough examination of the second year of this two-year GTLF grant project is included in the Regional Projects section of this report.

## **Regional Projects**

### **Middle School Math Fellowship**

Nevada's mission is to improve student achievement and educator effectiveness by ensuring opportunities, facilitating learning, and promoting excellence. To achieve this mission, Nevada has set aggressive goals to improve student performance; one of which is to increase Nevada's middle school students' proficiency rates as measured by Smarter Balanced Assessment Consortium (SBAC) criterion referenced tests. Recognizing the pivotal role regional professional development programs play in Nevada reaching its mission and goals, the Northeastern Nevada Regional Professional Development Program (NNRPDP) launched the Middle School Math Fellowship.

### **Instructional Context**

In the winter of 2018, middle school teachers from White Pine, Eureka, Humboldt, Elko, Lander, and Pershing County school districts were invited to participate in the Middle School Math Fellowship (Fellowship). Nearly half of all the middle school mathematics educators from northeast Nevada registered to become fellows. Of the 22 fellows, two were middle school principals, 10 were 6th grade mathematics educators, four were 7th grade mathematics educators, three were 8th grade mathematics educators, and three were 6-8 grade mathematics educators. Fifty-nine percent of the fellows were from Elko County School District, 18% from White Pine School District, 14% from Lander County School District, and 9% from Humboldt County School District. The Fellowship impacted  $\cong$ 1,300 students the fellows collectively teach.

### **Initial Data and Planning**

Nevada earned a D, ranking second to last in the nation, from the *2019 Quality Counts* report. Compared to 13 states in the consortium, Nevada ranks at the bottom for performance on the SBAC 6-8 grade mathematics assessments with a 32% proficiency rate in 2017-2018. Proficiency rates for the northeast region were comparable with Eureka County at 30%, Elko at 28%, White Pine at 28%, Humboldt County at 24%, Lander County at 22%, and Pershing County at 14%. The Nevada Every Student Succeeds Act (ESSA) Advisory Group (2019) recommended Nevada strive to increase mathematics proficiency rates from a 27% baseline proficiency to 46% proficiency by 2022. The regional professional development programs are identified in *The New Nevada Plan* as an instrumental component in leading the charge to achieve Nevada's goals (2017, p. 38). In response, the NNRPDP created the Fellowship to support Nevada's educators and students in achieving Nevada's goal by providing professional development supports to deepen understandings of student achievement targets outlined by SBAC to strengthen instructional practice.

### **Learning Design**

The learning design of the Fellowship was informed by *The New Nevada Plan* (2017), Nevada Professional Development Standards, Guskey's Five Levels of Professional Development (2002), and the U.S. Department of Education's guidance document, *Non-Regulatory 2 Guidance: Using Evidence to Strengthen Education Investments* (2016). The content and foci of the Fellowship was informed by the Nevada Academic Content Standards for Mathematics (NVACS-M), Institute of Education Sciences, SBAC, Achieve the Core, and mathematics leaders in the field.

### **Middle School Mathematics Fellowship Structure**

The Fellowship involved five full-day face-to-face sessions held in the central location for the region, Elko, Nevada. Registration for the Fellowship opened in December 2018. The first session was held in January 2019, and the Fellowship commenced in March 2019. The overarching goals of the Fellowship were to create a mind trust of middle school educators by deepening understandings of the interconnections of the SBAC claims, Nevada Academic Content Standards for Mathematics (NVACS-M), rigor, the major works of the grades, and coherence to inform and strengthen practice in order to impact student achievement. To gain insights from national perspectives, the structure also included attendance at the MidSchoolMath 2019 Conference.

**Session I.** The objective of Session I was to increase fellows' awareness of the four SBAC Claims: Claim 1 Concepts and Procedures; Claim 2 Problem Solving; Claim 3 Communicating Reasoning; and Claim 4 Modeling and Data Analysis. Fellows identified the essence of the claims, classified problems by claims, and constructed items aligned to claims. Fellows analyzed data about claims, formulated conjectures for students' performance, and identified methods to address gaps and deficiencies.

**Session II.** The objective of Session II was to increase fellows' understandings of the four definitions of rigor. Fellows explored the difference between complicated and complex. Common misconceptions of Norman Webb's Depth of Knowledge (DOK) and limitations of DOK representations were identified. Fellows classified sample items using Hess' Cognitive Rigor Matrix, the matrix employed by SBAC to establish DOK levels of test items. Fellows learned how NVACS-M define rigor as a balance between conceptual understanding, procedural skills and fluency, and application. Fellows synthesized understandings of rigor through formulations of applications to practice.

**Session III.** The objective of Session III was to increase fellows' understanding of mathematical modeling and its relationship to SBAC claims and rigor. Fellows applied learnings by identifying examples of and opportunities to incorporate modeling into their instructional practice and customizing resources to include modeling. Fellows learned about the significance

of productive struggle in instructional design and student achievement and methods for promoting productive struggle in their practice.

**Session IV.** The objectives of Session IV included increasing fellows’ awareness of the major works of the grade by identifying the major, supporting, and additional clusters of standards and exploring resources in the SBAC Digital Library. The concept of rigor was revisited during a virtual presentation by John Antonetti, an author and former teacher who works with schools across the country and Canada on student engagement, writing, rigor and relevance, and high–yield best practices.

**Session V.** The foci of Session V included analyzing the SBAC performance assessments and fellows’ classroom assessments through the lens of claims, rigor, modeling, and the major works of the grade. Fellows presented how they implemented learnings from the Middle School Math Fellowship into their practice and the impact of their learning on student performance.

**MidSchoolMath National Conference 2019.** Fellows attended a two-day mathematics conference targeting 6-8 grades to gain a national perspective and learn research-based strategies to incorporate into practice.

### **Measurement**

Qualitative and quantitative measurements were used to assess how participation in the Fellowship impacted fellows’ awareness and understandings, instructional practice, and student achievement.

### **Impact on Understandings**

**Smarter Balanced Assessment Consortium Claims.** Using the ratings Informed-I had no prior conceptions; Validated; Extended; or Challenged, measures of learning were reported on fellows’ prior conceptions about each of the four claims. Using the ratings Not Increased; Slightly Increased; Moderately Increased; Considerably Increased, methods to assess impacts on fellows’ understandings also included reporting of self-assessments of understanding of the following concepts:

- Four SBAC Claims
- Question types associated with the four SBAC Claims
- Thinking processes associated with the four SBAC Claims
- Major works of the grades

**Rigor.** Self-assessments of understanding of the following concepts using the rating scale 1= Validated; 2 = Informed; 3 = Extended; 4 = Challenged, were reported:

- Complicated
- Complex
- Depth of Knowledge

- Misconceptions of DOK - i.e. nominative vs a taxonomy, representations, uses, etc.
- Hess' Matrix
- Rigor as defined by NVACS-M
- Conceptual Understanding
- Procedural Skill and Fluency
- Application

**Modeling and Productive Struggle.** Methods to assess impact on understandings of modeling and productive struggle included coding and analyses of pre- and post-written responses to prompts eliciting definitions of the terms, *modeling* and *productive struggle*, using the ratings: 1 = minimal understanding; 2 = fair understanding; 3 = average understanding; 4 = notable understanding; 5 = significant understanding.

**Major Work of the Grade.** Self-assessments of understanding of the major work of the grade were reported using the ratings: Not increased; Slightly Increased; Moderately Increased; and Considerably Increased.

**NVACS-M Coherence; Progression Documents; Digital Library.** Self-assessments of understandings of NVACS-M coherence, the Progression Documents, and how to use the Digital Library were reported using the ratings: Informed; Validated; Extended; or Challenged.

### **Impact on Instructional Practice**

Methods to assess impacts on the fellows' instructional practice include analyses of evaluations and reflections. Evaluations and reflections were coded and analyzed in terms of evidence of references relating to impact on instructional design, instructional concepts, and instructional strategies. Evidence of incorporation of the implementation of concepts learned during the Fellowship in fellows' presentations were documented. Mean Likert scale ratings, ranging from not at all (one) to a great extent (five), of the following statements were reported:

- The training met my needs.
- The training added to my knowledge of standards and/or skills in teaching subject matter and content.
- I will use the knowledge and skills from this training in my classroom or professional duties.
- My learning today has prompted me to change my practice.

### **Impact on Student Achievement**

Fellows' evaluations and reflections were coded and analyzed for references to impacts on student learning. Occurrence of evidence of impact on student learning in fellows' presentations was documented. Mean Likert scale ratings, ranging from not at all (one) to a great extent (five), of the following statements were reported:

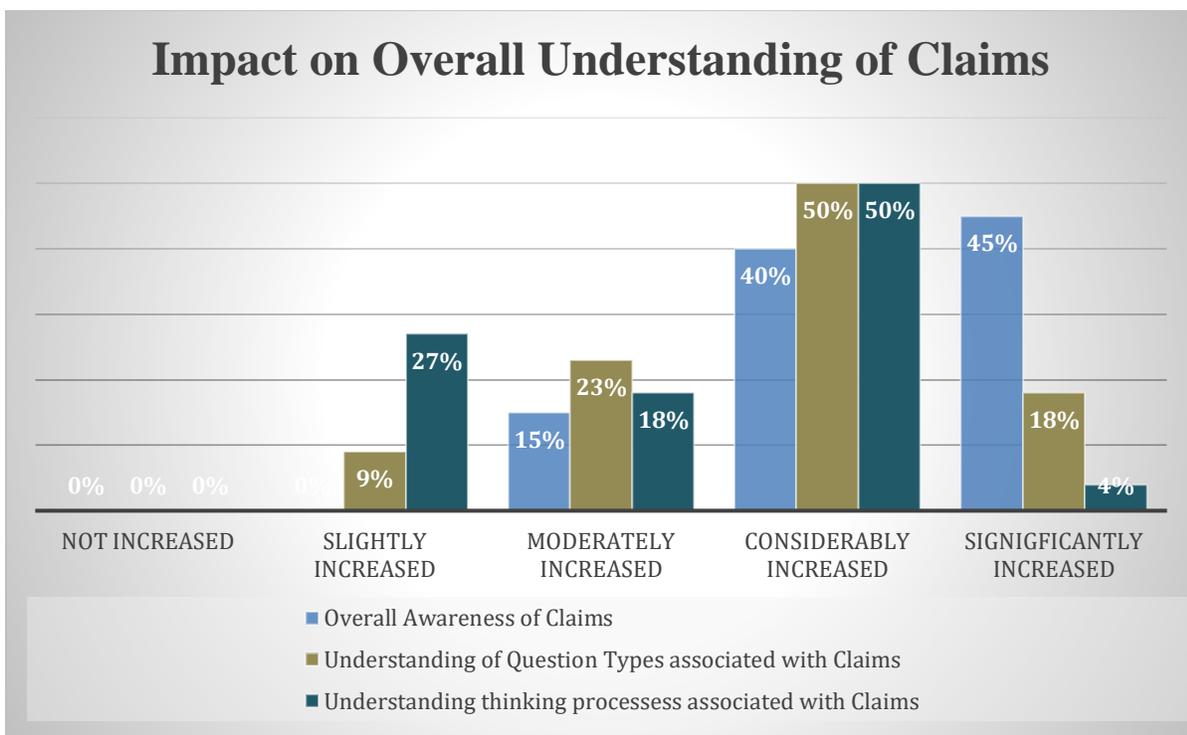
- The Middle School Math Fellowship will help me meet the needs of diverse student populations (e.g., gifted and talented, ELL, special ed., at-risk students).

- My learning today will affect students' learning.

## Results and Discussion

### Impact on Understandings

**SBAC Self-Assessment and Questionnaire Statements Data Results.** The goal to impact fellows' understandings of the SBAC claims was founded on the precept that educators' clarity of learning targets and performance expectations will lead to increases in students' achievement levels in mathematics, and eradication of misconceptions about the claims will inform instructional practice. The data suggest the objective to impact fellows' understandings of the claims was achieved. Using ratings, ranging from not increased to significantly increased, 85% of the fellows indicated their overall understanding of the four SBAC claims had considerably/significantly increased as a result of participating in the Fellowship. More than half of the fellows were made aware of the claims as they had no prior conception prior to participation in the Fellowship. Fourteen percent of the fellows' learnings were challenged due to their prior misconceptions of Claim 1, Claim 2, and Claim 4 (See Figures 2-6).



**Figure 2:** Impact on Overall Understanding of Claims

### Impact on Understanding Claim 1: Concepts and Procedures

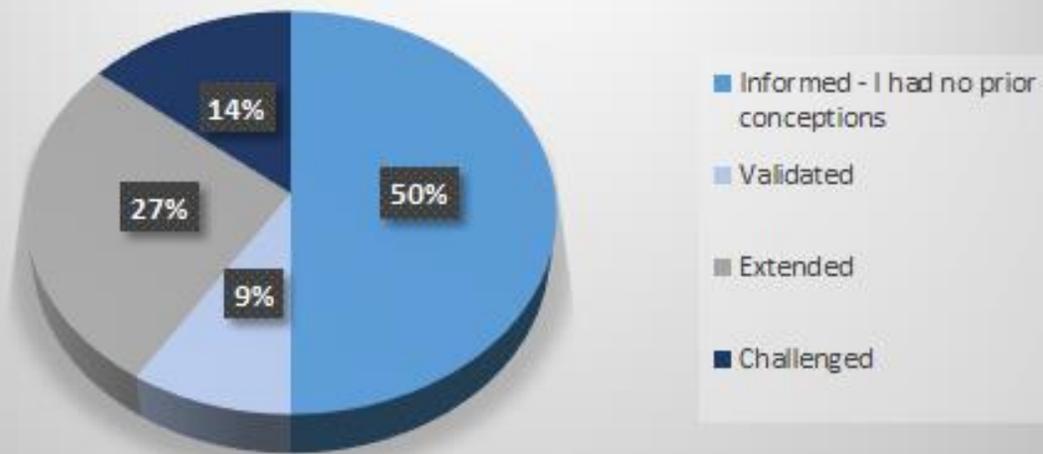


Figure 3: Impact on Understanding Claim 1: Concepts and Procedures

### Impact on Understanding Claim 2: Problem Solving

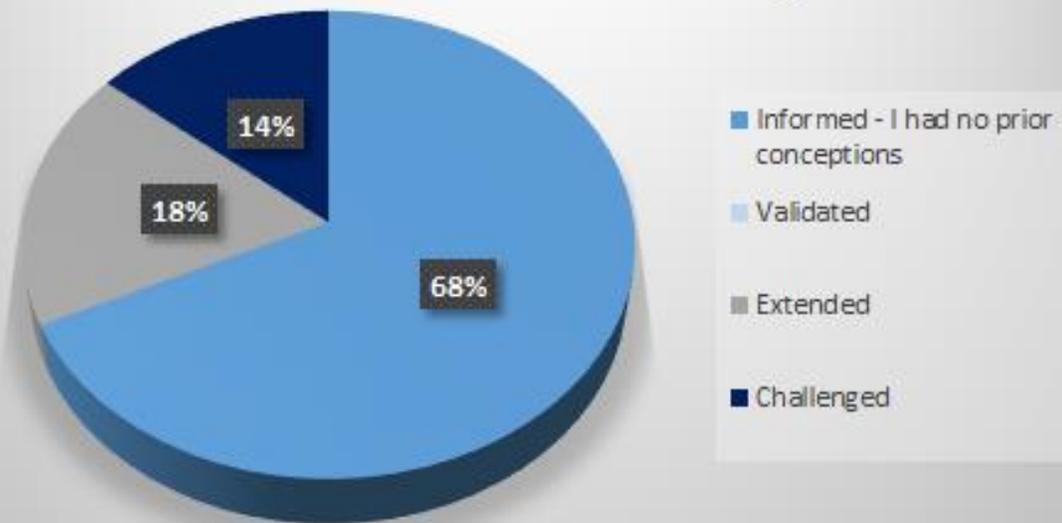


Figure 4: Impact on Understanding Claim 2: Problem Solving

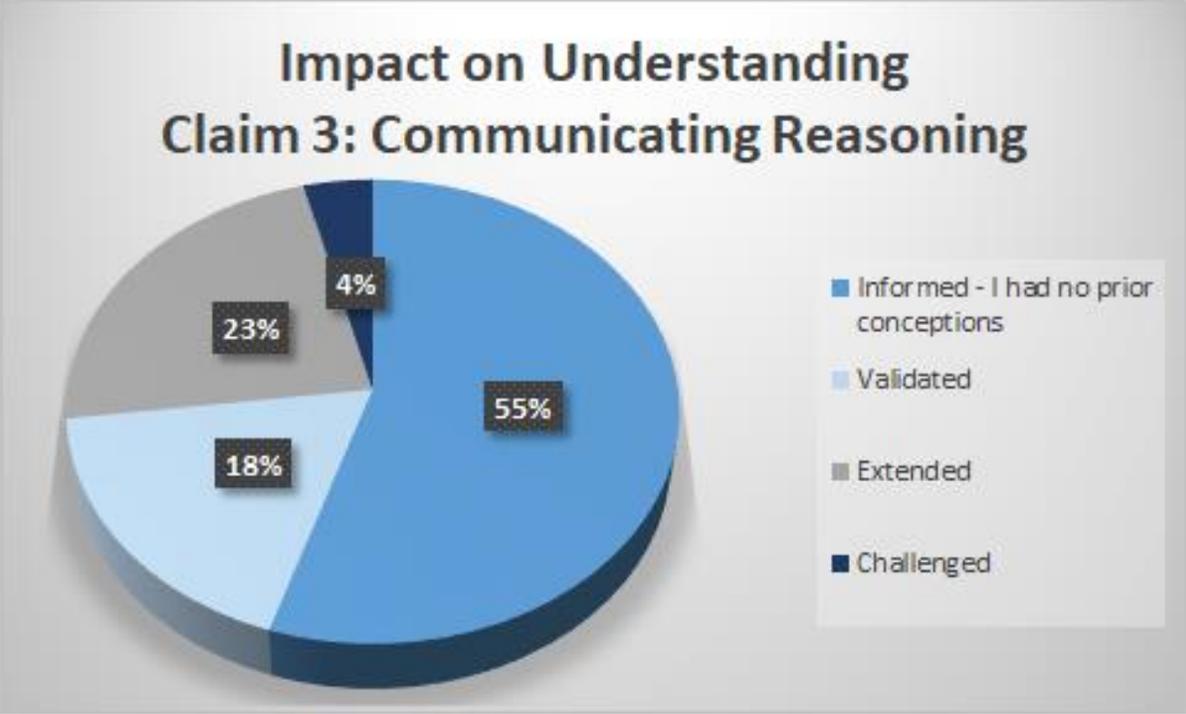


Figure 5: Impact on Understanding Claim 3: Communicating Reasoning

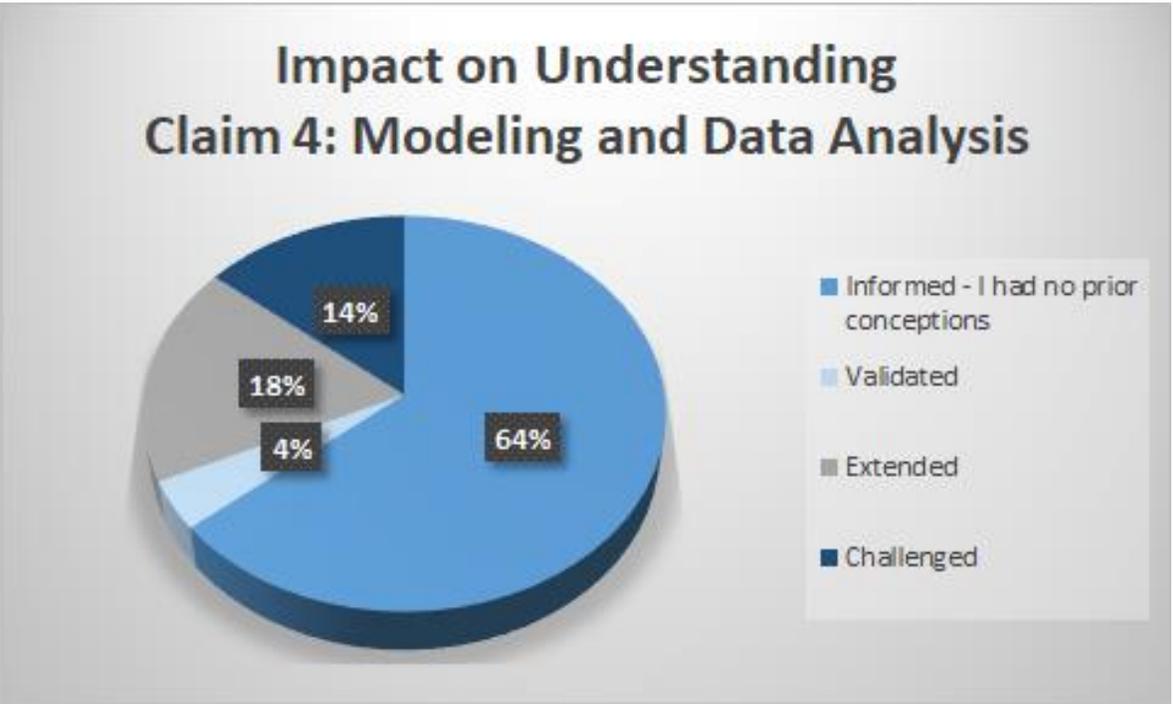


Figure 6: Impact on Understanding Claim 4: Modeling and Data Analysis

### Claims: Excerpts of Fellows' Learning Reflections

*Today I learned about the claims for the SBAC tests. I learned how to create questions that vary based on these claims and how to bring them into my classroom... 6th grade Math Fellow*

*Today has taught me so much more about the SBAC test than I've ever known....and has made me think about my teaching practices and how to improve to better prepare my students. 7th grade Math Fellow*

*I knew nothing about the middle school math SBAC claims. It has been beneficial to explore the claims and to see and understand how they work....8th grade Math Fellow*

**Rigor Questionnaire Statement Data Results.** There are different interpretations of rigor that are essential to the design of effective mathematics instruction. The objective to increase understandings of rigor was based on the premise the level of thinking in which students engage determines what they will learn (Lin, 2005). Understanding levels of thinking involves understanding interpretations of rigor. The data indicate this objective was met to a degree with ratings of understandings falling between the informed and extended range (See Figure 7). The greatest impact on understanding was related to conceptual understanding with a mean rating of 3.2. The impact on fellows' understanding of this concept is particularly relevant given middle school students' performance levels on the 2017-2018 SBAC assessment were the lowest in Claim 1: Concepts and Procedures.

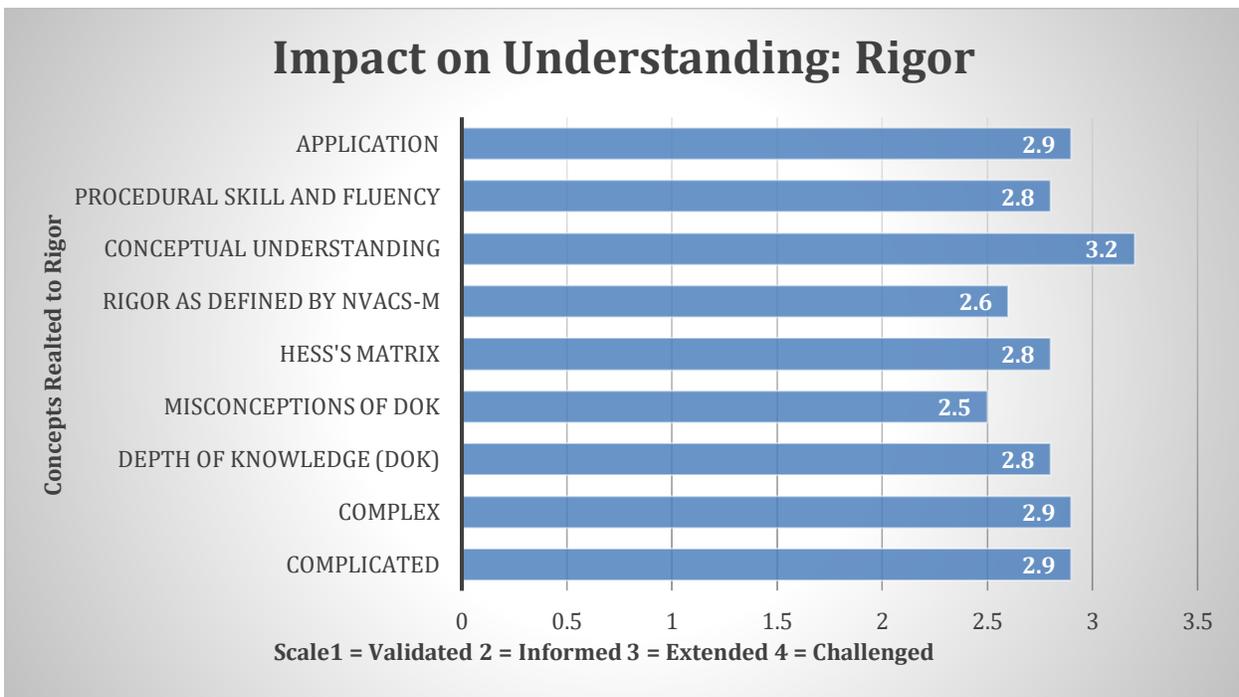


Figure 7: Impact on Understanding: Rigor

### Rigor: Excerpts of Fellows' Learning Reflections

*I can use the various facets of rigor to help me modify my practices in a meaningful way. I can make the problem more rigorous to help support student learning. 6th grade Math Fellow*

*[I will] use rigor to inform my practice by examining content and figuring out how to incorporate all DOK levels, complex and complicated tasks in order to impact student learning and make learning more worthwhile. 7th grade Math Fellow*

*My major take away today is that I must reframe my questioning and assignments to better measure conceptual comprehension and not just procedures. 8th grade Math Fellow*

### Modeling and Productive Struggle Pre-Post Prompt Response Analysis Data

**Results.** The many interpretations of the term *modeling* has resulted in confusion of what constitutes mathematical modeling. Misconceptions have formed, such as mathematical modeling referencing the gradual release model, *I Do, We Do, You Do*. These misconceptions informed the goal to impact understanding that mathematical modeling is a process. Data indicate the goal was met. Ratings of fellows' definition of mathematical modeling grew 3.5 points from minimal to notable understanding. Achieving this goal is relevant as recognizing mathematical modeling's centrality to understanding SBAC claims involves knowing modeling is "a process that uses mathematics to represent, analyze, make predictions or otherwise provide insight into phenomena" (GAIMEE, 2016, p.8). Productive struggle is integral to the design of instructional practices aligned to the intentions underlying the NVACS-M and SBAC claims. The goal to impact fellows' understanding of productive struggle was achieved. The increment of growth for ratings for productive struggle increased by 1.5 points. (See Figure 8)

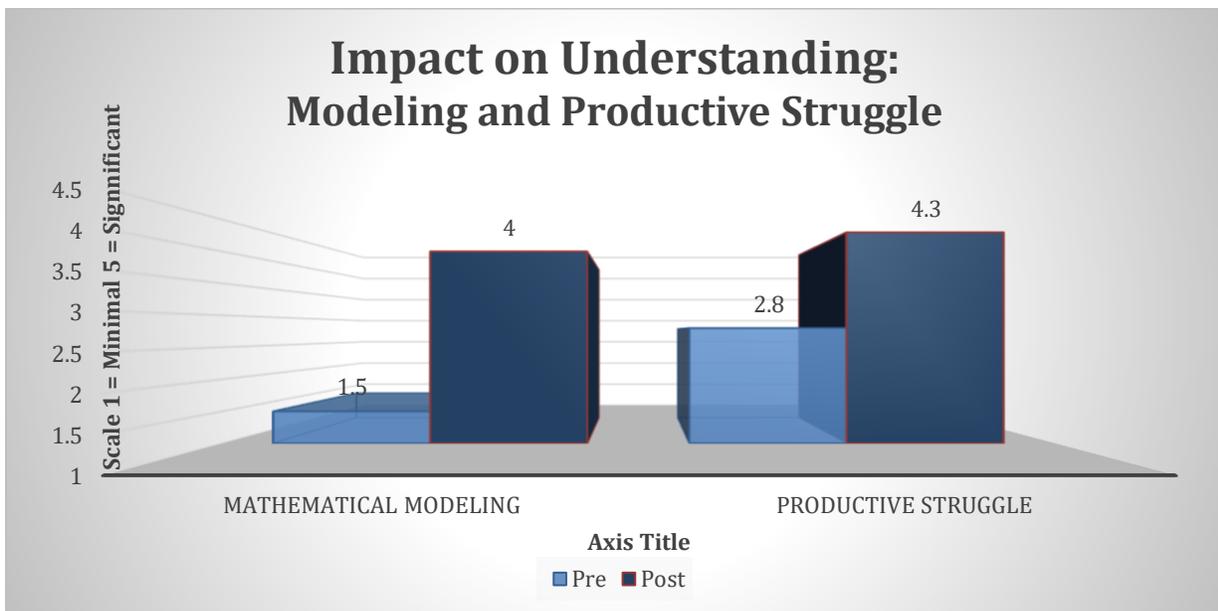


Figure 8: Modeling and Productive Struggle

### Modeling and Productive Struggle: Excerpts of Fellows' Learning Reflections

*I have a new perspective of what modeling can look like in the classroom. I think that bringing in this type of modeling can help build better critical thinkers. 6th grade Math Fellow*

*I now know modeling is a process rather than an event that allows students to think more critically...Rather than feeding students with formulas and algorithms, I will change how I introduce problems to them to determine what is necessary and unnecessary info. 7th grade Math Fellow*

*It will help me rethink my questioning choices as well as my need for 1 correct answer...It will help my students become more in-depth thinkers and eventually help them gain better conceptual understanding. 8th grade Math Fellow*

**Major Work of the Grade Questionnaire Statement Data Results.** The data indicate the goal to impact understandings of the major work of the grade was achieved. More than half of the fellows rated their understandings of the major work of the grade as being extended. Only 20% of the fellows were aware of the major works of the grade prior to participation in the Fellowship, and their understandings were informed. “Not all content in a given grade is emphasized equally in the Standards. Some clusters require greater emphasis than others based on the depth of the ideas, the time that they take to master, and/or their importance . . .” (Achieve the Core, n.d., para 1). The relevance of differentiating between and using the major, additional, and supporting clusters will inform practice. (See Figure 9)

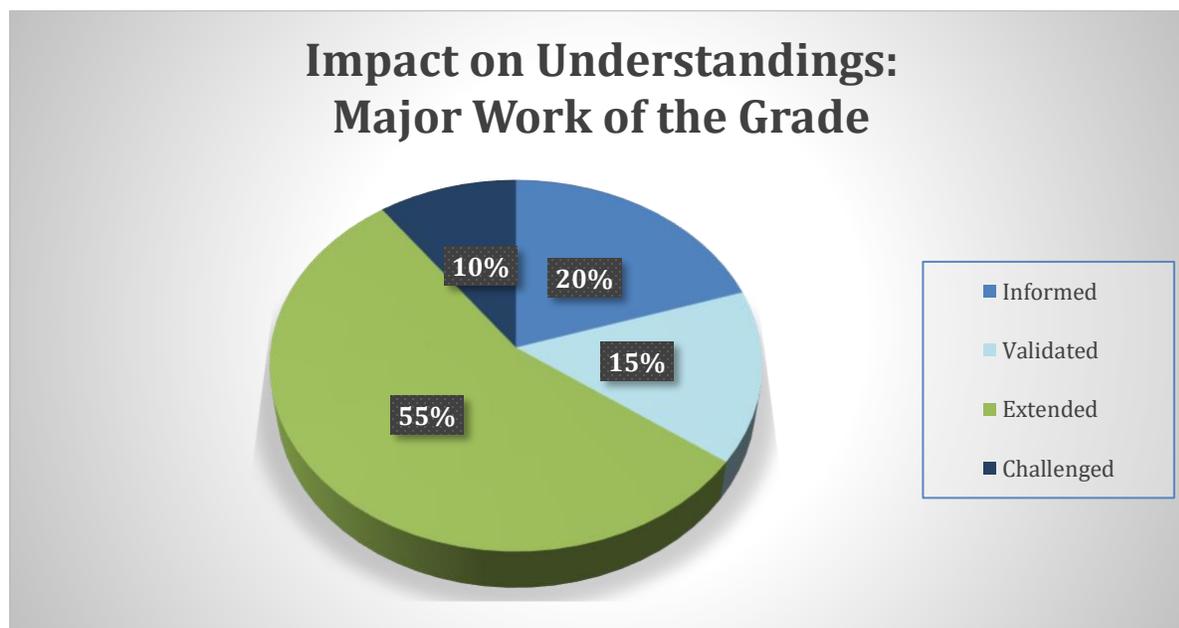
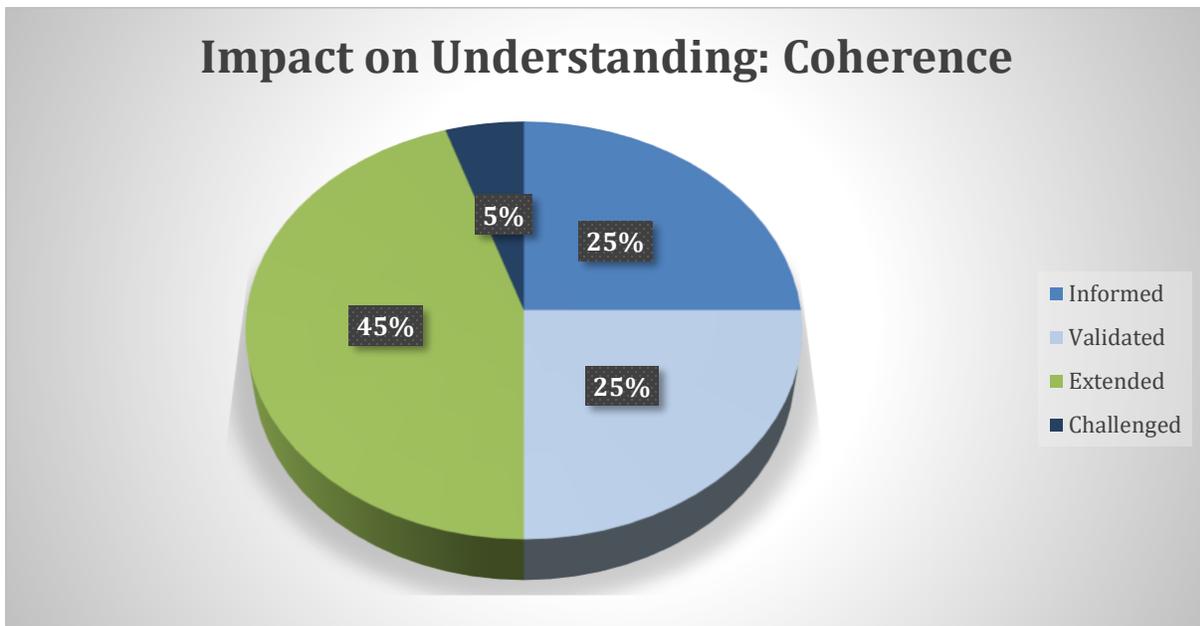


Figure 9: Impact on Understandings: Major Work of the Grade

**NVACS-M Coherence Questionnaire Statement Data Results.** The data to increase understandings of coherence indicate this goal was achieved. With only 15% of the fellows' understanding rated as *Validated* and 10% as *Challenged* suggests 75% of the fellows were not fully aware of coherence prior to participation in the Fellowship. Increasing fellows' understandings about the horizontal and vertical alignment of the NVACS-M opens insights into how the prerequisite understandings and future mathematical learnings can be used as a resource to identify and fill gaps and extend student learning (See Figure 10).



*Figure 10: Coherence*

**Progression Documents Questionnaire Statement Data Results.** The data suggest the Fellowship impacted understandings of the Progression Documents. With only 28% of the fellows' understanding rated as *Validated* and 5% as *Challenged* suggests 75% of the fellows were not fully aware of the Progression Documents prior to participation in the Fellowship. Given the Progression Documents constitute the foundation of the NVACS - M, these new understandings will inform instructional practice (See Figure 11).

## Impact on Understanding: Progression Documents

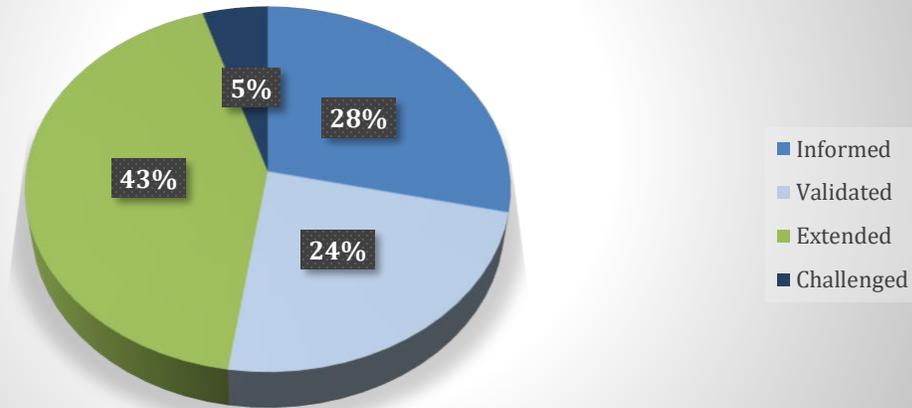


Figure 11: Progression Documents

**Digital Library Questionnaire Statement Results.** The data support the goal to impact understanding of how to access and use the Digital Library was achieved. With only 5% of the fellows' understanding rated as *Validated* suggests 85-95% of the fellows were not fully aware of the Digital Library prior to participation in the Fellowship. The Digital Library is a resource Nevada has purchased to support educators as described in *The New Nevada Plan* (2017, p. 27), and, with these understandings in place, fellows are more likely to utilize the resource than prior to participating in the Fellowship (See Figure 12).

## Impact on Understanding: Digital Library

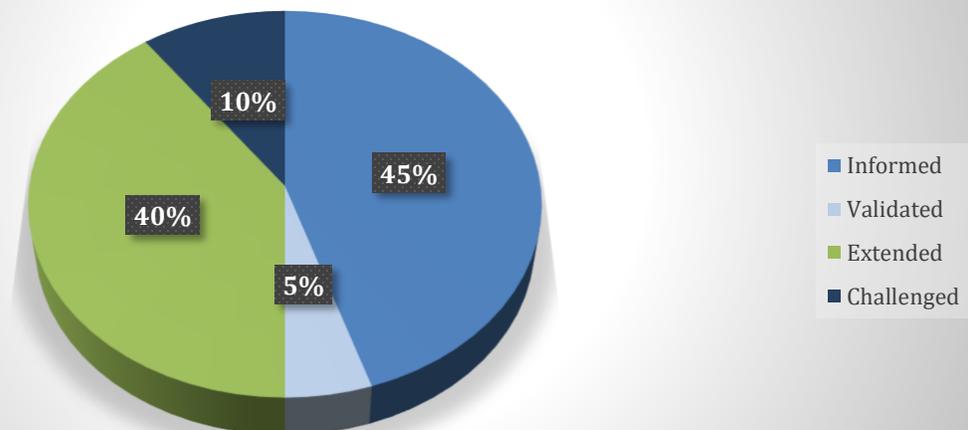


Figure 12: Digital Library

## Major Work of the Grade, Coherence, Digital Library: Excerpts of Fellows' Learning Reflections

*[I will be] researching the grades major clusters and comparing them to our current essential standards. Open the discussion and start implementing change where necessary.*  
6th grade Math Fellow

*There are some scope and sequence issues that we need to address and restructure...being able to see the map [Jason Zimba's coherence wiring diagram] that shows the future and past standards of a current standard was beyond helpful!!!* 8th grade Math Fellow

*Loved, Loved, Loved the information on the Smarter Balanced.org, especially the Digital Library!* Administrator Fellow

### Impact on Instructional Practice

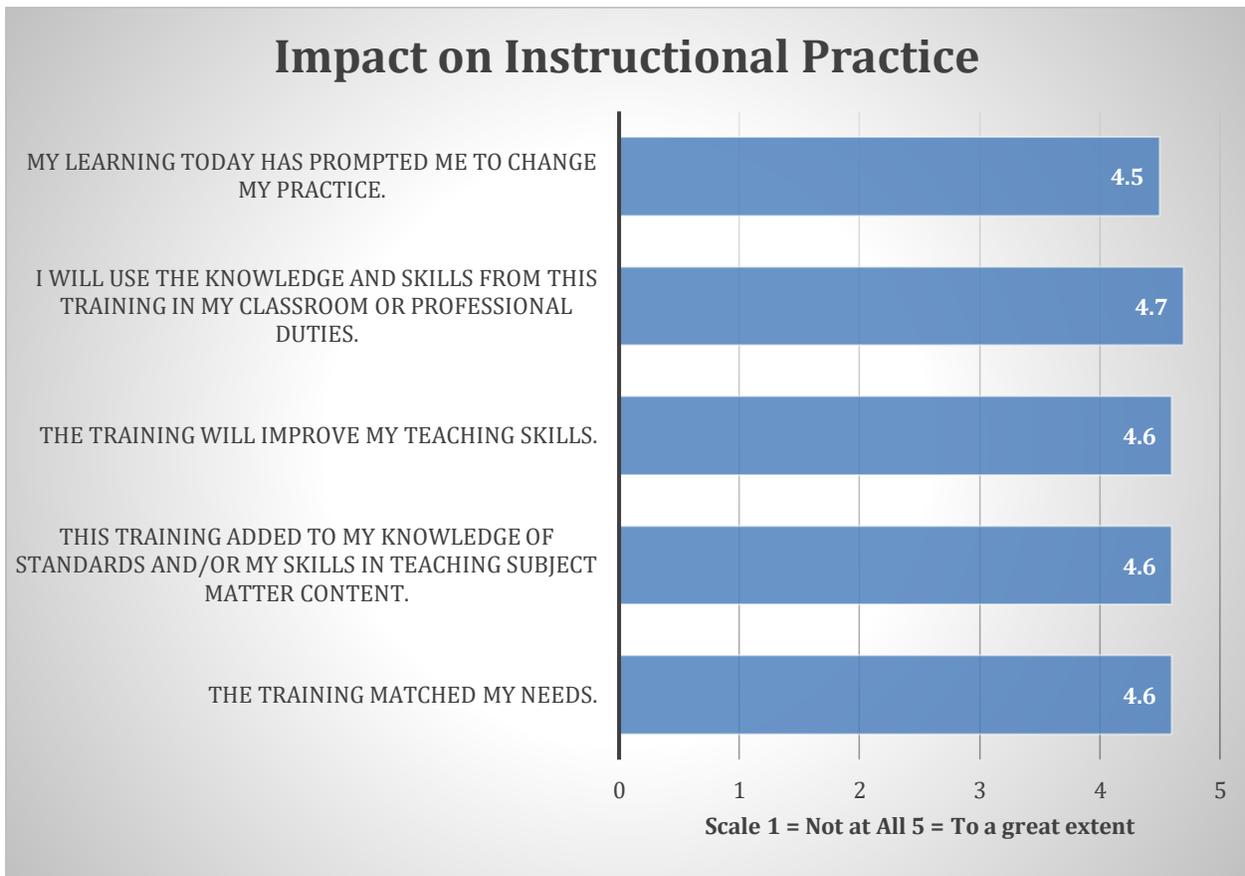
**Evaluation and Reflection Analysis Data Results.** Transferring new understandings is essential in strengthening practice. The data indicate integration of understandings acquired during the Fellowship had a notable impact on fellows' practice. In evaluations and reflections, fellows noted 201 times how the Fellowship would impact the design, methods, and strategies used in their instructional practice (See Table 9). The 22-percentage point difference between the number of references of impacts on instructional design to the number of references to instructional strategies will inform next steps in supporting fellows.

*Table 9: Impact on Instructional Practice: Evaluation and Reflection Themes and Occurrences*

<b>Theme</b>	<b>Number of Occurrences</b>	<b>Reflection Excerpt Example</b>
<b>Instructional Design</b>	86	<i>The matrix will be an excellent tool to use to make sure I am hitting all DOK's as wells as Bloom's Taxonomy in my instruction. Doing so would give students a more well-rounded understanding.</i> 6th grade Math Fellow
<b>Instructional Methods/ Concepts</b>	72	<i>I learned that I am not allowing my students adequate time to explore, therefore struggle with new topics, concepts, and ideas. I "baby" students too much....I have to let kids struggle.</i> 7th grade Math Fellow
<b>Instructional Strategies/ Resources</b>	43	<i>[I will be] using the coherence map to help me identify the gaps my students may have and the Digital Library to find the resources needed for intervention.</i> 8th grade Math Fellow

**Presentation Data Results.** One-hundred percent of the fellows' presentations included concepts and/or strategies addressed during the Fellowship evidencing impact on instruction. These results are significant and illustrate the learnings acquired in the Fellowship translated to instructional practice as shown in Figure 13.

**Questionnaire Statement Data Results.** One hundred percent of fellows’ mean ratings on each of five questionnaire statements indicated the Fellowship impacted instructional practice to a great extent with all statements receiving a rating of 4.5 or greater. These results corroborate evaluation/reflection comments and presentation evidence data.



*Figure 13: Impact on Instructional Practice*

### **Impact on Student Achievement**

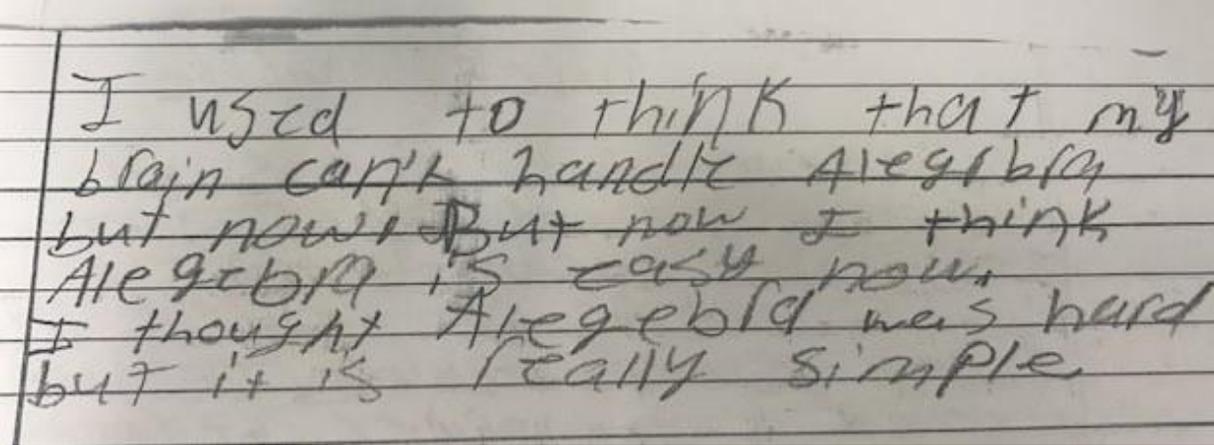
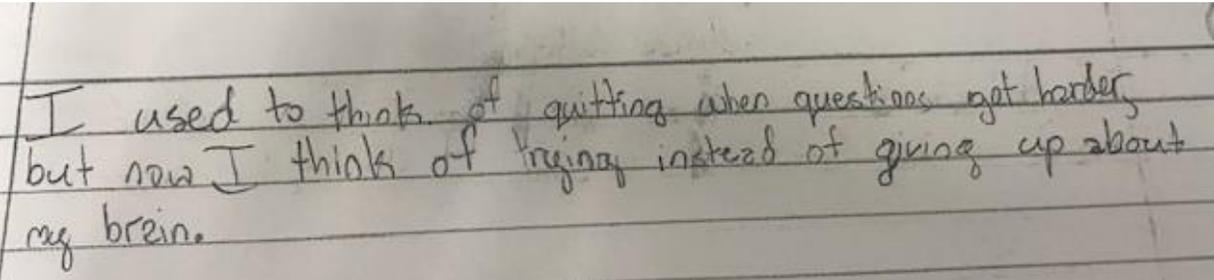
**Evaluation and Reflection Analysis Data Results.** Increased understandings lead to impacts on instructional practice, which lead to impacts on student achievement. Although it was not possible to make comparisons of SBAC 2017-2018 testing results to 2018-2019 testing results due to 2018-2019 results not being reported at time of publication, the reported data indicate the Fellowship impacted student learning. Fellows referenced impacts on student learning 94 times on evaluation and reflection comments from the five sessions. The references in Table 10 indicate how implementation of learning is and will impact student learning.

Table 10: Reference to Impact on Student Learning

	Number of Occurrences	Reflection Excerpt Examples
Reference to Impact on Student Learning	94	<p><i>I have noticed more ownership in my classroom of their work. 6th grade Math Fellow</i></p> <p><i>My students will learn how to <u>think</u> through math problems and gain a better understanding. 7th grade Math Fellow</i></p> <p><i>This will help my students make more connections and better relate to concepts. 8th grade Math Fellow</i></p>

**Presentation Data Results.** One hundred percent of the presentations by the fellows included explanations of and/or student work evidencing impact on student learning, mirroring patterns in the evaluations’/reflections’ commentary and questionnaire statements data. Table 11 shows student work samples.

Table 11: Fellows' Presentation Data: Student Work Sample Analysis

Fellows' Presentation Data: Student Work Sample Analysis
<p>Sample A</p>  <p>I used to think that my brain can't handle Algebra but now I think Algebra is easy now. I thought Algebra was hard but it is really simple.</p>  <p>I used to think of quitting when questions got harder but now I think of trying instead of giving up about my brain.</p>

Sample A reflects implementation of learnings from sessions on productive struggle and Jo Boaler's MidSchoolMath 2019 Conference presentation on growth mindset and the impact of fellows' learnings on students' mathematical dispositions.

Sample B

Diagram: A cylinder with height 8 and radius 10. A number line from 0 to 18 with points at 8 and 10. A diamond-shaped diagram with  $P + 8 = 18$ .

story

luis had  $P$  rocks. He went on an adventure and got 8 more. How many rocks did he start with?

calculate

$$P + 8 = 18 - 8$$

$$P = 18 - 8$$

$$P = 10$$

Diagram: A rectangular prism with dimensions 1500, 250, and 625. A label on the front face says  $60 \text{ ft}^2$ . A label on the top face says  $250 \text{ ft}^2$ .

PAINT  
1 gallon  
Cobalt gold Pre-primed  
fireside cherry transparent  
enamel stain and seal  
covers 400 square feet maximum

$$\begin{array}{r} 2312.5 \\ 625 \\ + 937.5 \\ \hline 1500.5 \\ \hline 2437.5 \\ \times 2 \\ \hline 4875.0 \end{array}$$

Sample B reflects implementation of learnings about conceptual understandings, rigor, modeling and the impact of fellows' learnings on students' connections between conceptual understanding, procedural skill, and application.

**Questionnaire Statement Data Results.** One hundred percent of fellows’ mean ratings on the two questionnaire statements related to student performance indicated the Fellowship had a significant impact on student achievement as both statements received ratings above 4 as shown in Figure 14.

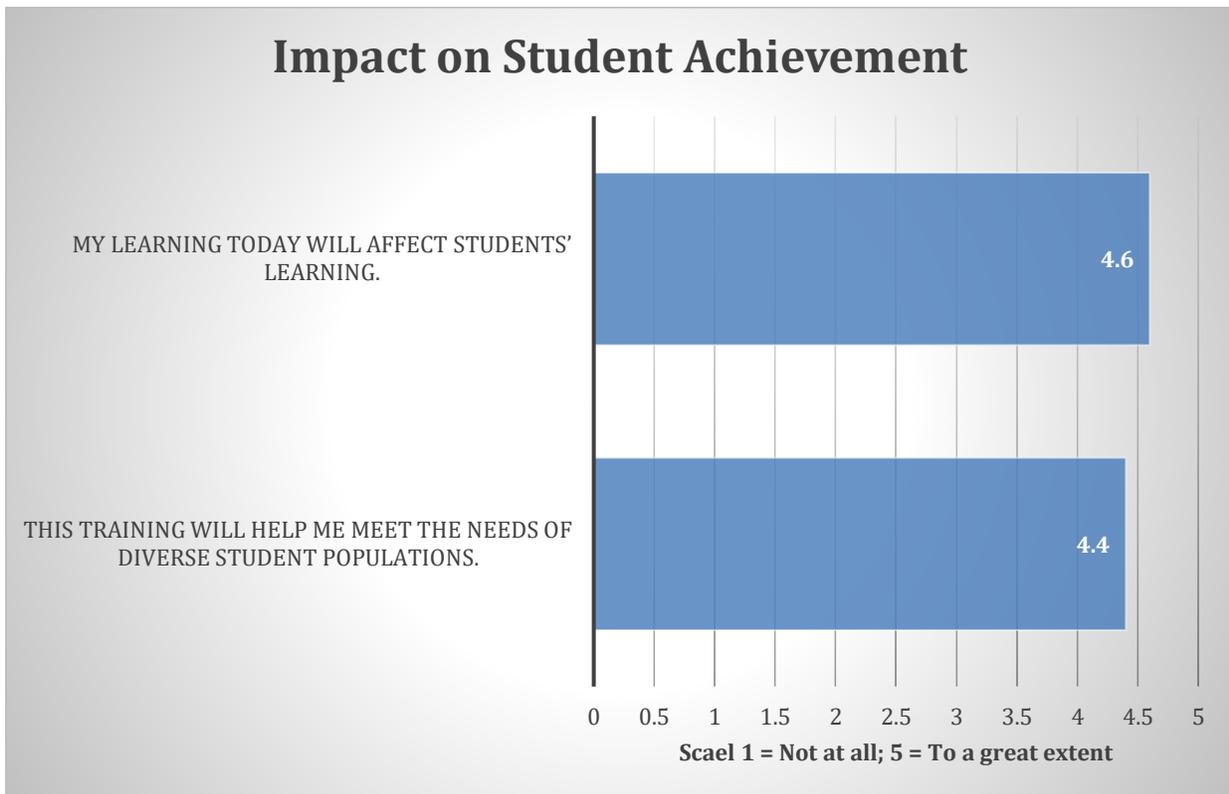


Figure 14: Impact on Student Achievement

### Impact on Student Achievement: Excerpts of Fellows’ Reflections of Learning Implementations

*I used to think that students just needed to solve their warm-up or entry task using a standard algorithm, but now I think that with minimal explanation of the task, students critically think to define the task and solve using a method that makes the most the sense to them!* 6th grade Math Fellow

*I previously felt that math needed to be just practicing the same thing repeatedly to ‘get’ the correct steps. I now feel that students need to make a connection to the math they are doing for them to really understand and conceptualize the math.* 7th grade Math Fellow

*It was interesting to see what the groups struggled with ...those who have a hard time with procedural have to rely on the conceptual for understanding...for me it will change how I approach a new concept. I will start with the conceptual understanding first through a problem, task, or story...”* 6th grade Math Fellow

## Conclusion

The Fellowship was designed to address the crisis in middle school mathematics by specifically targeting facets related to the SBAC structures and rigor. As the data indicate, the Fellowship was largely successful in meeting the goal to impact understandings to inform and strengthen practice in order to impact student achievement. However, five sessions and a conference are insufficient in providing the supports necessary to stop the downward trend of middle school students' performance levels in mathematics. It is but the first of many steps that need to be taken to achieve Nevada's goal to increase mathematics proficiency rates from a 27% baseline proficiency to 46% proficiency by 2022. With key understandings in place, next steps include further work with fellows on synthesizing the understandings by designing, implementing, analyzing, and refining instructional episodes. This will occur in the Middle School Math Fellowship Year 2 during the 2019-2020 school year.

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## **NNRPDP National Board Certification Cohort: Year Two**

Improvement of educator's instructional practice, including professional responsibilities as a teacher-leader and reflective practitioner are goals identified in the Nevada Educator Performance Framework (NEPF). These goals align with the National Board for Professional Teaching Standards (NBPTS) qualities of accomplished teachers. National Board Certified Teachers (NBCTs) are recognized for meeting the highest standards in the profession. Five core propositions create the foundation for National Board Certification. The first four propositions focus on what accomplished educators should know and be able to do regarding instructional practices. The fifth proposition addresses teachers as members of a learning community assuming leadership roles and responsibilities.

Successful certification requires that candidates engage in scrupulous reflection of their content and pedagogical knowledge as well as their students' achievement. Students of NBCTs achieve at higher levels than non-board-certified teachers (i.e., Horoi & Bhai, 2018). Studies also confirm NBCTs adopt leadership roles in their schools and districts (i.e., Quinzio-Zafran & Wilkins, 2018) with their most significant leadership roles supporting student and teacher learning and a collaborative culture (Swan-Dagen, Morewood, & Smith, 2017). Most recently, data suggest cooperating teachers who are also National Board Certified were most effective in providing feedback to student-teachers preparing for the edTPA, a performance-based assessment for teacher candidates (Kissau, Hart, & Algozzine, 2019).

Given the highly rigorous certification requirements, it is not surprising candidate attrition rate has been reported at 37% to 55% (Coskie & Place, 2008; Sato, Wei, & Darling-Hammond, 2008). Therefore, establishing a cohort-structured learning community of teacher candidates in northeastern Nevada may be an essential support for strengthening candidate resolve to complete the process. The National Board Certification Project, (NBC Project) developed by the Northeastern Nevada Regional Professional Development Program (NNRPDP) was designed to support a cohort of educators on their journey to earn National Board Certification or renewal of certification. Specifically, support was provided for participants to examine their teaching practice, analyze results of that practice, and implement necessary change in accordance with National Board Certification component requirements.

### **Instructional Context**

The second year of implementation FY19 cohort participants were engaged in multiple GTLF (Great Teaching and Leading Fund) learning opportunities required by their respective districts. Given these district initiatives, many teachers admit feeling overwhelmed and unlikely to take on additional professional development. As a possible consequence, a year-two survey (2018) of northeast region educators indicated 33 teachers, compared to 67 teachers the previous year, were interested in obtaining National Board Certification.

When the reality of the rigor of the National Board expectations was understood and personal time values aligned, similar to year one, many of the year-two educators chose to discontinue the certification process. All but two indicated they would like to try again with our support in the future, but for a variety of reasons were unable to continue at the time. Reasons included new positions (teacher to administrator), family crisis, time to devote to the process, and “too much work to certify”.

### **Initial Data and Planning**

Despite existing demands on teacher time related to professional development, NNRPDP coordinators were encouraged by others in both Clark and Washoe counties already providing cohort support for NBC candidates to promote the benefits of National Board Certification and provide support for any teachers in our region wishing to work toward certification. Recognizing the positive outcomes for teachers as leaders and student achievement related to NBCTs, we applied for and were awarded our own GTLF grant to provide support for teachers similar to what was being offered to NBC candidates in other parts of the state.

The grant was written to fund a two-year project. Year 1 (2017-18) included support for up to twenty-five teachers in the northeast region (White Pine, Eureka, Humboldt, Elko, Lander, and Pershing school districts) to complete Components Two and Four of the four-component assessment portfolio requirement for National Board Certification. In Project Year 2 (2018-19), the same educators from year one were invited to continue with the cohort to complete Components One and Three, while twenty-five additional teachers were offered the opportunity to begin their Components Two and Four. Therefore, two separate cohorts of educators were supported in Year Two.

Similar to year one of this two-year project, outcomes from year two of the NBC Project were three-fold. First, participants would feel supported while working through the component requirements. Second, participants would change their instructional practice according to component requirements. And, third, participants would grow as teacher-leaders. Additionally, the year two outcomes address two groups: Cohort One (those starting the certification process during the first year of the project and continuing during year two) and Cohort Two (those starting the certification process during the second year of the project).

### **Learning Design**

Given the vast geographical distances between school districts, Interactive Audio Video (IAV) was used for synchronous class attendance in combination with Google Drive tools for shared digital documents and access to agendas and session slides. To facilitate two cohorts simultaneously, the NNRPDP Coordinators working with Cohort One during year one each took charge of one cohort during year two.

Jumpstart events were planned for both cohorts. The Jumpstart days were targeted for intense investigation into the requirements and expectations for the component and to set goals, create plans, collaborate with colleagues, and consider evidence needed. See Appendix A for an example Jumpstart agenda. The Jumpstart for Cohort One focused on component three requirements. Cohort Two included two Jump Starts: the first focused on component two requirements, and the second focused on component four requirements. In between Jumpstart events, eight support workshops were planned, one each month in order to provide feedback, revise implementation plans, build community, and create accountability. See Appendix B for an example support workshop agenda. Finally, in between support workshops, coordinators sent an email blast to participants with tips, reminders, and encouraging comments. See Appendix C for an example email blast.

### **Cohort One Details**

Cohort One started with five of the seven educators who completed year one. The two educators who did not return included a renewal candidate successfully renewing and a first-time candidate who successfully completed all four components earning certification that year. After receiving less-than-desirable scores from the year one completed components (December 2018) two of the remaining five Cohort One members decided to discontinue the certification process.

Thus, Cohort One in Year 2 was comprised of three educators, one high school teacher from Humboldt County School District (joining each meeting using the virtual meeting software ZOOM) and two elementary teachers, one from Elko County and one from the charter school in Elko. These three participants indicated having seven to eleven years of teaching experience and reported spending two to five hours a week as a teacher leader.

The NNRPDP Cohort One facilitator, living in Elko, joined the two local educators at a provided meeting location where they would virtually interact with the Humboldt County School District teacher.

### **Cohort Two Details**

Cohort Two began with nine educators. Four educators were located in White Pine County and five were spread across Elko County in West Wendover, Wells, Spring Creek, and Elko. Three educators discontinued cohort membership after the initial Jumpstart recognizing they did not have time to complete the component requirements.

Thus, Cohort Two in Year 1 was comprised of six educators including two high school teachers, one from Elko and one from Wells, and one middle school teacher from Wells. The three remaining teachers were from White Pine and were teaching at the elementary level. These six educators indicated having a range from five to over 21 years of teaching experience. Four of the six did not consider themselves teacher leaders. The other two teachers reported spending three to four hours a week as a teacher leader.

The NNRPDP Cohort Two facilitator interacted with the Cohort Two members using IAV. The Cohort Two facilitator, living in White Pine County, joined the meeting from Ely. If the facilitator had been working in either Wells or Elko for the day, she would stay late to join the Cohort Two teacher(s) in that location.

### **Measurement**

The following section is organized into three sections based on project outcomes and associated measurements: assisting teachers, instructional practice, and teacher leadership.

#### **Assisting Teachers**

Outcome one: participants feel supported while working through the component requirements. Each Jumpstart and support session concluded with time for participants to complete a five-point Likert scale questionnaire to address participant knowledge and understanding. Questions providing data for outcome one included a) This training added to my knowledge of standards and/or my skills in teaching subject matter content, b) I will use the knowledge and skills from this training in my classroom or professional duties, and c) The training will improve my teaching skills. The questionnaire also included a short-answer written reflection related to outcome one.

#### **Instructional practice**

Outcome two: participants will change their instructional practice according to component requirements. During each session participants completed a written reflection questionnaire related to the given component. The questionnaire asked teachers to report if they had refined an existing instructional practice or tried a new instructional practice related to component requirements. They also reflected on what they might do differently if they used the given tool or approach again.

#### **Teacher leadership**

Outcome three: participants will grow as teacher-leaders. A pre/post Teachers as Leaders survey (Swan-Dagen, Morewood, & Smith, 2017) was used to measure participant self-reported leadership experiences. This survey is divided into seven domains: Domain One, fostering a collaborative culture to support educator development and student learning; Domain Two, accessing and using research to improve practice and student learning; Domain Three, promoting professional learning for continuous improvement; Domain Four, facilitating improvements in instruction and student learning; Domain Five, promoting the use of assessments and data for school and district improvement; Domain Six, improving outreach and collaboration with families and community; and Domain Seven, collaborates with colleagues. In addition to these domains there is a final section about teacher beliefs related to leadership.

### **Results and Discussion**

The following section is organized into three sections each addressing data from both Cohort One and Cohort Two. For identification purposes, these sections have been given the following labels: assisting teachers, instructional practice, and teacher leadership. Cohort One, year two is identified as C1Y2. Cohort Two, year one is identified as C2Y1.

**Assisting Teachers**

The data suggests the NBC Program accomplished outcome one, participants feel supported while working through the component requirements. On average, both Cohort One and Cohort Two members reported high satisfaction for having their needs met. Similarly, they reported ample opportunities for interaction and reflection in a setting enhanced by the quality of training. Table 12 shows each question and its corresponding score based on a five-point Likert scale.

*Table 12: Question Statements and Associated Scores*

Question Statement	C1Y2	C2Y1
The training matched my needs.	4.9	4.8
The training provided opportunities for interactions and reflections.	5	4.8
The presenters’ experience and expertise enhanced the quality of the training.	5	4.8

**Instructional Practice**

The data suggest the NBC Program accomplished outcome two, participants will change their instructional practice according to component requirements. Seven of the eight responses collected from C1Y2 while working on component three indicated a change in instructional practices. As an example, see the following participant reflection:

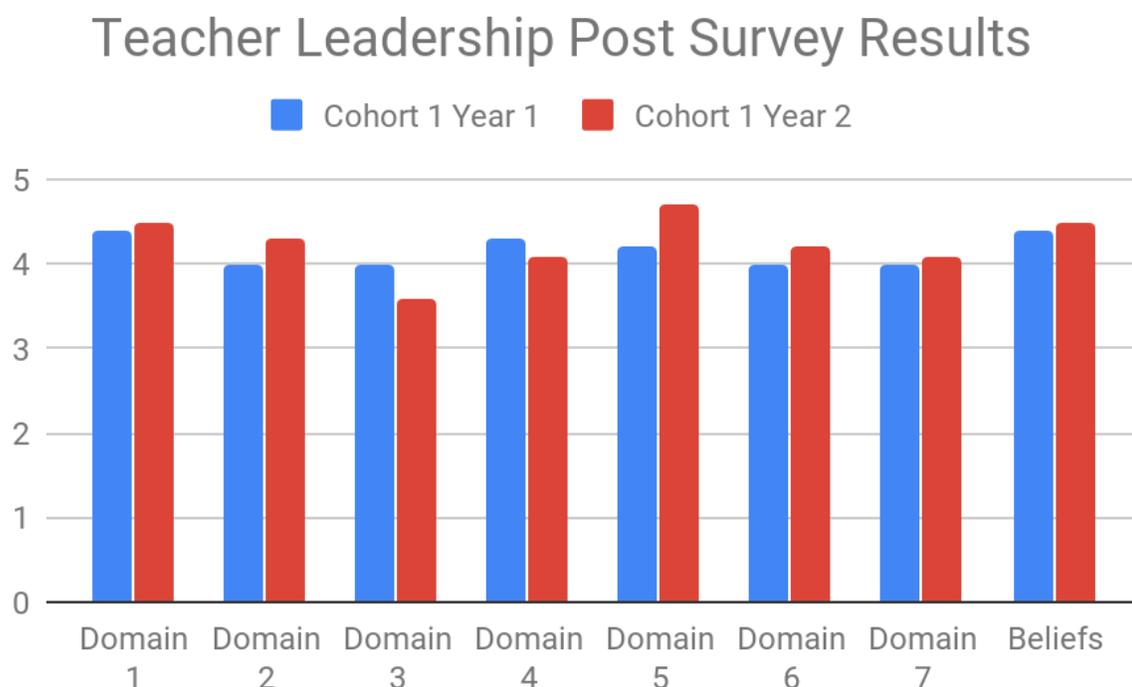
I have fully implemented the engineering design process and given students the ability to rebuild based upon their observations. I also implemented prices with the materials, which completely changed the process to science engineering based, to an added math component. During the rebuild, I changed the parameters for students to build their prototype. In the future, I think changes would depend on the specific lesson. I have also refined an existing approach. Also, I have changed how students interact with one another. My students were having a difficult time taking turns when speaking. Through collaborative projects, it has helped me see how to readjust learning engagement so all students have equitable say in the learning process.

The data for C2Y1 suggest the NBC Program did not accomplish outcome two, participants will change their instructional practice according to component requirements. It

appeared the only time cohort members gave any attention to the NBC components was during cohort meetings each time still developing an understanding of the component requirements. After completing five of the ten planned sessions, all six C2Y1 members reported a desire to discontinue their certification efforts. Two reported personal reasons related to home and family while the other four reported feeling overwhelmed with local work expectations.

### Teacher Leadership: Cohort One Only

Note that the teacher leadership post data for Cohort Two were not collected. Therefore, this section will only address data reflecting teacher leadership changes between year one and year two of the three Cohort One members.



*Figure 15: Teacher Leadership Post Survey Results*

Comparing teacher leadership survey data between year one and year two suggests Cohort One educators increased in their teacher leadership experiences over the two-year cohort experience in all domains other than Domains Three and Four. Figure 15 provides a comparison of survey results between years.

Generally, C1Y2 data indicate an increase in teacher leadership related to six of the eight reported categories. These six leadership areas include a) fostering a collaborative culture, b) accessing and using research, c) promoting the use of assessments and data for school and

district improvement, d) improving outreach and collaboration with families and community, e) advocating for student learning and the profession, and f) a belief in self as a teacher leader.

Specific survey items with decreased scores in Domain Three include a) facilitates professional learning among colleagues, b) provides constructive feedback to colleagues to strengthen teaching and improve student learning, and c) identifies/uses appropriate technologies to promote collaborative differentiated professional learning.

Specific survey items with decreased scores in Domain Four include a) uses knowledge of existing and emerging technologies to guide colleagues in helping students skillfully and appropriately navigate the universe of knowledge available on the Internet, use social media to promote collaborative learning, and connect with people and resources around the globe, and b) promotes instructional strategies that address issues of diversity and equity in the classroom and ensures that individual student learning needs remain the central focus of instruction.

These two decreased score results are not surprising given the second-year component focused on the individual teacher and analysis of their teaching. Less emphasis was placed on collaboration with colleagues and the integration of technology, both emphasized in the components from year one. Additionally, these experiences require opportunity, confidence, and a deep understanding of Internet technologies used for teaching and learning as well as issues of diversity and equity. These lower self-report scores may indicate a deeper awareness of knowledge in these areas, thus recognizing what they are not yet doing in their classrooms.

### **Conclusion**

The National Board Certification Project, (NBC Project) developed by the Northeastern Nevada Regional Professional Development Program (NRRPDP) was designed to support two cohorts of educators on their journey to earn National Board Certification or renewal of certification. Specifically, support was provided for participants to examine their teaching practice, analyze results of that practice, and implement necessary change in accordance with National Board Certification component requirements.

The data for Cohort One suggest the NBC Project clearly achieved the three intended outcomes. The educators felt supported while working through the component requirements and reported changing their instructional practice according to component requirements. Additionally, the Cohort One members grew as teacher-leaders over the two-year process.

The data for Cohort Two suggest the NBC Project clearly achieved the first intended outcome: participants felt supported while working through the component requirements. Due to limited data, it is unclear if the participants changed their instructional practice according to component requirements or grew as teacher leaders.

There are a number of conjectures regarding the attrition rate of Cohort Two. Although these teachers reported feeling supported (the first intended outcome), this particular group, during this particular year, required more than feeling supported. After personal conversation with NBC cohort facilitators in both Clark and Washoe counties, they also reported an unusually high attrition rate among participants this year.

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## Supporting New Teachers

Elko County School District (ECSD) has long recognized that a “sink or swim” attitude toward teachers new to the profession and/or new to the district is not ideal for teacher retention and fulfillment. The RISE (Retain, Induct, Support, Encourage) program for new teachers, provided through a partnership between ECSD and Northeastern Nevada Regional Professional Development Program (NNRPDP), has been in effect for at least a dozen years with revisions to fine-tune the program along the way.

This focus of supporting new teachers aligns with one of three state-level priorities identified during Nevada’s 2015 legislative session (SB474), that of recruiting and retaining effective teachers. Research supports the idea that providing induction and mentoring for new teachers increases retention (Ingersoll, 2012, Smith & Ingersoll, 2004). High-quality induction programs not only increase retention, but they are also linked with increased teacher effectiveness and student achievement (Strong, 2006).

The umbrella goal of RISE is effectively communicated through the acronym - it is to **retain** newly-hired teachers through an **induction** program that provides **support** and **encouragement**. With that goal in mind, NNRPDP coordinators provided a week-long RISE Induction for new teachers prior to the start of school and facilitated a mentor component providing support to mentors who then provided support to new teachers at their school sites. These two components helped teachers navigate the essential workings of the district and their schools, understand and implement high leverage pedagogical standards, and receive ongoing, job-embedded support throughout the school year.

## Instructional Context

Elko County School District employs over six hundred teachers, hiring an average of 54 teachers each year over the past decade. Fifty-three new teachers were hired for the 2018-2019 school year. These new hires teach in fifteen rural and semi-rural schools filling an array of positions in grades K-12 including regular education teachers in all disciplines, special education, music, PE, and library. They teach the district’s student population including those with identified learning disabilities (nearly 13% with IEPs), those who speak English as a second language (10%), and those facing the challenge of poverty (nearly 40% free and reduced priced lunch eligible).

With nearly 10% of the teaching force being new to the district each year, a strong start and robust support is essential.

## Initial Data and Planning

In partnership with ECSD, NNRPDP continued the RISE program in 2018-19 with teachers newly hired by the district. This effort coincides with a statewide focus on recruiting

and retaining effective teachers. Both the week-long RISE Induction prior to the start of school and the ongoing site-based mentoring support have received overwhelmingly positive reviews from past participants. Data collected in 2016-17 indicates RISE was a valuable experience for both newly hired teachers and their mentors. In a 2016-17 survey, 100% of participants rated the experience of the 5-day institute prior to the start of the new school year as positive.

*This has been some of the best PD I have had. Very relevant and useful. No time was wasted and we felt very welcome. I like how everything being used, including the format, can be used in my classroom. I appreciate time spent sharing ideas with other teachers.*

*This...work has been extremely useful in numerous ways, first off, it's great to get to know other teachers in Elko County and begin networking.*

Regarding the impact of site-based mentor support, participants had only positive reviews:

*I was extremely lucky to have a mentor that was not only checking on my teaching skills, but cared about how I was doing personally as well.*

*RISE has been a positive experience. It is comforting to know that I could always count on my mentor for advice or just having someone to bounce ideas off of.*

Additionally, 100% of mentors reported that mentoring newly hired teachers had a positive impact on them professionally and that they found value in their role, growing as colleagues and professionals.

*I appreciated this experience, and I was grateful for the opportunity to be a school mentor. It is humbling, but also wonderful professional development for me. I believe in a shared leadership model; and, once again, RISE (NNRPDP) delivered a quality program.*

*This opportunity has been wonderful for both myself and my mentees. They have grown more comfortable throughout the year coming to me with questions and in many cases, we are seeking the answers together. It has really helped to create a better sense of community within our school.*

At the end of the 2017-18 school year, NNRPDP coordinators brought mentors together to brainstorm possible ways to make RISE more effective for teachers. Many questions were posed, and ideas were discussed, and at the end of the session, one mentor summed up the feelings of the group, "Why do you want to change RISE...it's working!" With that in mind,

NNRPDP facilitators planned 2018-19 RISE with the same structure as in the prior two years with only a few small updates.

### **Learning Design**

Keeping in mind the overarching goal of RISE, to support and encourage new teachers, and knowing that effective support and encouragement includes a variety of structures at multiple levels, NNRPDP facilitators planned to support new teachers through the implementation of two major components: 1) the week-long RISE program prior to the start of school, and 2) providing support to site-based mentors by establishing a mentor community and facilitating sessions at regular intervals throughout the school year.

#### **Part I: RISE Induction**

Prior to the start of school, newly-hired teachers gathered at the Elko High Tech Center for a week-long induction. With the exception of one full day mid-week at the school site, each day followed a predictable schedule designed to provide engaging pedagogical content, coordinated opportunities for connections and networking on multiple levels, and pertinent information regarding the practical details of working in the state of Nevada, specifically Elko County School District.

**Content.** Since Nevada Academic Content Standards vary for each educator depending on the content and grade level they teach, participants were given focused time to locate and delve into the content standards applicable to them. This content was presented as the “what” to teach. Pedagogical content regarding “how” to teach included a dive into each of the five high-leverage instructional standards and indicators comprising the Nevada Educator Performance Framework (NEPF) which Nevada educators are expected to implement and by which they are evaluated. As a practical companion providing ways to implement the NEPF instructional standards, facilitators engaged participants in Ron Ritchart’s work with Project Zero at Harvard’s Graduate School of Education outlined in the book, *Creating Cultures of Thinking*. The morning content continued with what NNRPDP facilitators call “ready to roll” -- a practical piece where teachers think through and plan for necessary routines and procedures and anticipate the whirlwind of the first weeks of school.

**Connections.** Fostering connections between new teachers and assigned mentors has become an integral part of the RISE program. This began on the afternoon of day two when each site-based mentor met with the teachers new to that school, facilitating a short productive meeting. The following day new teachers spent the day with their assigned mentors at their school sites becoming familiar with the school, setting up their classrooms, and meeting others at the school with whom they will spend the year working closely. NNRPDP provided mentors a comprehensive checklist to ensure that each new teacher received pertinent information concerning the complex details and systems particular to their school.

NNRPDP facilitators orchestrated networking sessions for new teachers to get to know other newly-hired teachers, those in their same grade level, at their school sites, and throughout the district, as well as mentors, administrators, and district office personnel. These networking sessions occurred in “walking meetings” where participants usually left the building to get some sun while discussing a provocative question such as “What is one of the most important words in education today, and why do you think so?”

To create a bridge between district office personnel and new teachers, each day began with a welcome from administration starting with the superintendent, assistant superintendent, and directors of curriculum and special services so teachers begin to recognize names and faces and know that those individuals are approachable and accessible. Assigned school site mentors, school administrators, school board members, and district office staff were invited to attend RISE and, despite busy schedules, often sat in for a session or two.

One session new teachers participated in, “hot topics”, is a segment which both new teachers and NNRPDP facilitators have come to anticipate. During this session, new teachers rotated through short roundtable discussions facilitated by principals and mentors from throughout the district. Each roundtable discussion focused on timely topics including collaborating with colleagues, priorities for the first six weeks of school, and building relationships with families and the community.

On the final day of the RISE program, newly-hired teachers were treated to a luncheon, hosted at a local venue, where they were joined by their school site administrators, mentors, and school board members. Participants were given certificates recognizing their attendance and participation as well a monetary stipend from the district recognizing the time devoted to RISE providing support for what could be a long stretch of time between regular paychecks. Additionally, to help new teachers with the licensure renewal process, the district obtained continuing education credits for new teachers who participated in all five days of RISE.

**District Details.** Each afternoon, participants completed required “district details” including training in harassment and boundary policies and Olweus (anti-bullying) training, as well as becoming familiar with district Special Education policies and procedures, employee portal housing information and records, state retirement program, district health insurance, online grading system, and teachers’ association (which they were invited to join).

## **Part II: Supporting Site-Based Mentors**

Mentors for each school were chosen by the administrator at that school. The mentors received support from NNRPDP coordinators and they, in turn, supported newly-hired teachers at their schools. Mentors, who were paid a stipend by the district as a token of appreciation for

the often-extensive amount of extra work required in their role, came together for an initial face-to-face orientation provided by NNRPDP coordinators during the week of RISE.

**Critical Friends Groups.** Critical Friends Groups (CFG) are a protocol-driven form of Professional Learning Community (PLC). Based on past success, NNRPDP coordinators chose to implement Mentor CFGs as the vehicle for regular professional mentorship and collaborative support for mentors who, in turn, facilitated RISE CFGs for new teachers at their school sites. The effectiveness of CFGs is dependent upon participants' voluntary attendance; therefore, new teachers were not required to attend; rather, mentor teachers developed relationships with new teachers inviting and encouraging them to attend.

**Cycles of Support via Zoom.** The community of mentors participated in cycles of support spaced over the course of the year. In previous years, mentors met face to face for CFG meetings, but this year, following the initial face-to-face orientation meeting to begin establishing a professional mentor community, they met via the online synchronized Zoom meeting platform. In Mentor CFGs, NNRPDP coordinators supported mentors in their role with new teachers while modeling effective facilitation of protocols which mentors then used to facilitate new teacher CFGs at their school site. Each cycle consisted of:

- attending an online synchronous mentor CFG facilitated by NNRPDP;
- facilitating a face-to-face new teacher CFG modeled after the one they experienced with NNRPDP coordinators at their school site; and
- reflecting on the CFG experience.

**Protocols.** In order to provide relevant support and consistency, the coordinators chose to include two components in every CFG which mentors then replicated in the CFG they facilitated at their school. Since all teachers benefit from reading and discussing worthy professional literature, and all teachers face dilemmas and benefit from collaborative support to resolve, each two-hour CFG agenda included two main parts:

1. Processing a relevant professional text using a CFG protocol such as The Three Levels of Text Protocol (adapted from National School Reform Faculty), the purpose of which is to deepen understanding of a text and explore implications for participants' work, or processing a text using "thinking routines" described in the text, *Creating Cultures of Thinking*.
2. Processing a mentoring dilemma using The Consultancy Dilemma Protocol (adapted from National School Reform Faculty) which provides a structured process to help a participant see new possibilities for a dilemma they face.

After engaging in the Mentor CFG facilitated by NNRPDP coordinators, mentors scheduled and facilitated a RISE CFG with new teachers at their school. Like the mentor CFG, this on-site CFG included the following components:

1. Processing a relevant professional text (chosen by the mentor) using a protocol or thinking routine modeled in the mentor CFG.
2. Processing a teaching dilemma encountered by a new teacher using The Consultancy Dilemma Protocol.

**Responsibilities.** Principals, mentors, and NNRPDP coordinators shared responsibility for the job-embedded year-long support provided at each site. Detailing, sharing, and effectively communicating responsibilities for the mentoring support for new teachers is essential for success.

#### Principals

- Assign one or more mentors at their school site depending on the number of new teachers

#### Mentors

- Attend a face-to-face orientation and planning meeting prior to the start of school
- Provide an orientation and support new teachers at the school site prior to the start of school
- Co-facilitate “Hot Topics” discussion during the week of RISE
- Participate in online synchronous Mentor CFGs (Critical Friends Group) four times over the course of the year with other mentors to collaborate, plan, and experience protocols to use to assist new teachers
- Schedule, plan, and facilitate five face-to-face New Teacher CFGs over the course of the school year with new teachers at their school site(s)
- Share a written reflection on Google Docs for each of the five CFGs facilitated
- Provide ongoing support to new teachers as needed

#### NNRPDP Coordinators

- Facilitate an orientation session for mentor teachers prior to the start of school
- Facilitate four Mentor CFGs over the course of the school year which serve as a model for mentors to replicate at their school site
- Review and respond to reflections on CFGs and provide ongoing support for mentor teachers

### Measurement

Several measurements were used to determine the effectiveness of the 2018-19 RISE program. Data were collected from RISE participants and from RISE mentors in the form of surveys, questionnaires, and reflections.

#### RISE Participants

**Surveys.** RISE participants completed a 4-question survey at the end of the five days prior to school starting. This survey involved using a five-point Likert scale to rate the effectiveness of that component of the induction process in the following ways: 1) The training

will improve my teaching skills, 2) I will use the knowledge and skills from this training in my classroom or professional duties, 3) My learning today has prompted me to change my practice, and 4) My learning today will affect students' learning.

**Reflections.** Participants' reflections from both the five-day session prior to school starting and from the ongoing site-based support they received from their mentor gave the coordinators additional awareness of the effect of these two components of the RISE program.

### **RISE Mentors**

**Questionnaires.** RISE mentors completed an end-of-year questionnaire including open-ended questions to determine how their role as mentors was fulfilling and challenging and to determine the effectiveness of support provided by NNRPDP.

**Reflections.** RISE mentor reflections from each CFG they facilitated at their school provided rich anecdotal evidence of the success of this component.

## **Results and Discussion**

### **RISE Participants - Impact of RISE Induction**

RISE participants completed a survey at the end of the five days prior to school starting. This core component of the RISE program, while changing somewhat from year to year in substance, has remained much the same in structure. An analysis of responses to four survey questions and from open-ended reflections indicate that this component of RISE continues to have a meaningful, positive impact.

*I really enjoyed this process. Getting to know the people in the district and other new teachers. Also having this week and bringing much of the information I've learned in college all together to apply to the specific population here in Elko County has been beneficial for me, especially as a brand-new teacher.*

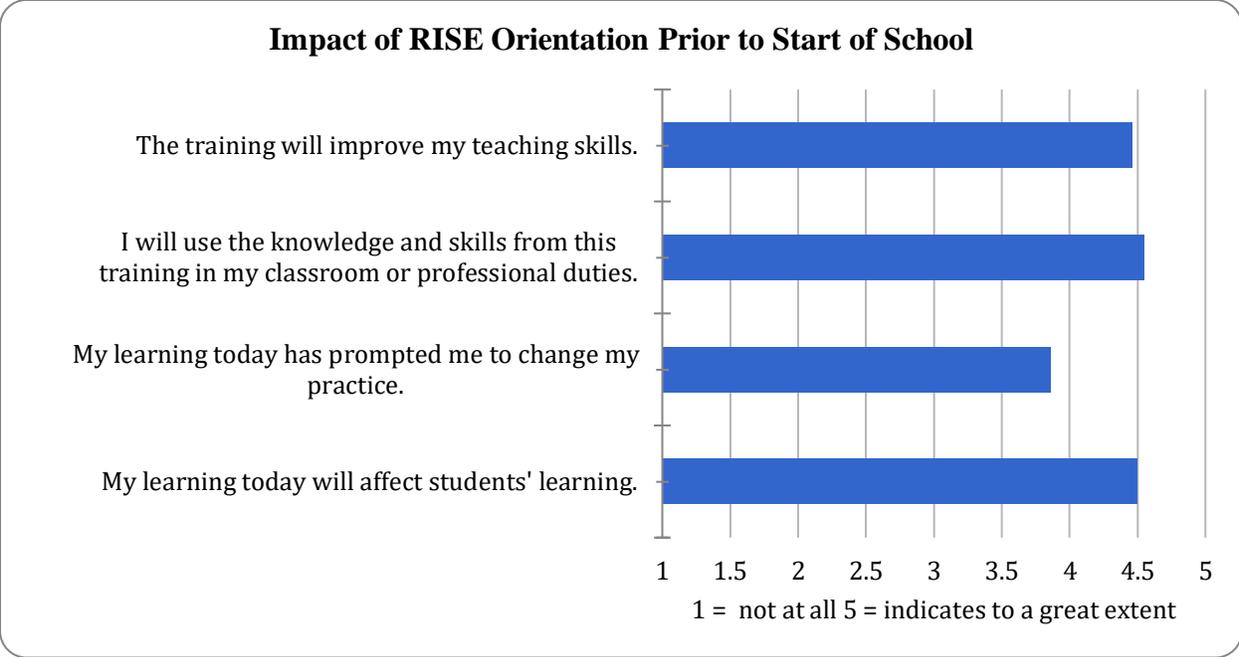
*RISE is beneficial to help in understanding the best practices for teaching.*

*Best thing I have seen in the State of Nevada.*

*Such a helpful training! Feel so much more prepared for the year!*

*I really enjoyed the interactions and discussion.*

*I'm exhausted, but super excited! I appreciate all the effort and time that went into planning and delivering RISE.*



*Figure 16: Impact of RISE Orientation Prior to Start of School*

On three of the four survey questions, 100% of RISE participants rated the impact in the 4 to 5 range on a Likert scale of 1–5, where a rating of 1 indicates not at all and a rating of 5 indicates to a great extent. The question receiving a score in the three range was “My learning today has prompted me to change my practice.” Since school had not yet started, and teachers were not actively teaching, this rating is understandable as shown in Figure 16.

On the same survey, participants were given the opportunity to respond to three open-ended questions. Question one asked, “From today’s session, what will you transfer to practice?” Forty-eight of the fifty-four participants responded, and four themes emerged reflecting the major components of RISE as shown in Table 13.

*Table 13: Themes Reflected in RISE Participant Responses*

<b>Theme</b>	<b>Examples</b>
Classroom Environment	<i>Building a culture of learning</i>  <i>Planning the last 5 minutes of class for group reflection</i>  <i>I will be more aware of the culture I am creating in my classroom</i>  <i>I will establish routines for my classroom</i>  <i>Not only focusing on classroom management, but more on student learning.</i>
Learning strategies and methods modeled throughout the week	<i>I loved all the methods modeled for learning...the walking meeting, the large post-it notes, the conga line, the give one, get one...</i>
NEPF	<i>Conscious application of NEPF</i>  <i>I need to really pay close attention to the NEPF standards and focus on those in my classroom.</i>
NVACS	<i>Becoming more familiar with NVACS and understanding them.</i>

**RISE Participants - Impact of Ongoing Site-Based Support**

RISE participants completed reflections at the end of each CFG meeting. These reflections were mined for correlation with NEPF standards, support and encouragement provided through CFG, comments directly related to mentorship, and lastly the emerging theme “teaching is hard”. It is important to note that there were no negative statements related to mentorship nor CFG meetings.

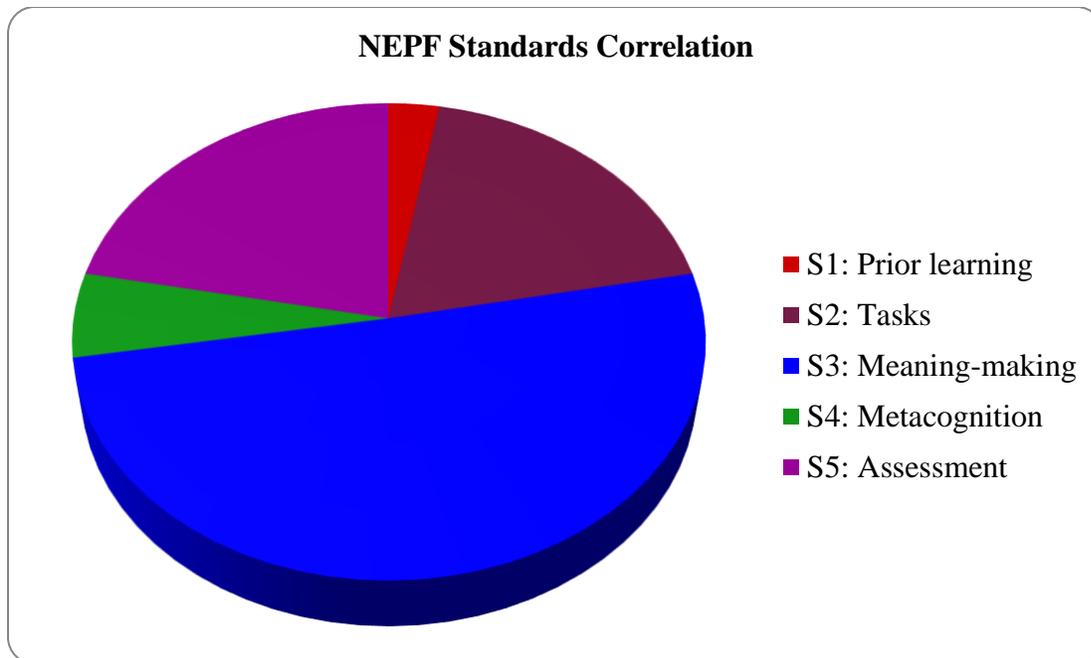


Figure 17: NEPF Standards Correlation

Teachers who participated in RISE CFG reflected on the experience following each meeting. Since a significant portion of the RISE program week focused on exploring and understanding the NEPF standards, the coordinator mined reflections for statements correlated to NEPF standards finding that many statements did indeed relate. Of the 105 total statements correlated to NEPF standards, half corresponded with standard three. Since this standard is about students making meaning through multiple representations, the coordinator included all references to strategies. Additionally, the fourth indicator for this standard references classroom environment and affective experience for students, so all statements related to establishing a positive classroom culture were included with this standard. The standard with the fewest corresponding statements was standard one dealing with activating and connecting new learning with prior learning and experience followed by standard four which focuses on metacognition. This data could indicate a need for greater focus on these two important aspects of teaching in the future (See Figure 17).

Aside from statements correlated to NEPF standards, two major themes emerged from RISE participants' reflections: 1) teaching is hard, and 2) mentors and regular CFG meetings provided necessary support and encouragement.

**Teaching is Hard.** *Being a teacher is hard, especially being a first-year teacher. Questions constantly run through my mind such as, "Did I choose the right profession?" "Am I doing good enough?" "Why do people keep asking me if I want to stay a teacher?" Being successful starts with yourself but also requires a lot of outside help from the principal, other teachers, and the community.*

*As a first-year teacher, I had so many things running in my head all at once. As soon as I got one thing done, something else came up. For a while, it felt like it was never-ending. I was at school from early morning until late at night trying to plan and make sure everything is ready for my students the next day...*

*It can be hard to step away from the daily stressors and put them into perspective, but it is key to making it through the harder parts of teaching. Networking and finding support is so important.*

*I need to be more aware of my verbal and nonverbal language. Sometimes it is hard to stay positive at the end of a long day.*

*My dilemma: how do you tell the difference between a struggling student versus an unmotivated kid?*

One participant spewed a laundry list of problems:

- *Not enough time to plan for 7 classes*
- *Canvas is clunky, slow, could use a search bar*
- *Still waiting on licensing*
- *[School Club] takes up too much time on activities that have little to no correlation to [my content].*
- *First year teachers apparently cannot be evaluated on student-driven data, even though we need to use it anyway.*
- *The computers are not able to run the software needed to develop the games.*
- *Students destroy the chairs*

...and ended his reflection with a single word goal: *survive*.

*First year teaching is overwhelming and requiring, suggesting, or even asking 1st year teachers to participate, help or act as an advisor for another club ... is too much. Duties get delegated down to the 1st year teacher, with little appreciation to what their course load looks like. This ongoing desire to use new teacher to fill holes in the organizations takes away from the teachers' ability to effectively teach. Goal: to limit - as much as possible - any additional involvement in clubs and organizations; it is not worth the pay, nor the sacrifice to the teacher's primary job which should be to focus on becoming an effective teacher.*

*My first-year teaching has been a rollercoaster ride. I have had highs and lows! I have had two big challenges. The first challenge was trying to find different ways to motivate all of my students. I definitely began the year naively, under the assumption that all*

*students wanted to be at school and do their best. My second challenge was trying to find a balance between teaching and family.*

*After my first formal observation, I was devastated. However, I learned from others, observed others, listened, took what was given to me and I changed. Got better. Each day I implemented something new, stuck to routines that worked, ditched what didn't. [Second] formal observation, I felt more successful. Got glowing feedback. Continued to learn and get better. 3rd observation felt ok, but it turned out great! I am STILL learning every day, keep what is working, change what doesn't.*

**Mentors and CFG Meetings Provided Support and Encouragement.** *[My mentor] has been patient, sharing and a fantastic listener. Many times, I figure a solution out while explaining the problem. In truth, she has been a fantastic mentor.*

*One of my ah-ha moments was taught to me by my mentor teacher. I want all of my students to think that they are my favorite. This has challenged me to learn how to put on a poker face when there are annoying behaviors and really look into what makes each child special and unique.*

*[My mentor] has been a great mentor - helping me navigate the ins and outs of teaching the first year. There was a lot of times I popped into her classroom unannounced and she always was open to discuss/address any questions or issues I have had.*

*I love coming to these meetings...I do not always feel like I have people to collaborate with because I am running around all day. I do not get a lot of interaction with other teachers.*

*It was helpful to get clarification on specific issues. I liked getting to work together to dissect and understand the reading.*

*I enjoyed the monthly meetings knowing that I would be getting great advice and have a scheduled time to reflect on the previous month because sometimes I would get really busy and forget to reflect on my own learning during the month until the meeting came around. It was also very helpful to hear other first year teachers' woes and know, even if I couldn't fix them, we were not alone in the daily struggles of teaching. This planned and guided reflection is something that I will continue on my own in the years to come and continue to develop my methods.*

*Looking back at the previous year and the RISE program, I am excited about my career choice. Of course, I don't feel like I have this all figured out. There are structural*

*problems, behavioral problems, and finding the zone of proximal development for each student while modeling a culture of learning is difficult....the main thing RISE taught me is I'm not alone in this. I have the support of my coworkers who are all struggling to perfect the imperfectable. I may not have it this year or next year, but we all struggle together toward a goal greater than ourselves.*

*RISE was very useful to me and I enjoyed listening to the struggles, victories, and experiences of the other new teachers. I gained useful information and new understanding on topics like classroom management, personal care, problem-solving, and student discipline. I felt supported and encouraged throughout the year, and I am glad that I had RISE to help me through the year.*

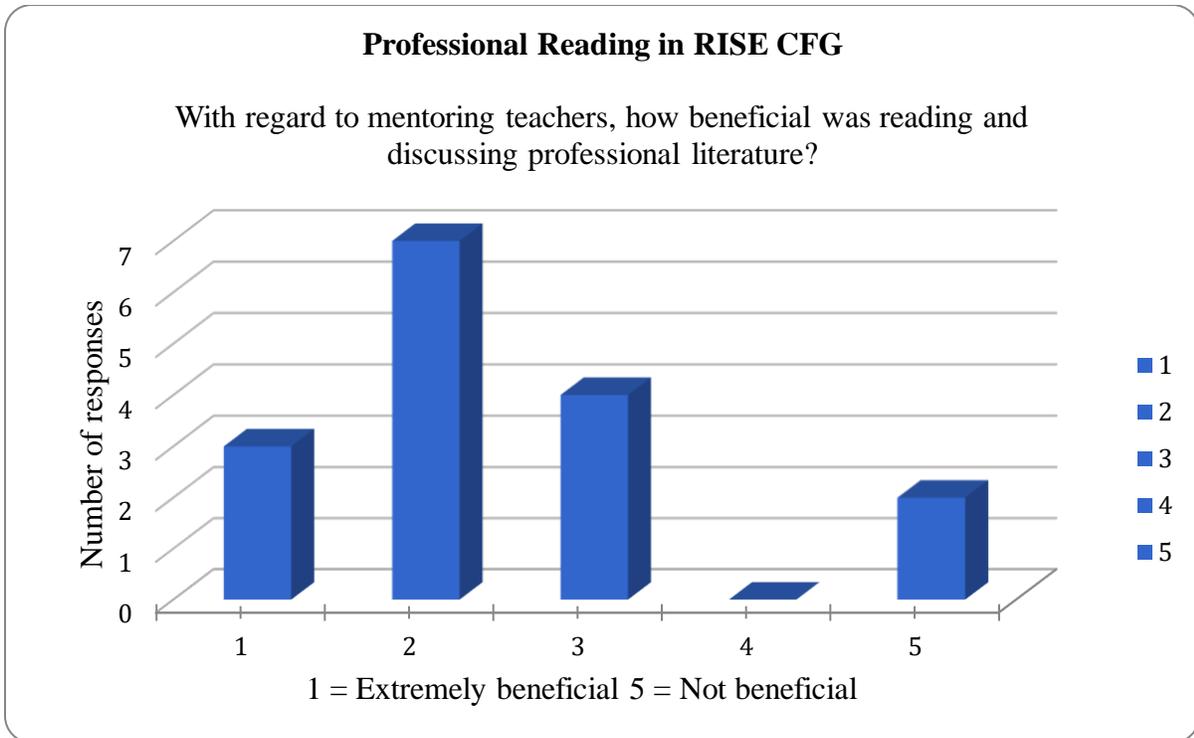
*RISE has been a good support during my first year of teaching. I found the reflection and discussions to be most valuable...The comradery that was developed during meetings will likely blossom into lasting relationships....*

*It is nice to have a team of teachers to learn from. If there is a struggle that we are dealing with, the mentor provides valuable feedback and support.*

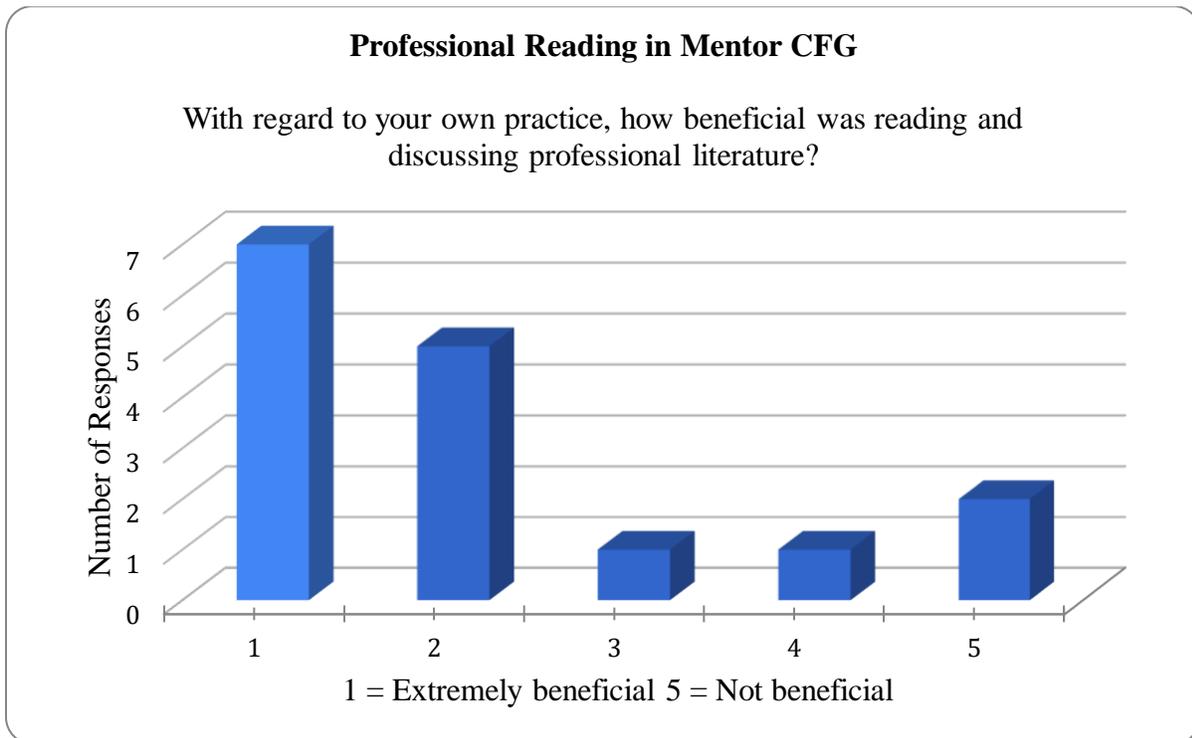
### **RISE Mentor Survey**

Mentors were asked about the most fulfilling aspect of mentoring and the most challenging aspect of mentoring. All 16 mentors indicated that mentoring was fulfilling because they were able to help new teachers navigate the struggles of first year teaching and share the successes and growth new teachers experienced. By far the biggest challenge mentors faced, and one which could have been anticipated, was finding a time to meet that fit the schedules of everyone involved.

Mentors were asked to evaluate the benefits of the two consistent components of both the Mentor CFG meetings in which they participated and the RISE CFG meetings which they facilitated. Those two components were reading and discussing professional literature and tapping the power of the collaborative group in addressing dilemmas of practice (See Figures 18-19).



*Figure 18: Professional Reading in RISE CFG*



*Figure 19: Professional Reading in Mentor CFG*

Mentors indicated that they thought processing professional literature was more beneficial to their own practice than to their mentoring.

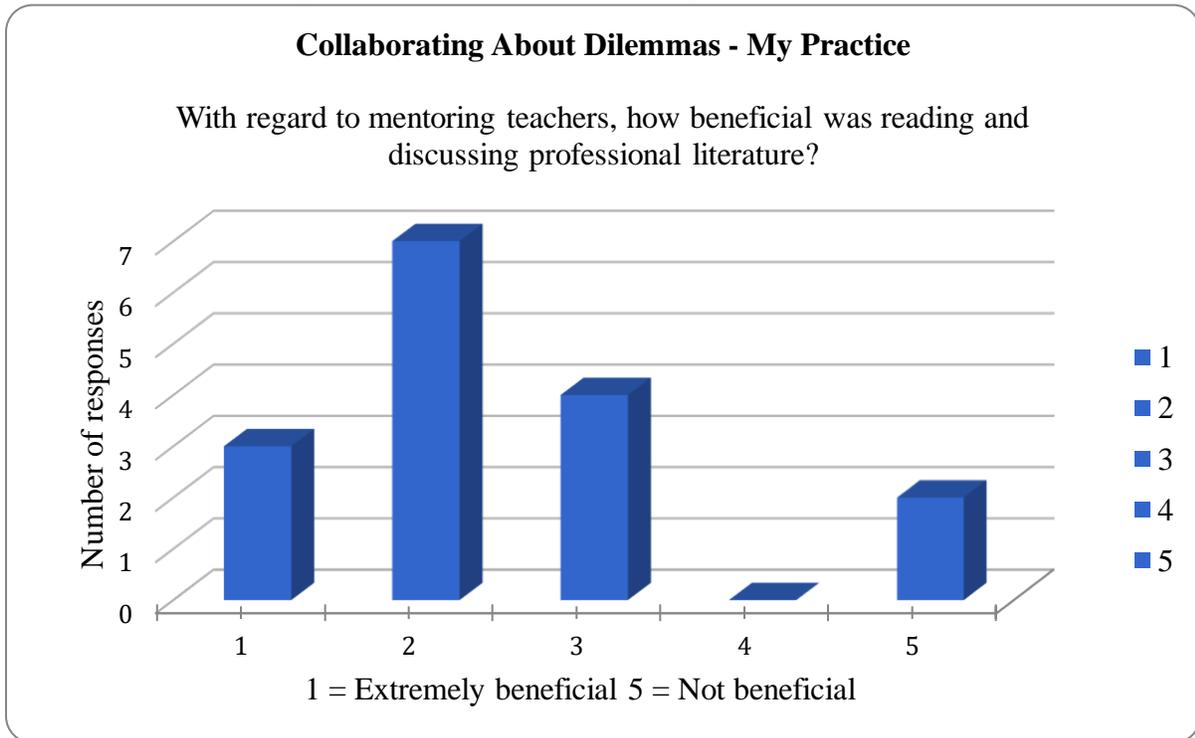


Figure 20: Collaborating About Dilemmas-My Practice

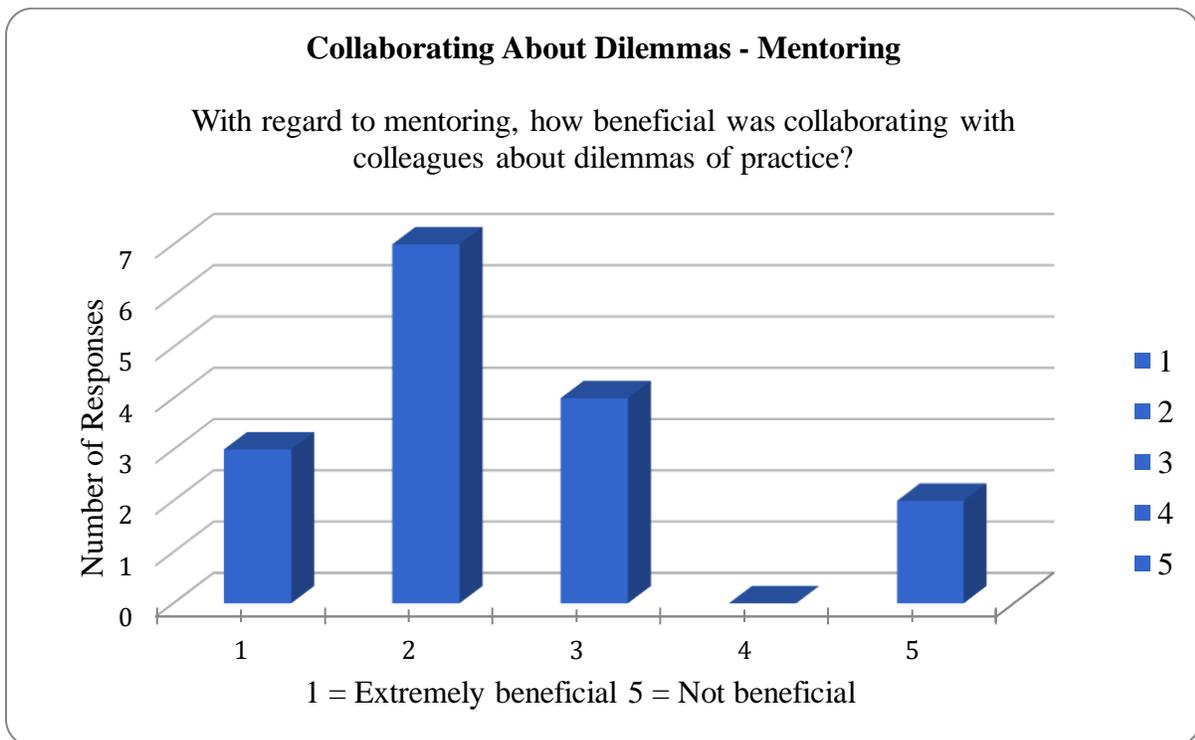
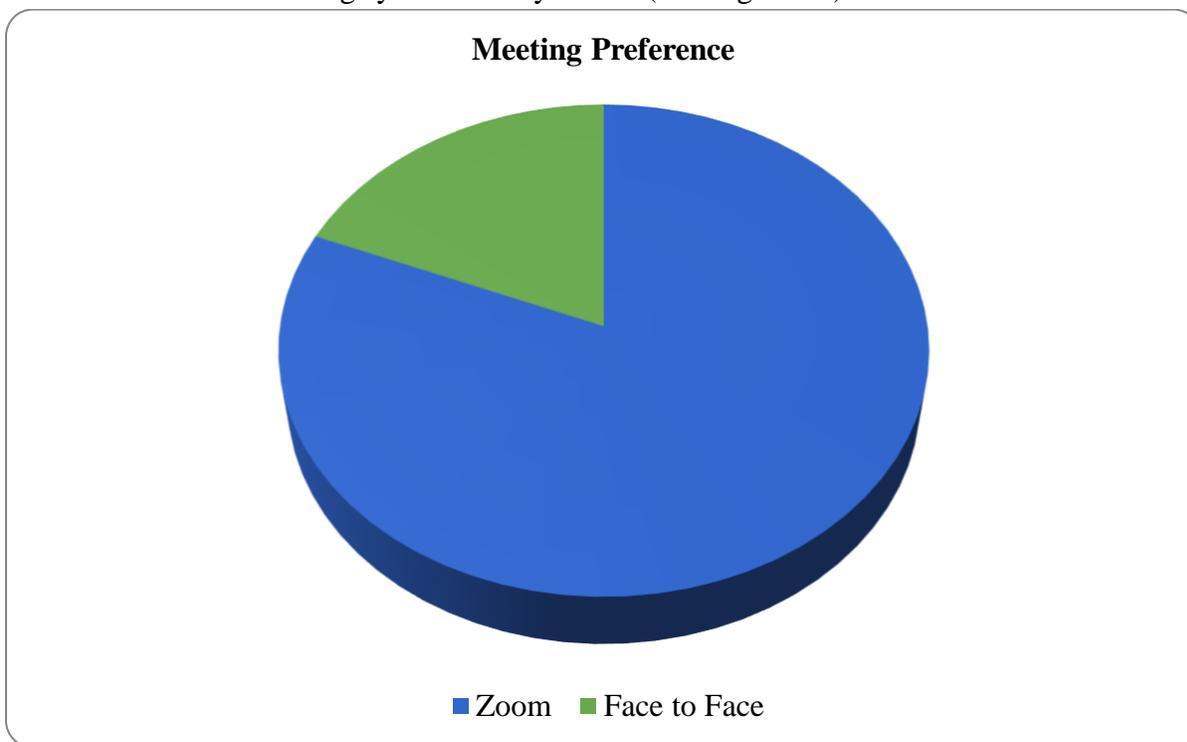


Figure 21: Collaborating About Dilemmas-Mentoring

Results indicate that mentors believe collaborating with colleagues about dilemmas of practice was beneficial for both their own practice and that of their mentees. (See Figures 20-21)

This year, NNRPDP coordinators chose to try a different format for the Mentor CFGs. After the initial face-to-face session during the week of RISE, all meetings were held via Zoom, an online meeting platform. Coordinators surveyed mentors in order to determine the effectiveness of the new meeting form and results show that more than 80% of mentors prefer the convenience of meeting synchronously online (See Figure 22).



*Figure 22: Meeting Preference*

When asked how NNRPDP coordinators could better support mentors, half of the responses expressed gratitude for the support currently provided with no suggestions for improvement. The other half offered suggestions that are worthy of consideration for next steps. Suggestions included:

- Time embedded in the mentoring program to observe new teachers in their classrooms to provide feedback and target challenges.
- NNRPDP coordinators could attend one RISE CFG meeting at each site and provide coaching to the mentor.

### **RISE Mentor Reflections**

Each Mentor CFG meeting began with a five-minute reflection period where mentors reflected on their work in a shared Google Doc. These reflections shown in Table 13 reveal teachers deeply committed to the profession, their schools, and the new teachers they have been

charged with mentoring. Many, if not most, went above and beyond the requirements of the contract.

*Table 14: Themes Reflected in RISE Mentor Responses*

<b>Theme</b>	<b>Example</b>
<p>Mentoring and CFG meetings were a positive experience</p>	<p><i>Our meeting was very productive.</i></p> <p><i>Our meeting was great!</i></p> <p><i>We have had a good year and have drawn close together. I just had one of my teachers drop by this afternoon to ask some advice for a student. It is nice to see the comfort they have in coming to seek information, advice, or suggestions for their teaching. I have seen great growth in both of them and we recently talked about the upcoming P/T conferences and if they we feeling good about them, and they both said they were much more comfortable this go around than in the fall.</i></p> <p><i>I really enjoy my mentee teachers. They are doing really well and trying new things.</i></p>
<p>Mentors went far above and beyond the requirements outlined in the contract</p> <p>(Nearly all mentors spent extra time, some extensive amounts of time supporting mentees. Some did observations with feedback, some spent time planning with mentees. Some mentors provided food for the meetings. One mentor invited students to a meeting where adults and high school students were able to share their different perspectives.)</p>	<p><i>I cannot say that there has been just one meeting. My mentee teacher is my trailer mate and we meet daily. We have gone in depth about procedures as this has been the greatest struggle she has faced so far. I was able to give her ideas and suggestions of things that have worked well for me in my classroom. I have helped her with the school climate and how things are generally run here at this school. I am continually clarifying questions on the curriculum and rigor that should be expected at this grade level. She is full of questions and very willing to ask for any needed help. We have sat and planned our weeks out together just so she could get a sense of what others schedules look like as far as pacing of the day.</i></p> <p><i>After school that day, another new teacher (history) came by my class to hash out some problems she'd had. Her "thinking" assignment for that day had fallen pretty flat, and she was struggling to get the kind of engagement we had talked about that morning. So, she and I brainstormed for about 90 minutes to redesign an upcoming lesson she had planned to make it more about deep thinking, engagement, and ownership.</i></p>
<p>Mentors reflected on the experience and what went well and what did not</p>	<p><i>I felt like I "hogged" the conversation and need to do less talking next time.</i></p> <p><i>I removed myself from the conversations and let the two groups do the talking and answer one another's questions. This was super helpful I felt more like I was</i></p>

Theme	Example
	<p><i>facilitating/hosting rather than “running a class”. They were in charge of the learning and not me.</i></p> <p><i>I think had we established some agreements first, there would not have been as much reluctance to try and participate in the protocol as it is set up.</i></p>
<p>Mentors targeted support to the specific needs of RISE teachers</p>	<p><i>I have three out of the six that have never done standard-based grading and were struggling with how to do it. They said they felt much better about it after our meeting so I’m glad I choose that topic.</i></p> <p><i>We also were able to discuss current goals and struggles with attaining those goals, due to either lack of resources, clarity regarding policy, or challenging students.</i></p> <p><i>Our last meeting was on Classroom management as the two kinder teachers that are mentees have been struggling.</i></p> <p><i>Our dilemma time was productive in the sense that we were able to help alleviate some stress from one colleague by offering support in his situation and providing collaborative ideas that hopefully will be useful in the next couple months. It was nice that everyone offered such great feedback and mutual concern for a teacher that really is struggling, burnt out, and overwhelmed.</i></p>
<p>Mentors targeted support based on what they believe is important</p>	<p><i>History of the school is important and so is knowing your audience, especially in a small community. We clarified questions on curriculum and other topics, as the new teachers are receiving a lot of different answers when asking questions.</i></p> <p><i>Our second topic was Discipline with Love and Logic. This ended up going longer than we expected as the discussion was rich with new understandings that could be related to their classrooms.</i></p> <p><i>We spent our meeting with the topic of reflection. It is the time of year when we can still make some changes. I had them reflect on three topics...students, classroom, and parents.</i></p>
<p>Mentors face many challenges</p>	<p><i>It was challenging to meet the needs of 1st year teachers versus 1st year in Elko.</i></p> <p><i>Trying to schedule 7 high school teachers all at the same time is rough!</i></p>

Theme	Example
	<i>One of my mentees is struggling with just about everything in her classroom and continually misses our meetings.</i>
Mentors find great satisfaction in helping new teachers	<p><i>The two brand new teachers are finding challenges and successes, but truly enjoying the year! This was great to hear!</i></p> <p><i>One teacher brought a dilemma and everyone who participated really enjoyed the protocol, especially the teacher who had the dilemma. I hope we were able to help her.</i></p> <p><i>I feel very lucky to have a teacher who shares a lot of similar beliefs that I have. She is willing to work hard and try new things. I feel more like we are teaching partners than I her mentor.</i></p>

**Conclusion**

Through the partnership between Elko County School District and NNRPDP, RISE offered new teachers needed support and encouragement. The two components of RISE, induction and mentoring, gave teachers necessary information and inspiration prior to the start of the school year and ongoing support through the school year provided at the school site. The evidence strongly indicates that both components are necessary and effectively work in tandem to accomplish this goal. The evidence also suggests that effectively supporting new teachers during their first year requires a great deal of time and commitment on the part of mentors and that the small stipend and credits they receive is not compensation, but merely a token of appreciation. With such intense effort, mentors themselves risk burnout suggesting that revision to the program could include more support for mentors. Small measures could be taken to provide that support including NNRPDP coordinators attending at least one CFG meeting at each school site each year to provide support and coaching to mentors. More robust revision could include mentorship for all teachers in their first two years in the profession.

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## **Teacher Academy Cohort 5: Professional Learning of NEPF Standards and Indicators**

In response to statewide efforts to improve instruction through the Nevada Educator Performance Framework (NEPF), the Northeastern Nevada Regional Professional Development Program (NNRPDP) offered Teacher Academy Cohort 5 (2018-2019) to teachers in all six northern districts that comprise the NNRPDP region. Teacher Academy Cohort 5 focused on the following instructional practice standards and accompanying nineteen indicators:

Standard 1: New Learning Is Connected to Prior Learning and Experience

Standard 2: Learning Tasks Have High Demand for Diverse Learners

Standard 3: Students Engage in Meaning-Making through Discourse and Other Strategies

Standard 4: Students Engage in Metacognitive Activity to Increase Understanding of and Responsibility for Their Own Learning

Standard 5: Assessment Is Integrated into Instruction

Led by NNRPDP coordinators, educators were supported in their knowledge and implementation of the NEPF through participation in Teacher Academy Cohort 5. Critical Friends Groups (CFGs) were an integral extension of Teacher Academy Cohort 5. The CFGs, small collaborative groups, supported group members in implementing content knowledge learned in Teacher Academy Cohort 5 through inquiry, professional reading, and analyzing student work.

The overarching outcome of Teacher Academy Cohort 5 and CFGs was to improve instructional and pedagogical practices through the implementation of the NEPF's high-leverage instructional standards (See Appendix E). Teacher Academy Cohort 5 focused on the first two goals of NEPF: 1) foster student learning and growth, and 2) improve educators' instructional practices (NDE: NEPF FAQ, 2018).

### **Instructional Context**

In the spring of 2018, K-12 educators in the NNRPDP's designated service area were invited to apply to participate in Teacher Academy Cohort 5. Unlike previous cohorts requiring participant selection through principal nominations, teachers from Eureka, Humboldt, Elko, and Lander school districts applied and were carefully selected based on application responses. Also, unlike previous cohorts, Teacher Academy Cohort 5 invited alumni teachers to apply.

Teacher Academy Cohort 5 included 36 teachers from 21 schools, representing grade levels kindergarten to high school (see Table 15). Alumni members made up 31% of the total cohort. Additionally, Teacher Academy Cohort 5 included unique perspectives from a diverse

population (i.e., K-5 librarian, 5-6 music teacher, Read by Grade 3 learning strategist, and high school Advanced Placement (AP) teachers). In addition, participants represented both self-contained and departmentalized contexts with teachers from small departments and solo teachers who are the department. Teachers traveled as far as 150 miles one way to attend the full day sessions and to collaborate with colleagues.

*Table 15: Teacher Academy Cohort 5 Participants*

<b>District</b>	<b>Number of Schools</b>	<b>Number of Teachers</b>	<b>K-5</b>	<b>6-8</b>	<b>9-12</b>
Elko	17	30	20	3	7
Eureka	1	1	1	0	0
Humboldt	1	2	2	0	0
Lander	2	3	3	0	0
Total	21	36	26	3	7

The demographics of students taught by Teacher Academy Cohort 5 educators were diverse as well. They included a range of multicultural populations (i.e., Native American, Asian, Hispanic, Black, and White). Also included are English language learners, special education students, and many students who qualify for free or reduced lunch/breakfast. Most common Teacher Academy Cohort 5 individual teaching contexts included at least one, and often more, students in each of the above subcategories.

### **Initial Data and Planning**

NNRPDP launched the first cohort of Teacher Academy in 2014-15 in response to the passage of AB222 which outlined the expectation of a statewide performance evaluation system for teachers and school administrators. Nevada Department of Education tasked the three Nevada Regional Professional Development Programs to administer trainings on the NEPF. The depth of the framework and the limited number of teachers who could be supported in each year's Teacher Academy led to continued cohorts in subsequent years. Teacher Academy 2018-19 was Cohort 5, serving veteran teachers as well as teachers in the first few years of their careers. Responses to application questions revealed the need to understand the theoretical underpinnings of the NEPF as well as practical instructional and pedagogical strategies aligning to the NEPF. From alumni participants, the opportunity to join a second time indicated an overwhelming sense of value from participating in a previous year. For example: Why do you want to participate in Teacher Academy Cohort 5?

*I would like to participate in the Teacher Academy because I believe it will provide an incredible opportunity to learn and grow alongside other educators who also seek to*

*challenge themselves in new ways. This current school year, several colleagues participated in Teacher Academy and I enjoyed listening to their experiences in Teacher Academy, and was inspired by examples they shared about how they were integrating new strategies and approaches to teaching into their classrooms. I desire a similar learning experience, and would deeply value an opportunity to be challenged, professionally and personally, by expanding my understanding of NEPF and then putting that "understanding" into practice in my classroom. I believe this would not only increase student learning, but also, student engagement and motivation in my classroom. I also believe this would help me to be a better educator, colleague and member of my school community (Cohort 5 first time applicant).*

*My last experience with Teachers Academy was VERY worthwhile, and I would be delighted to have another opportunity to participate. This program has helped me to fall back in love with learning and realize that I teach to pass that on to my students. Learning strategies aligned to the NEPF helped me be a better teacher. All teachers need the Teachers Academy experience (Cohort 5 Alumni applicant)!*

Although the NNRDPDP provides a variety of NEPF learning opportunities across the region, Teacher Academy Cohort 5 is the only intense and ongoing across-region collaborative professional learning experience. Combined total Teacher Academy participation in cohorts 1, 2, 3, and 4 (n=175) represents 17% of the teachers in the NNRDPDP region. Continued professional learning focused on NEPF is crucial for the remaining 83% of the region's teachers.

Guided by research in effective professional development (Guskey, 2002; Murray, 2014), the Teacher Academy Cohort 5 learning design included whole-group, full-day instruction of a single NEPF standard and accompanying indicators with further support through small-group, half-day CFGs. Diverse CFG groupings were based on teacher location, grade level, and subject areas taught. Also, given the NNRDPDP's vast service area and unique travel challenges for many participants, virtual attendance became an option for some half-day CFG members.

### **Learning Design**

Focusing on one specific NEPF standard and its indicators, NNRDPDP coordinators planned content details for each full-day Teacher Academy Cohort 5 as well as content for the accompanying half-day CFG. Peer review feedback guided planning of content delivery, participant engagement, and interaction, reading assignments, intentional questioning, and reflection prompts.

Teacher Academy Cohort 5 launched with an orientation day in August 2018, prior to the start of the school year. Teachers arrived energized and motivated about this unique professional learning opportunity. Applying for Teacher Academy Cohort 5, rather than being nominated by

their principals as in previous years, ensured that every participant self-selected this elite opportunity for their professional learning.

### **Full-Day Teacher Academy Cohort 5**

Following orientation, Teacher Academy Cohort 5 met as a whole group for five full-day content trainings, each day targeting one specific NEPF standard. This targeted, sustained professional development extended throughout the school year, beginning in September 2018 and concluding in February 2019. This deep dive into each standard gave teachers an opportunity to reflect on their new learning and plan instructional implementation. Each day began with learning outcomes and success criteria. Learning included discussion of the research supporting each standard and indicators with examples of aligned instructional strategies and pedagogy. In addition, teacher participants used the NEPF performance levels to evaluate the effectiveness of the strategies and tasks modeled by the NNRDPD coordinators. Careful planning ensured participants had opportunities to experience the standards and indicators first hand throughout the day.

### **Half-Day Critical Friends Group**

In addition to the full-day professional learning, teachers deepened their NEPF knowledge by participating in CFGs. These half-day professional groups, limited to five or six teachers per CFG, met in between whole day Teacher Academy Cohort 5 days to provide additional implementation support. CFGs also met for two hours in the afternoon as a conclusion of the full-day Teacher Academy Cohort 5. CFG work included planning implementation mini-inquiries, discussing student work samples and professional readings, and reflection writing, all as a means to support each other as professionals. The members of the CFG’s developed a close relationship that allowed this support to happen. Finally, National School Reform Faculty and School Reform Initiative protocols provided a structure for CFGs (See Appendix F). Table 16 details the three components of CFG.

*Table 16: Components of CFG*

<b>Components of CFG</b>	<b>Description and purpose</b>	<b>Protocols</b>
Inquiry	Teacher inquiry provided support for teachers to make changes in practice as they planned and implemented a mini inquiry based on learning from each Teacher Academy. Using “The Cycle of Inquiry” protocol, teachers provided encouragement and feedback, meeting the collaborative and collegial outcomes of a CFG.	Cycle of Inquiry A Change in Practice
Student work analysis	Teachers analyze and learn from student work, looking for connections between students’ learning and teacher instructional practices, curriculum, assessment or other factors of teaching and learning.	Looking at Student Thinking

		Guidelines for Learning from Student Work
Professional reading	Carefully selected journal articles provided teachers content, new perspectives, strategies, and ideas. Using protocols to process text ensured collaborative construction of meaning, opportunities to clarify and expand thinking, as well as a structure to examine assumptions and beliefs while gaining a deeper understanding of content.	Text Rendering Block Party The Final Word Save the Last Word for Me

**Measurement**

Multiple qualitative and quantitative measures were used to assess educators’ instructional and pedagogical practices aligned to NEPF standards and indicators: a) NNRPDP evaluations, b) participant reflections, c) teacher inquiries, and d) teacher self-reported affective benefits.

**NNRPDP Evaluation**

The NNRPDP evaluation consists of seven self-assessment statements which are rated using a Likert scale, ranging from *not at all* (one) to *a great extent* (5). Participants completed this evaluation at the end of every full-day Teacher Academy Cohort 5 and half-day CFG.

**Teacher Reflections**

Participants completed an open-ended reflection after every full-day Teacher Academy Cohort 5 and half-day CFG. As a support, reflection prompts from the National School Reform Faculty were provided. NNRPDP coordinators reviewed these reflections and considered the feedback when debriefing each Teacher Academy Cohort 5 and planning for the next session.

At the conclusion of Teacher Academy Cohort 5, participants synthesized their understanding of how the NEPF standards are connected using the Stronger and Clearer Each Time (SCET) structured thinking routine (Zwier, 2011; See Appendix D).

**Teacher Inquiries**

Teacher inquiries provided anecdotal evidence of participant change in classroom practice based on the NEPF standards and indicators. Through the use of protocols and subsequent inquiry results, teachers reflected on improving student learning.

**Affective Benefits**

Participants considered affective benefits from each full-day Teacher Academy Cohort 5 session and ranked them in order of most beneficial to least beneficial for them personally.

## Results and Discussion

Results from the NNRPDP evaluation demonstrate teachers' self-assessment of learning progress as a result of Teacher Academy Cohort 5. Table 17 shows each statement and corresponding score based on a five-point Likert scale. The score is an average of the evaluations given after each day of learning in Teacher Academy Cohort 5.

*Table 17: RPDP State Approved Evaluation*

<b>RPDP State Approved Evaluation (5 point scale)</b>	<b>Average Score</b>
My learning today will affect students' learning.	4.54
My learning today has prompted me to change my practice.	4.28
This training will help me meet the needs of diverse student populations.	4.45
I will use the knowledge and skills from this training in my classroom or professional duties.	4.72
The training will improve my teaching skills.	4.58
This training added to my knowledge of standards and/or my skills in teaching subject matter content.	4.55
The training provided opportunities for interactions and reflections.	4.80
The training matched my needs.	4.63

### Teacher Reflections

Additional evidence related to instructional and pedagogical strategies required to meet the NEPF standards and indicators came from teacher reflection statements. Their statements demonstrate the impact of Teacher Academy Cohort 5:

- *Today's session was incredible. It helped me more clearly identify the difference between discussion and discourse; I walked away with so many great strategies and better understanding of what productive discourse looks, sounds and feel like as well as how to provide multiple opportunities for student to make meaning and explain how and what they are learning with regards to the content.*
- *As always I feel amazing leaving a TA/CFG day! I love the inquiry process, student work, share, and the real and meaningful discussion our group has.*
- *My ah ha was what does it mean to have assessment integrated into instruction. It means my students thinking is visible. This is how we are able to make immediate adaptations.*
- *The inquiry process is a great thing to help me make my teaching more meaningful.*

The Stronger and Clearer Each Time (SCET) thinking routine solidified participants' understanding of how the NEPF standards were connected, as portrayed in this example:

- *The NEPF standards were created with a purposefully structured flow. They are interconnected with a focus on students that encourages them to collaborate and connect in a teacher provided safe environment that promotes highest possible learning opportunities.*

These teacher reflections and SCET summaries identify critical knowledge and learning necessary for professional growth.

### **Teacher Inquiries**

The following vignette provides evidence of one teacher's personal learning story as she implemented her inquiry with a class of 5th grade students. This anecdotal evidence suggests a transformation in teacher instruction and formative assessment based on teacher reflection and student actions.

#### **Vignette:**

*This professional learning inquiry took place in an intermediate, 5th- and 6th-grade, school general music class setting. Students attend a general music class once per week for forty minutes...students' primary learning goals were to be able to read and play simple and complex melodies, with a steady heartbeat, and accurate rhythm pattern, on each string of the acoustic guitar.*

*This ...inquiry was derived from a previous professional learning inquiry "gone astray" for NEPF Standard 4 to support students engaging in metacognitive activity to "increase understanding of and responsibility for their own learning" in combination with NEPF Standard 5, in which "assessment is integrated into instruction" The original...inquiry ... revealed that the majority of 6th-grade students could not identify the learning goals for the current learning target -- singing and playing Rock Around the Clock -- which made it impossible for them to monitor their learning or create a learning plan no matter what metacognitive strategy was utilized.*

*After this discouraging, yet necessary awakening to the reality of what students did, and did not, understand about the course learning goals, I determined that students needed a "vision" for the overarching learning goals, as well as a "visual tool" that identified learning "steps along the way" to achieving the learning goals....[I designed] a Learning Continuum Chart (LCC) for 5th- and 6th-grade students ... learning goals centered around playing the acoustic guitar.*

*[The] learning goal was that students would be able to play three songs using the notes E, F and G on the first string of the guitar, with each song increasing in complexity. With that learning goal in mind, each specific skill needed to achieve the goal was broken down into steps, which became the basis of the progression. The visual chart created reflected the overall skill, represented by an arrow, and each step towards the learning goal progressed from left to right on the arrow.*

*The first LCC included a progression chart for accurate placement of the fingers to play the notes, and a progression chart for performance of the song. After the initial implementation, I noticed that students required additional separation of the skills for performance LCC progression -- students could sometimes play the melodic pattern accurately, but not play with a steady heartbeat or accurate rhythm pattern. These observations led to the creation of two separate LCC -- one focused on accurate performance of the melodic pattern, and one focused on accurate performance of the rhythmic pattern.*

*During the second phase of implementation, I integrated the revised and updated LCC ... [and] feedback from students...showed that the majority of students could now clearly identify what they already knew/could do, what they needed to work on, and what their next step would be in the learning process. Students could also clearly match their assessment of their own learning with my assessment of their learning.*

*The LCC became the “anchor” for each music class, wherein students began the class with a partner-discussion of where they were in the learning process on each skill progression chart, and what specific steps they needed to take to move forward in the learning process, and what possibilities existed to take each skill beyond the steps listed on the LCC. Ultimately, students went beyond taking ownership of their learning just within the music class goals, and began brainstorming ways to extend their learning beyond the goals of the class by identifying ways ...each skill could be challenged further e.g. “If I can use the notes E, F and G to play a song, then what would it look like to create my own song using those notes?” It was incredible to watch students extend their own understandings of the learning goals, and their own role in the learning process in this way!*

*This professional learning inquiry ultimately led to the development and integration of LCC for each new grade, and music unit ...Students’ familiarity with the LCC has allowed them to truly own their learning, and to challenge and extend their learning in ways that I could never have imagined!*

*In sum, the development and integration of the LCC dramatically changed my approach to teaching (instructional practice).*

Additional statements reflecting teachers’ inquiry provides further evidence of a change in practice based on learning the NEPF standards and indicators during Teacher Academy Cohort 5:

- *I have tried to place more of the final understanding and knowledge base on my students. I have tried to keep my questions and assessments more open ended. Rather than giving my students a direct standards-based quiz/assessment before moving on, I am trying to keep it more open such as.... show me what you understand about\_\_\_\_\_. Or, How will I know you understand the \_\_\_\_\_?*
- *How would using the strategies 2 minutes talk, Hot Seat and First Word on consecutive days' impact grammar usage, specifically adjectives?*
- *What would happen if I build my curriculum around a pattern/theme of social, economics, and political connecting through the lens of micro to macro?*
- *If I use a strategy (think, pair, share) to discuss text features in non-fiction, rather than direct instruction, could it speed up the instructional process and possibly add more rigor to my practice?*

### **Affective Benefits**

Teachers reported secondary benefits stemming from Teacher Academy Cohort 5 having a profound impact on teaching and learning that extend the professional development experience. Four major benefits surfaced in the teacher reflections:

- More reflective of my practices
- Professional interactions
- More confident to share
- Rejuvenating

Over half of the teachers chose “more reflective of my practice” as the most beneficial affective aspect of Teacher Academy Cohort 5, followed by professional interactions, confidence to share, and rejuvenating. While each affective aspect of Teacher Academy Cohort 5 is important, “more reflective of my practice” is closely aligned with the NEPF goals of Teacher Academy Cohort 5 to increase student learning and growth and improve educators’ instructional practices.

### **Conclusion**

Teacher Academy Cohort 5 improved instructional and pedagogical practices through the implementation of the NEPF high-leverage instructional standards, evidenced by multiple measures. Results suggest a correlation between teachers’ understanding of the NEPF standards and indicators and their confidence to implement aligned high-quality instructional pedagogy. The culmination of evidence strongly suggests teachers’ effectiveness and responsiveness to the needs and backgrounds of their students. In addition, being more reflective, as well as the other affective benefits, enhanced teachers’ experience during Teacher Academy Cohort 5, potentially transferring to many areas of professional practice.

### **References**

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## **Reading Workshop Implementation**

Nevada's Academic Content Standards (NVACS) place equal weight on reading and writing. Calkins, Ehrenworth, and Lehman (2012) noted teachers must "create conditions that allow you to match readers to books and to provide students with opportunities to read extensively. You will also want to accelerate their progress up the ladder of text complexity" (p. 43-44). Furthermore, Calkins, Ehrenworth, and Lehman (2012) go on to state students need "to have a crystal-clear target in mind and to be given concrete instructional feedback about his or her progress toward that target" (p. 44). Thus, a focus on Reading Workshop (Calkins, 2015) benefits students' ongoing learning needs and incorporates NVACS. The outcomes of this learning opportunity for Local School (LS, a pseudonym) teachers are as follows:

1. Students will meet or exceed expected MAP growth norms in overall reading by reading daily in a workshop structure.
2. Teachers will collaborate in a multi-grade level team to refine their Reading Workshop teaching skills, including daily reading workshop (4 or 5 days weekly), the mini-lesson, and analysis of student writing using learning progressions, and ongoing conferring with students.

LS teachers are supported in learning Reading Workshop methods through monthly structured Professional Learning meetings, as well as collaborative discussions, reflection on practice, and implementation of Reading Workshop. Improved student reading outcomes result from this intentional Professional Learning (PL).

Reading Workshop (Calkins, 2015) consists of a systematic daily reading structure. The basics of the structure include student assessment and analysis, teacher mini-lessons, student independent writing, conferring with readers, and sharing learning. Teachers use this framework to move readers forward in their reading ability based on individual needs and readiness.

### **Instructional Context**

Northeastern Nevada encompasses a large geographical range with many small towns and rural areas. LS is a charter school and serves a student population in the Northeastern Nevada region. LS teachers and their local administration team requested Northeastern Nevada Regional Professional Development Program (NNRPDP) support for improving student reading outcomes through the use of Reading Workshop.

### **Initial Data and Planning**

Current content knowledge and practice of Reading Workshop was informally assessed. LS teacher strengths included professional communication, team support, and a belief that reading is extremely important for learners. These strengths demonstrated readiness and willingness to learn and begin implementation of new learning, in this case, the Reading Workshop.

Based on teacher responses to questionnaires, Reading Workshop learning needs included use of learning progressions, analysis of student reading, mini-lessons, independent reading time, conferring with students, and structure of Reading Workshop. The PL was designed to address these needs and support teachers in Reading Workshop implementation.

### Learning Design

The learning design of the Reading Workshop PL was informed by Guskey’s Five Levels of Professional Development and based on Nevada State Professional Development Standards. This learning opportunity also incorporated readings, discussions, and reflections encompassing the Reading NVACS.

The PL was delivered through regularly scheduled monthly meeting times and teacher prep times with some outside time needed for content reading. Implementation of Reading Workshop occurred in each teacher’s classroom. Coaching occurred in multiple classrooms.

### Measurement

Participants’ learning is measured using pre and post questionnaire responses and responses to *I used to think...Now I think* prompts. Both teacher and student learning outcomes are measured using the end of the year (17-18) and end of year (18-19) reading MAP scores.

### Results and Discussion

Participants’ responses to the prompt *Rate your ability to analyze student reading* are shown in Figure 23.

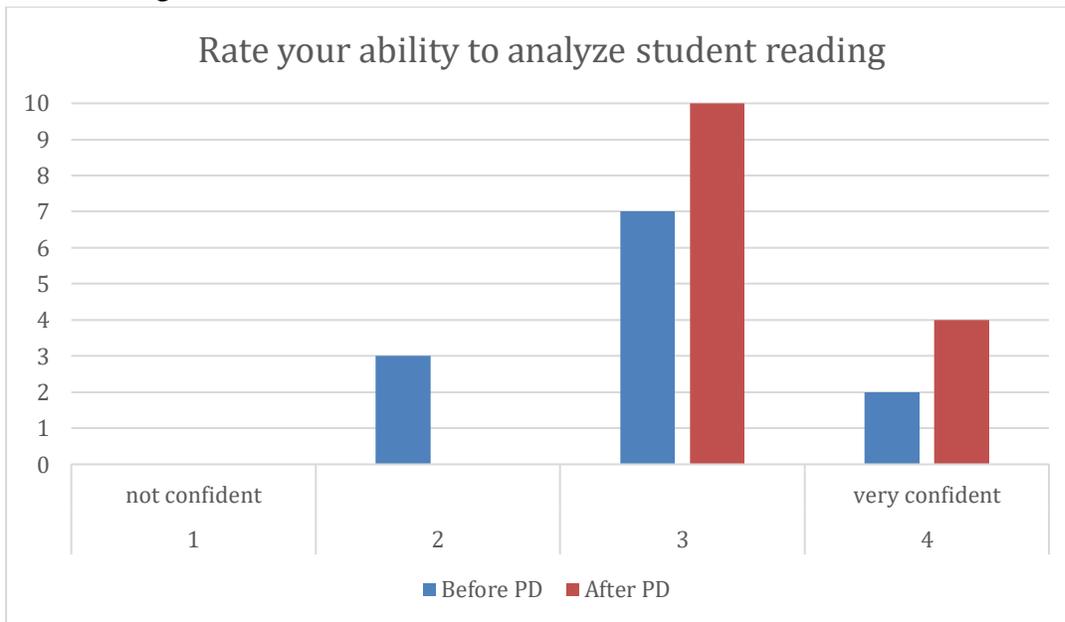
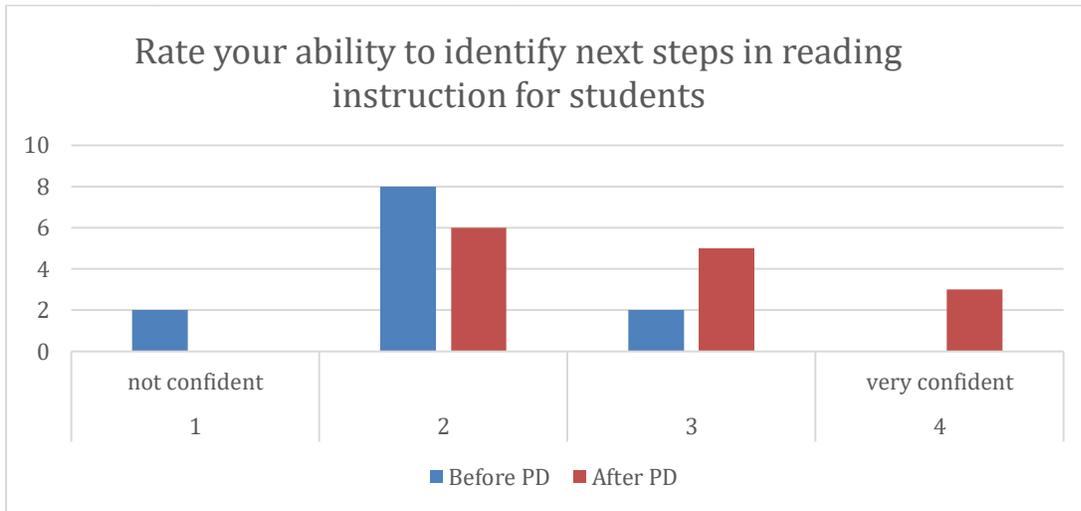


Figure 23: Ability to Analyze Student Reading

Figure 23 displays participants’ level of confidence in their ability to analyze student

reading following the PL. Clear growth is noted, growing from less confident to feeling more confident in their abilities.

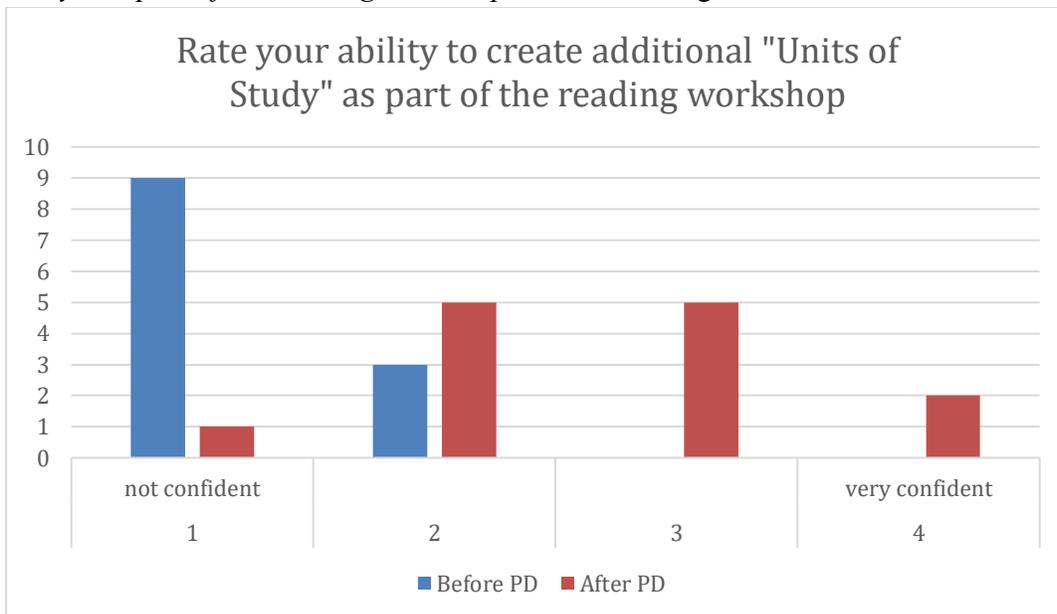
Participants’ responses to the prompt *Rate your ability to identify next steps in reading instruction for students* are shown in Figure 24.



**Figure 24:** Ability to Identify Next Steps

Figure 24 displays participants’ level of confidence in their ability to accurately determine students’ next steps in reading instruction following the PL. Clear growth is noted, growing from less confident to feeling more confident in their abilities.

Participants’ responses to the prompt *Rate your ability to create additional “Units of Study” as part of the reading workshop* is shown in Figure 25.



**Figure 25:** Ability to Create Additional “Units of Study”

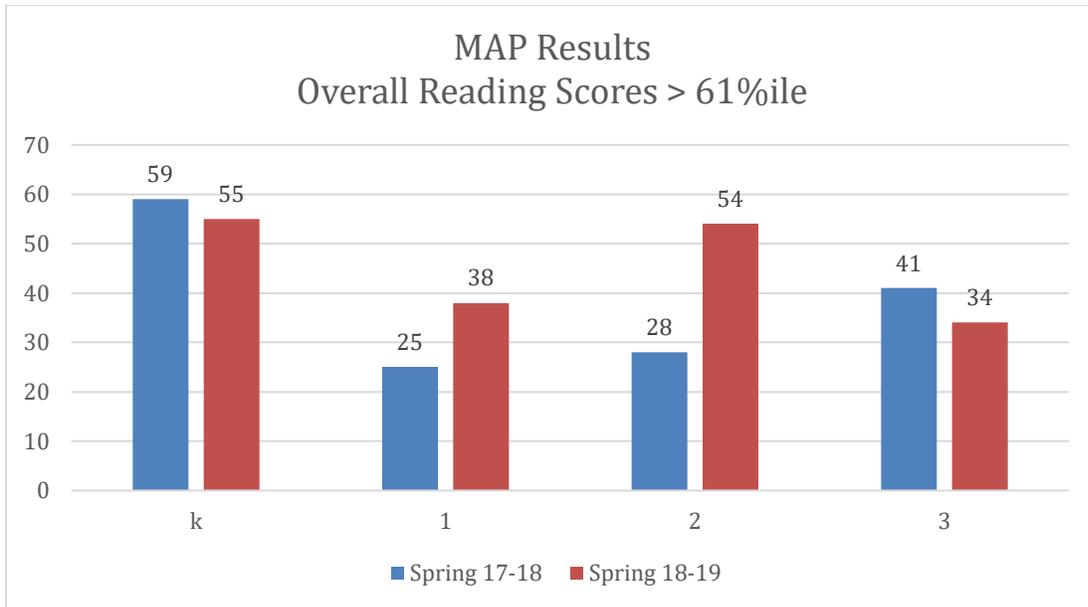
Figure 25 displays participants' level of confidence in their ability to create additional units of reading instruction based on the needs of their classroom following the PL. Clear growth is noted, growing from less confident to feeling more confident in their abilities.

Responses collected from *I used to think...Now I think...* prompt indicated a significant change in perception. In personal communications with participants all noted surprise at the increased reading abilities exhibited by their students.

- *I used to think Reading Workshop was overwhelming. Now I think Reading Workshop is the teaching model I really needed to help me do a better job growing my readers.*
- *I used to think it was just another gimmicky reading curriculum...This year I was really able to jump in with both feet and really the proof is in my test scores. This curriculum works, and I feel it is best practice for my students. As I get more and more comfortable with it, my students are going to benefit more and more.*
- *I used to think reading workshop was letting the kids loose to cause chaos. Now I think reading workshop is a way to allow students to own their own learning.*

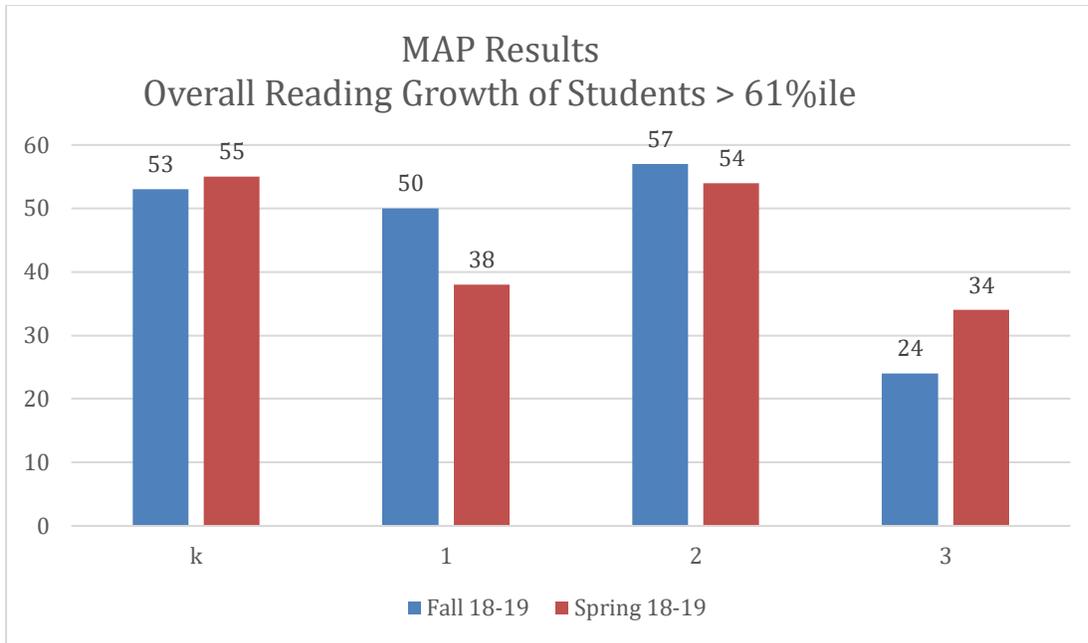
Responses collected from *What effect has using a reading workshop model had on student learning outcomes* prompt indicated significant changes.

- *I believe the workshop model has impacted my student's reading proficiency this year. I have seen growth in their reading stamina and their reading levels have increased over last year's class.*
- *My students test scores have improved incredibly.*
- *My students have built positive relationships with reading!*
- *Students' scores have improved on assessments.*
- *We have seen a noticeable increase in student data and performance*
- *I have experienced tremendous growth and the love of reading.*
- *More reading in the classroom*



**Figure 26:** MAP Results-Overall Reading Scores

The *MAP Results Overall Reading Scores > 61%ile spring 17-18 to spring 18-19* (Figure 26) displays participants’ classes overall reading scores in the spring of two consecutive years (different students, same teacher). The 17-18 data constitute the baseline of reading scores before Reading Workshop implementation. The 18-19 data provide reading scores after one year of implementation. These data provide a comparison at the teacher level, i.e. the overall reading scores of the class at the end of the year in spring 17-18 (prior to Reading Workshop implementation) compared to the end of the year spring 18-19 class scores (following the first year of Reading Workshop implementation). The ongoing goal for the Reading Workshop is to collect yearly data to look for patterns or trends. Growth is noted in grades one and two.



*Figure 27: MAP Results-Overall Reading Growth of Students*

The *MAP Results Overall Reading Growth of Students > 61%ile Fall 18-19 to Spring 18-19* (Figure 27) displays student overall reading scores from the fall 18-19 to the spring of 18-19. These data show students who met expected growth norms throughout the current school year, the first year of Reading Workshop implementation. Growth is noted in kinder and third grade.

### Conclusion

Based on these data the LS teachers met the outcomes. **Evidence** is provided for each outcome:

1. Students will move forward as readers at least one grade level by reading daily in a workshop structure.
  1. Beginning-of-year and end-of-year student MAP data indicated clear growth of at least one year in the majority of students.
2. Teachers will collaborate in a multi-grade level team to refine their reading workshop teaching skills, including daily reading workshop (4 or 5 days weekly), the mini-lesson, and analysis of student reading using learning progressions, and ongoing conferring with students.
  1. The staff consistently collaborated about implementation, analysis of student reading, student progress, and use of student conferring.
  2. Teachers implemented reading workshop basic structure into their classrooms, encouraging daily independent reading, partner reading, and the management techniques needed to ensure the effective use of independent and partner reading.
  3. Reading instruction occurred at minimum 4 or 5 days per week.

4. Teachers refined their use of a reading mini-lesson including pacing of the NVACS.

LS teachers indicated a need for follow-up professional learning about reading workshop in the areas of conferring with students, management of student data, and logistics and management as they continue with implementation of reading workshop into the next school year. Further professional learning opportunities are imperative to support LS teachers as they learn and apply strategies, skills, and develop pedagogical expertise in reading that benefits student achievement.

### **References**

Calkins, L., Ehrenworth, M., & Hehman, L. (2012) *Pathways to the common core*. Portsmouth, NH: Heinemann.

## **Implementation of *Pearson enVision Math 2018-19***

A regional high school partnered with the Northeastern Nevada Regional Professional Development Program (NNRPDP) for a mid-year implementation of new math curriculum materials for high school Algebra I and Geometry. Pearson's enVision Math series was selected by the high school's math department members earlier in the year and implementation began in November 2018. Since previous math curriculum materials being used in the Algebra I and Geometry classes were published before the adoption of the Nevada Academic Content Standards (NVACS), the specific goals were:

1. Increase mathematical rigor for students in Algebra I and Geometry.
2. Improve students' scores on the End of Course (EOC) exams, EOC I and EOC II, from the 2017-18 administration.

### **Instructional Context**

The regional high school has a seven-person math department with a median math teaching experience of four years. Five of the members teach at least one section of Algebra I and three members teach at least one section of Geometry. The Pearson enVision Math series has a printed textbook, an electronic textbook, and other online resources which include remediation help and assessment tools. The teachers implemented varying combinations of the resources. One geometry teacher did not adopt the new curriculum materials but continued to use the previous materials.

### **Initial Data and Planning**

The department has a scheduled one hour meeting each week. NNRPDP's Secondary Math Coordinator met with the department seven times, beginning in January 2019, during their weekly meetings to discuss ideas regarding aligning rigor with the EOC exams and the appropriate scope and sequence of the new curriculum materials. Additional days were devoted to individual coaching of department members. Coaching focused on the appropriate use of curriculum materials to increase rigor while maintaining a brisk pace of the teaching of the standards.

### **Learning Design**

The learning design was based on Nevada State Professional Development Standards. This learning opportunity incorporated discussions and reflections encompassing the NVACS for mathematics. The professional learning was delivered through regularly scheduled weekly meetings and teacher prep times. Coaching occurred in multiple classrooms.

### **Measurement**

To measure the impact on rigor from the Pearson enVision implementation, math department members were given the following survey questions:

1. Describe how your teaching strategies have changed with the implementation of the enVision curriculum materials.
2. Describe the impact of the new curriculum materials on the cognitive rigor of students.
3. Describe any obstacles encountered while implementing the new curriculum materials.

In addition, average student scores on the EOC I and EOC II from the academic year 2018-19 were compared with results from the academic year 2017-18.

### **Results and Discussion**

Responses to the survey by the math department members indicate increased rigor in the tasks and questions posed to students from the curriculum materials. The learning curve for teachers and students as they transitioned to an online format for problem sets and assessments was a concern for department members, especially because of the mid-year implementation.

Q1. Describe how your teaching strategies have changed with the implementation of the enVision curriculum materials.

- Increased rigor requires a focus on application rather than simple computation.
- Whether you are working with a book or with online resources, most, not all, students don't use time outside of class to work on math assignments. So, I adopted a method where I introduced material to them one day and helped them with assigned problems in class the next day. When pushing through material at the end of the year, I didn't find time to remediate on a third day. Additionally, I had woefully little time to remediate tests as we had to keep moving through material to teach the basic concepts that would be tested on the EOC exam.
- enVision has given me a good vehicle for which to present information in an 'I do, We do, You do' model. I am able to use visual representations more consistently, which provides a more concrete method of learning content.

Q2. Describe the impact of the new curriculum materials on the cognitive rigor of students.

- There is a focus on application of ideas. This naturally increases rigor and demands a deeper understanding of the topics.
- The Pearson text is a cut above the previous text in the matter of rigor. At the end of each lesson, you can find practical problems that incorporate lesson content. I heard 'this is hard' too many times to count this year.
- The Pearson enVision has really increased the rigor in all classes. More and more word problems that employ a real-life context are presented.

Q3. Describe any obstacles encountered while implementing the new curriculum materials.

- The speed with which we are forced to cover the material is a little much. The demands and content of the EOC have forced our department to move at a very fast pace. There are several topics that could use additional instructional time.

- I had no obstacles implementing the Pearson text. Our students have not been required to learn at this level of rigor, so they ran against many obstacles. However, the learning resources are embedded in the material for them if they have the drive to use them.
- It was difficult to begin the year with the old materials and then switch gears second quarter. There was a lot of digital technicalities that we had to learn as we went. I would also like to see the junior high kids learning with this content so that they are better prepared for Algebra I.

Figure 28 shows a comparison of EOC I data by teacher between the academic years 2017-18 and 2018-19. An overall increase in student scores for the high school occurred, from 40.93% to 42.38%. Teacher 1 did not teach an Algebra I class in 2018-19. Teacher 2 used the printed version of the textbook exclusively. Teachers 3 and 5 used a combination of print and online resources. Teachers 4 and 6 used the online resources exclusively, which included the electronic textbook, practice problems, and assessments.

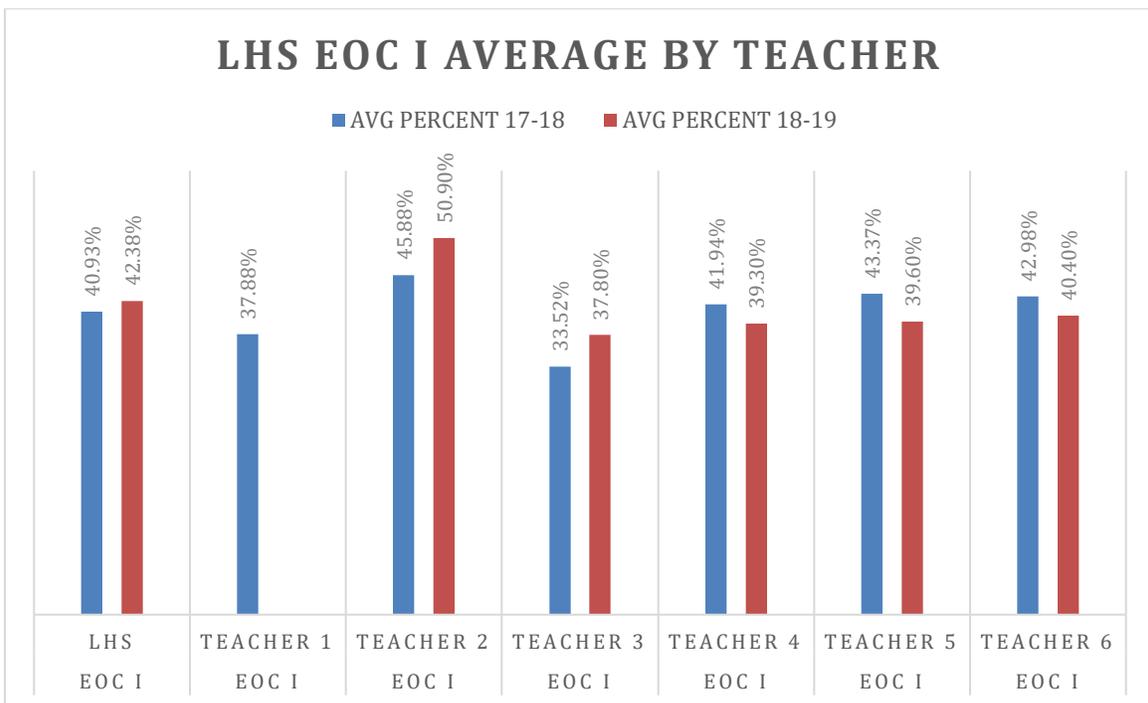


Figure 28: EOC I

Figure 29 shows a comparison of EOC II data by teacher between the academic years 2017-18 and 2018-19. The average student scores increased from 36.03% to 42.56%. Teacher 1 exhibited the greatest gains, employing a combination of Pearson enVision print and online resources. The bulk of coaching by the NNRPDP math coordinator was spent with Teacher 1. Student scores for Teacher 2 remained relatively the same from the previous year. Teacher 2 did not implement the Pearson enVision curriculum materials this year, but continued with the older geometry textbook and resources. Teacher 4 used the online resources exclusively from enVision, showing an increase of 10 percentage points in average student scores.

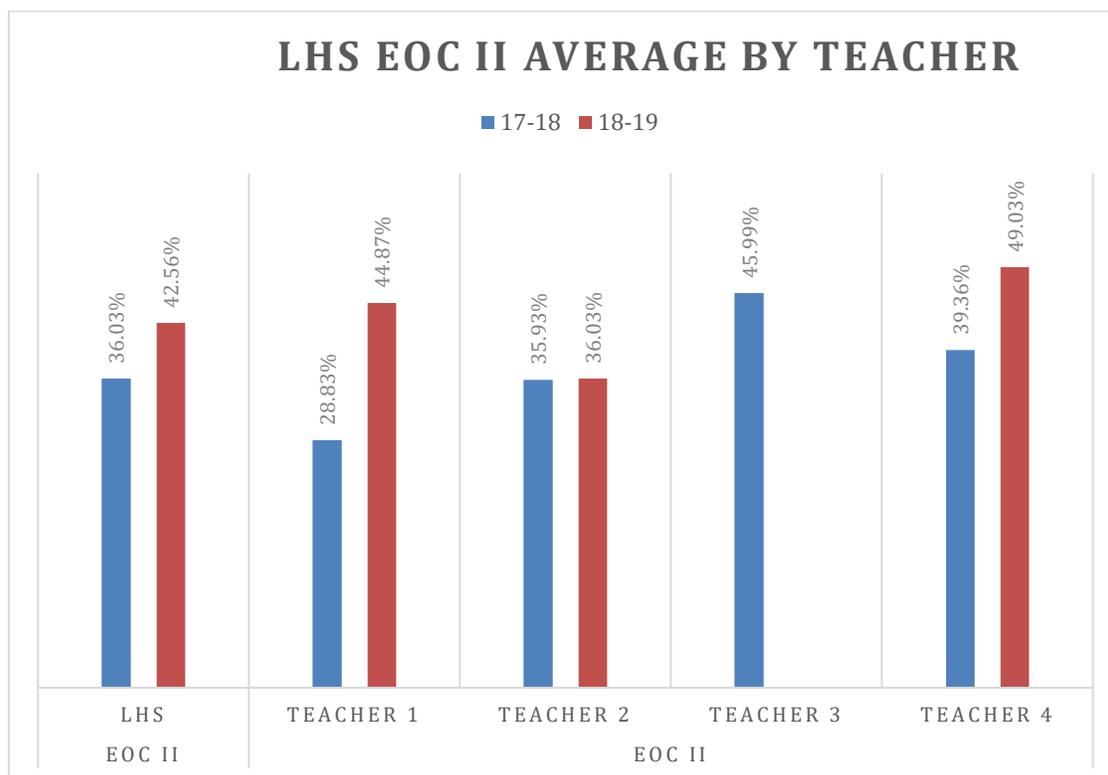


Figure 29: EOC II

### Conclusion

Despite the disruption and learning curve for both teachers and students with the new curriculum materials, performance on the Algebra EOC I and Geometry EOC II exams improved from the previous year. Progress was slow for the learning process especially from November through January as students learned to navigate the technical aspects of the online format, accessing and completing assignments and assessments online. Teachers were slowed as they learned how to navigate the logistics of providing access for students and restructuring lessons to increase rigor.

The adoption of the new curriculum materials more closely aligned with the rigor expectations of the NVACS and EOC exams showed the greatest promise for future results in the geometry classes. Student results for the one teacher who did not adopt the new materials remained flat, while the two teachers who did adopt enVision showed gains of 16 and 10 percentage points, respectively.

The EOC I scores for Algebra I did not show as great of gains. Students are younger and less experienced with the demands of high school. Also, teachers reported a greater gap between the rigor expectations of the previous curriculum materials and the Pearson enVision materials. More time was spent remediating students on background knowledge, reducing time for more cognitively rigorous applications. These issues have been addressed for the upcoming year and

full implementation of the curriculum materials. Time has been built into the pacing schedule to acclimate the students to the online format and rigor demands of the high school classes. During the next academic year teachers will also be focusing on mathematical modeling to increase students' conceptual understanding of the mathematics.

## Appendices

## Appendix A: Jumpstart Agenda

NNRPDP NBCT Candidate Cohort  
Jumpstart Day Component 2  
Monday, September 17, 2018  
5:00 to 8:30

[Candidate Center](#)

[Component 2 at a Glance](#)

[Today's Slides](#)

### **5:00 to 5:15 Getting Started** 15 min.

Check in to IAV sights/attendance

Go over agenda, get out your materials for Component 2

Talk about tables - what is your current understanding of the NBC process/comp.2

### **5:15 to 5:40 Session One: Introduction to Jumpstart Session (Sarah)** 25 min.

### **5:40 to 6:00 Data Collection Teachers as Leaders Survey - email link (Holly)** 20 min.

### **6:00 to 7:30 Session Two: Digging into Component 2 Documents (Holly)** 90 min.

- 5 Core Propositions, Architecture graphic, Standards graphic organizer 30 min.
- Component two 60 min.
  - Linking Component 2, the 5 Core Props, and your practice
  - Component 2 scoring rubric and analysis

### **7:30 to 7:45 Session Three: Find Them and Flag Them (Sarah)** 15 min.

- Standards
- Rubric
- 5 Core Propositions
- General Portfolio Instructions

### **7:45 to 8:10 Wrapping Up/Next Steps (Sarah)** 25 min.

- [Digital parking lot](#) check in
- What's next, goal setting, keeping in touch, providing support
- Email blasts; eMentoring opportunity
- Next Dates reminder
- [Evaluation](#) - NNRPDP Survey

## Appendix B: Support Workshop Agenda

NNRPDP NBCT Candidate Cohort  
Support Day Component 2  
Monday, October 1, 2018  
5:00 to 7:00

[Candidate Center](#)

[Component 2 at a Glance](#)

[Today's Slides](#)

### **5:00 to 5:15 Getting Started** 15 min.

- Check in to IAV sights
- Gather [attendance](#) (each person will sign in on their own)
- Look over the agenda
- Read and study your component documents as you wait

### **5:15 to 5:30 Session One:** 15 min.

Tonight we will get established with Google Drive ([I shared a folder with each of you!](#))

- Google Drive shared folders/docs explained - 5 min.
- Baseline data collection - 10 min.

### **5:30 to 6:40 Session Two:** 60 min.

- 5:30 to 6:30 Component 2 “What do I need to do?” ([Located in the folder I shared with you!](#))
- 6:30 to 6:40 Discussion - what does your component 2 ask you to do?  
[Writing Reminders](#) & discussion ([move to November 5 agenda](#))

### **6:40 to 6:50 Session Three: Components 2 & 4 Completion Plan** 10 min.

([Located in the folder I shared with you!](#))

- Component Completion Plan Update and Revisions
- Brainstorm or refine existing ideas for what you will do next in your classroom

### **6:50 to 7:00 Wrapping Up** 10 min.

- [Digital parking lot](#) check in
- Next Steps
- Evaluation - [NNRPDP Survey](#)

## Appendix C: Example E-Mail Blast

Dear NNRPDP Cohort National Board Candidates,

As you know *differentiation* is an important part of your work with Component 2. Consider the following:

### Thinking about differentiation

“Without choice in what they read and the opportunity to work on authentic learning tasks - work that one might reasonably expect to do outside of an academic setting - we cannot truly differentiate for students.” - Ellin Oliver Keene, 2016

“Differentiation means creating an instructional framework that allows choice and provides different scaffolds for meeting the same goals. It does not mean teachers need to invent scaffolds and choices or create lesson plans for each student.” - Lynn Geronemus Bigelman, 2016

As you prepare your component 2 portfolio, reflect on the instructional framework established in your classroom. How does your framework allow choice and opportunities for different scaffolds?

Check out [this SlideShare](#) about the Instructional Framework! The Slides are titled Module 4: Instructional Strategies. If you study the first few slides you will see what is meant by an instructional framework.

Remember to access the [NNRPDP resource library](#) for more about differentiation!

Happy Teaching, Learning, Writing, and Reflecting!  
Holly, Ketra, and Sarah

**Appendix D: Stronger and Clearer Each Time (SCET)**

**Stronger and Clearer Each Time (SCET)**

**Focus Question: NEPF Standards Interconnectedness**

<b>Me (original thoughts)</b> Just two or three key words	
<b>1st person I spoke to</b> (ideas, evidence, and language from this person that will help my idea to be stronger and clearer):	
<b>2nd person I spoke to</b> (ideas, evidence, and language from this person that will help my idea to be stronger and clearer):	
<b>3rd person I spoke to</b> (ideas, evidence, and language from this person that will help my idea to be stronger and clearer):	
<b>Me (revised):</b>	

Assess Your Understanding:

Adapted from Jeff Zwiers at <https://jeffzwiers.org/tools>

# Appendix E: Teacher Instructional Practice Standards and Indicators

## TEACHER INSTRUCTIONAL PRACTICE STANDARDS AND INDICATORS

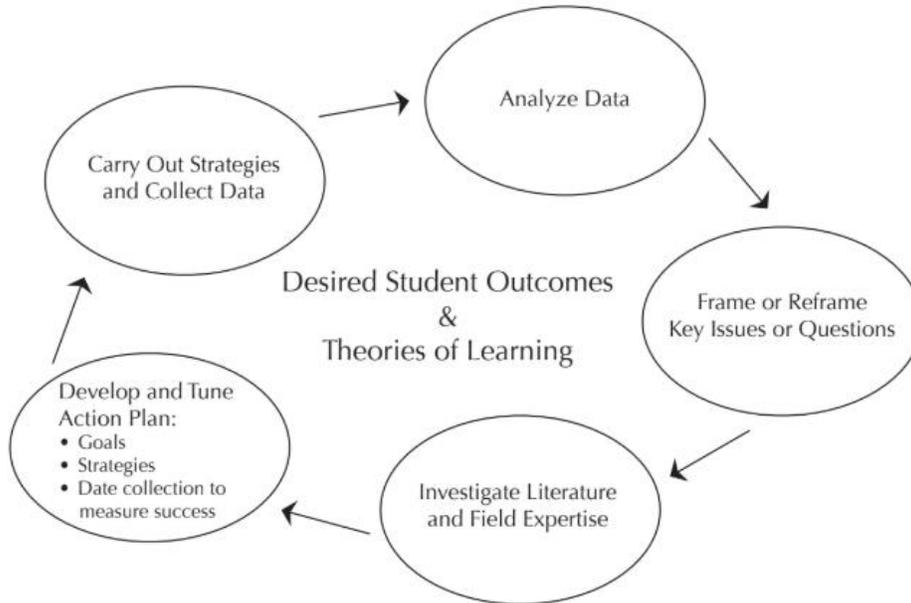
<b>STANDARD 1</b> New Learning is Connected to Prior Learning and Experience <span style="font-size: 2em; color: white; float: right;">1</span>	<b>STANDARD 2</b> Learning Tasks have High Cognitive Demand for Diverse Learners	<b>STANDARD 3</b> Students Engage in Meaning-Making through Discourse and Other Strategies	<b>STANDARD 4</b> Students Engage in Metacognitive Activity to Increase Understanding of and Responsibility for Their Own Learning	<b>STANDARD 5</b> Assessment is Integrated into Instruction <span style="font-size: 2em; color: white; float: right;">5</span>
<b>Indicator 1</b> Teacher activates <b>all</b> students' initial understandings of new concepts and skills	<b>Indicator 1</b> Tasks purposefully employ <b>all</b> students' cognitive abilities and skills	<b>Indicator 1</b> Teacher provides opportunities for extended, productive discourse between the teacher and student(s) and among students	<b>Indicator 1</b> Teacher and <b>all</b> students understand what students are learning, why they are learning it, and how they will know if they have learned it	<b>Indicator 1</b> Teacher plans on-going learning opportunities based on evidence of <b>all</b> students' current learning status
<b>Indicator 2</b> Teacher makes connections explicit between previous learning and new concepts and skills for <b>all</b> students	<b>Indicator 2</b> Tasks place appropriate demands on each student	<b>Indicator 2</b> Teacher provides opportunities for <b>all</b> students to create and interpret multiple representations	<b>Indicator 2</b> Teacher structures opportunities for self-monitored learning for <b>all</b> students	<b>Indicator 2</b> Teacher aligns assessment opportunities with learning goals and performance criteria
<b>Indicator 3</b> Teacher makes clear the purpose and relevance of new learning for <b>all</b> students	<b>Indicator 3</b> Tasks progressively develop <b>all</b> students' cognitive abilities and skills	<b>Indicator 3</b> Teacher assists <b>all</b> students to use existing knowledge and prior experience to make connections and recognize relationships	<b>Indicator 3</b> Teacher supports <b>all</b> students to take actions based on the students' own self-monitoring processes	<b>Indicator 3</b> Teacher structures opportunities to generate evidence of learning during the lesson of <b>all</b> students
<b>Indicator 4</b> Teacher provides <b>all</b> students opportunities to build on or challenge initial understandings	<b>Indicator 4</b> Teacher operates with a deep belief that all children can achieve regardless of race, perceived ability and socio-economic status	<b>Indicator 4</b> Teacher structures the classroom environment to enable collaboration, participation, and a positive affective experience for <b>all</b> students		<b>Indicator 4</b> Teacher adapts actions based on evidence generated in the lesson for <b>all</b> students

## Appendix F: Cycle of Inquiry



### Cycle of Inquiry

*Developed by the Southern Maine Partnership.*



The cycle of inquiry to the left is displayed as a linear process. In actual implementation, schools and individual teachers can enter the cycle at any point, and often move back and forth between steps. Desired Student Outcomes and Theories of Learning are integral parts of the cycle of inquiry even though they are not displayed as a stage of the cycle. Refinement of these elements may happen at any stage of the cycle. In fact, these ideas should be revisited on a periodic basis in order to refine these elements.

Protocols are most powerful and effective when used within an ongoing professional learning community and facilitated by a skilled facilitator. To learn more about professional learning communities and seminars for facilitation, please visit the School Reform Initiative website at [www.schoolreforminitiative.org](http://www.schoolreforminitiative.org)

**Appendix G: Middle School Math Fellowship PLP**



**Middle School Math Fellowship**

<b>District:</b> Regional	<b>School:</b> Regional	<b>Coordinator(s):</b> Byrnes, Reagan, Thomson
<b>Administrator(s):</b>	<b>Audience:</b> Middle School Mathematics Teachers	<b>Location:</b> Elko

<b>Outcomes</b>	<b>Evidence</b>
<b>Teachers will:</b>	
Deepen understandings of the interconnections of the SBAC claims, Nevada Academic Content Standards for Mathematics (NVACS-M), rigor, the major works of the grades, and coherence to inform and strengthen practice in order to impact student achievement.	Evaluations Reflections Questionnaires Self-assessments
<b>Students will:</b>	
Engage in learning episodes informed by teacher participation in the Middle School Math Fellowship.	Teacher Reflections Teacher Presentations Student work samples

<b>Actions</b>
<b>Coordinator(s) will:</b>
Research, design, and facilitate Middle School Math Fellowship and coordinate optional attendance at the MidSchoolMath 2019 Conference.

<b>Actions</b>
<b>Administrators will:</b>
Approve teacher participation in the Middle School Math Fellowship.

<b>Plan/Schedule</b>	
<b>Session I</b> <b>January 10, 2019</b>	Introduce SBAC Claims: Claim I Concepts and Procedures; Claim 2 Problem Solving; Claim 3 Communicating Reasoning; Claim 4 Modeling and Data Analysis. Classify problems by claims. Construct sample items aligned to claims. Analyze data about claims. Formulate conjectures about data.
<b>Session II</b> <b>January 23, 2019</b>	Introduce 4 definitions of rigor. Investigate the difference between complicated and complex, common misconceptions of Norman Webb’s Depth of Knowledge (DOK), and limitations of DOK representations. Classify sample items using Hess’ Cognitive Rigor Matrix. Define rigor as a balance between conceptual understanding, procedural skills and fluency, and application. Synthesize understandings of rigor through formulations of applications to practice.
<b>Session III</b> <b>February 5, 2019</b>	Introduce modeling and its relationship to SBAC Claims and rigor. Identify examples of and/or opportunities to incorporate modeling into their instructional practice. Customize items to include modeling. Introduce productive struggle in instructional design and demonstrate methods for promoting productive struggle into practice.
<b>Session IV</b> <b>February 6, 2019</b>	Introduce the major works of the grade to determine the major, supporting, and additional clusters. Illustrate and practice how to access resources in the SBAC Digital Library. Introduce guest speaker, John Antonetti on student engagement, writing, rigor and relevance, and high–yield best practices.
<b>MidSchoolMath 2019</b> <b>Conference</b> <b>March 1 - 2, 2019</b>	Attendance Optional

Plan/Schedule	
<b>Session V</b> <b>March 19, 2019</b>	Analyze the SBAC performance assessments and fellows' classroom assessments through the lens of claims, rigor, modeling, and major works of the grade. Small group presentations of learning implementation.

### **NNRPDP Integration of Standards for Professional Learning**

Standards for Professional Learning guide our thinking when planning and preparing professional learning opportunities. The Professional Learning Plan (PLP) clarifies outcomes, roles, and responsibilities of stakeholders in the learning and also demonstrates the alignment of projects with the standards.

Standard	Alignment
<b>LEARNING COMMUNITIES: Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment.</b>	A learning community will be established by creating a cohort of middle school teachers throughout the region.
<b>LEADERSHIP: Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.</b>	The Middle School Math Fellowship will be led by experts in the field with the goals of increasing understandings and developing a mind trust of mathematical educators in the region. The agenda's for sessions will be aligned to classroom, school, district, and state goals for student and educator learning.
<b>RESOURCES: Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning.</b>	The Middle School Math Fellowship will include resources for attending the Middle School Math Fellowship, such as travel and substitute costs. Funding for a guest speaker and MidSchoolMath 2019 Conference attendance will be acquired.

Standard	Alignment
<p><b>DATA: Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.</b></p>	<p>The effectiveness and impact of the Middle School Math Fellowship on teachers’ understandings will be assessed using learning self-assessments, questionnaires, evaluations, reflections and evidence of impact on student learning</p>
<p><b>LEARNING DESIGNS: Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes.</b></p>	<p>Sessions will include active engagement, modeling, reflection, metacognition, application, feedback, and ongoing support to support acquisition of understanding and application of understanding to practice, such as leading participants through tasks that infuse SBAC claims, rigor, modeling, and productive struggle.</p>
<p><b>IMPLEMENTATION: Professional learning that increases educator effectiveness and results for all students; applies research on change and sustains support for implementation of professional learning for long-term change.</b></p>	<p>The Middle School Math Fellowship will sustain learning by providing implementation support over the course of five sessions and conference attendance. A Year 2 Middle School Math Fellowship will continue to sustain support. Through the use of protocols and methods for creating a collaborative environment where participants feel safe to take risks will be incorporated into implementation of the Fellowship. Examination of data will be used to inform refining instruction practice.</p>
<p><b>OUTCOMES: Professional learning that increases educator effectiveness and results for all students aligns its outcomes with educator performance and student curriculum standards.</b></p>	<p>The goals of the Middle School Math Fellowship will be aligned to the Nevada Academic Content Standards for Mathematics as assessed by the Smarter Balanced Assessment Consortium. The methods and strategies provided will align to the standards and indicators outlined in the Nevada Educator Performance Framework.</p>
<p><b>EQUITY: Professional learning that increases educator effectiveness and results for all students focuses on equitable access, opportunities and outcomes with an emphasis on</b></p>	<p>The Middle School Math Fellowship will address equitable access and achievement for all students by addressing disparities between student groups through investigation of scaffold and extension strategies to make mathematics accessible, include the incorporation of research on</p>

Standard	Alignment
<p><b>addressing achievement and opportunity disparities between student groups.</b></p>	<p>neuroplasticity and its relationship to productive struggles, and encourage attendance at equity sessions offered at the MidSchoolMath 2019 Conference.</p>
<p><b>CULTURAL COMPETENCY: Professional learning that increases educator effectiveness and results for all students facilitates educator’s self-examination of their awareness, knowledge, skills, and actions that pertain to culture and how they can develop culturally-responsive strategies to enrich educational experiences for all students.</b></p>	<p>The design of the Middle School Math Fellowship will promote fellows’ awareness and skills to embed culturally-responsive strategies into their practice to align with the standard. In the design and customization of tasks and resources, fellows will draw upon their cultural knowledge to provide students with learning opportunities that honor the cultural and identify backgrounds of students.</p>

**Appendix H: National Board Certification Cohort Year 2 PLP**



**National Board Certification Cohort Year 2**

<b>District:</b> Regional	<b>School:</b> Regional	<b>Coordinator(s):</b> Marich, Gardner, Negrete
<b>Administrator(s):</b> Negrete	<b>Audience:</b> K-12 Teachers and Educators	<b>Location:</b> Regional

<b>Outcomes</b>	<b>Evidence (Guskey)</b>
<b>Teachers will:</b>	
<p>Outcome One: Participants would feel supported while working through the component requirements.</p> <p>Outcome Two: Participants would change their instructional practice according to component requirements.</p> <p>Outcome Three: Participants would grow as teacher-leaders.</p>	<p>For outcome one, a five-point Likert scale questionnaire with the following questions will provide data: a) This training added to my knowledge of standards and/or my skills in teaching subject matter content, b) I will use the knowledge and skills from this training in my classroom or professional duties, and c) The training will improve my teaching skills. The questionnaire also included a short-answer written reflection related to outcome one. This questionnaire will be completed after each meeting (n=10).</p> <p>For outcome two, during each session participants will complete a written reflection questionnaire related to the given component. The questionnaire asks teachers to report if they had refined an existing instructional practice or tried a new</p>

Outcomes	Evidence (Guskey)
	<p>instructional practice related to component requirements. They will also reflect on what they might do differently if they used the given tool or approach again.</p> <p>For outcome three, to measure participant self-reported leadership experiences a pre/post Teachers as Leaders survey will be used.</p>

Actions
<b>Coordinator(s) will:</b>
<p>Plan and facilitate two Jumpstart sessions, each lasting three hours.  Plan and facilitate eight support workshop sessions, each lasting two hours.  Send monthly reminder email blasts including tips and information for further learning.</p>
<b>Administrator(s) will:</b>
<p>Support their teachers to try new pedagogical approaches in their classroom.</p>

Plan/Schedule	
Dates	
<p>September 17, 2018  October 1, 2018  November 5, 2018  December 10, 2018  January 14, 2019  February 25, 2019  March 11, 2019  April 15, 2019  April 29, 2019</p>	<p>Jumpstart - Launch Component Two and Three  Support workshop  Support workshop  Support workshop  Jumpstart - Launch Component Four and One  Support workshop  Support workshop  Support workshop  Support workshop  Support workshop</p>

**NNRPDP Integration of Standards for Professional Learning**

Standards for Professional Learning guide our thinking when planning and preparing professional learning opportunities. The Professional Learning Plan (PLP) clarifies outcomes,

roles, and responsibilities of stakeholders in the learning and also demonstrates the alignment of projects with the standards.

Standard	Alignment
<p><b>LEARNING COMMUNITIES:</b>  <b>Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment.</b></p>	<p>An online and live/IAV learning community will be formed with cohort participants. Learning community participants will provide feedback for one another through live/IAV and online discussions leading toward continuous improvement, collective responsibility, and goal alignment.</p>
<p><b>LEADERSHIP:</b>  <b>Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.</b></p>	<p>The process of becoming National Board Certified requires teachers to complete leadership-related tasks. These learners will, in turn, become school leaders capable of developing an awareness of the professional learning outcomes within their schools and advocating for change.</p>
<p><b>RESOURCES:</b>  <b>Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning.</b></p>	<p>This professional development opportunity requires human resources to commit to 28 hours of instructional time (28 hours of live/IAV time). Teachers will be required to implement portfolio requirements during their daily teaching and complete writing task on their own time. Live and IAV participation is made available to the region (including Elko, Eureka, Humboldt, and Pershing).</p>
<p><b>DATA:</b>  <b>Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.</b></p>	<p>The course structure and content will be developed to utilize collaboration, insightful reflection on learning, and strategy implementation practice. Data garnered through participants’ ongoing responses to session component completion plans, “parking lot” questions, and evaluations will be used to fine-tune the course to participant needs.</p>
<p><b>LEARNING DESIGNS:</b>  <b>Professional learning that increases educator effectiveness and results for all students</b></p>	<p>The design of the course is based on Guskey’s Five Levels of Professional Development and</p>

Standard	Alignment
<p><b>integrates theories, research, and models of human learning to achieve its intended outcomes.</b></p>	<p>informed by the Standards for Professional Learning.</p>
<p><b>IMPLEMENTATION:</b>  <b>Professional learning that increases educator effectiveness and results for all students; applies research on change and sustains support for the implementation of professional learning for long-term change.</b></p>	<p>This is a two-year PL opportunity providing continued support for sustained implementation.</p>
<p><b>OUTCOMES:</b>  <b>Professional learning that increases educator effectiveness and results for all students aligns its outcomes with educator performance and student curriculum standards.</b></p>	<p>Outcomes from the NBC Project were three-fold. First, participants would feel supported while working through the component requirements. Second, participants would change their instructional practice according to component requirements. Third, participants would grow as teacher-leaders.</p>
<p><b>EQUITY:</b>  <b>Professional learning that increases educator effectiveness and results for all students focuses on equitable access, opportunities and outcomes with an emphasis on addressing achievement and opportunity disparities between student groups.</b></p>	<p>The process of becoming National Board Certified requires teachers to reflect upon and address areas of equity. Specifically, one of the standards for board certification is titled, “respect for diversity”. These learners will, in turn, become aware of and act upon expectations outlined in this standard.</p>
<p><b>CULTURAL COMPETENCY:</b>  <b>Professional learning that increases educator effectiveness and results for all students facilitates educator’s self-examination of their awareness, knowledge, skills, and actions that pertain to culture and how they can develop culturally-responsive strategies to enrich educational experiences for all students.</b></p>	<p>Similar to Equity, the process of becoming National Board Certified requires teachers to reflect upon and address areas related to knowledge of students. Specifically, building relationships with students to understand and support student learning including aspirations and values. To accomplish this standard, self-examination of the teacher’s awareness, knowledge, skills, and actions that pertain to their students’ cultural experiences is necessary. These learners will, in turn, become aware of and act upon expectations outlined in this standard.</p>

**Appendix I: Rise 2018-2019 PLP**



**RISE 2018-19**

<b>District:</b> ECSD	<b>School:</b> All	<b>Coordinator(s):</b> Parker, Thomson
<b>Administrator(s):</b> All	<b>Audience:</b> New teachers hired to teach in ECSD for the 2018-19 school year	<b>Location:</b> GBC High Tech Building and school sites

<b>Outcomes</b>	<b>Evidence (Guskey)</b>
<b>Teachers will:</b>	
<p>Understand the expectation to teach the content of the Nevada Academic Content Standards for their content and grade level.</p> <p>Understand the expectation to use the Nevada Educator Performance Framework as a tool to provide pedagogically sound instruction.</p> <p>Understand district expectations and complete required new teacher certifications.</p> <p>Participate in an ongoing supportive Critical Friends Group learning community.</p> <p>Receive support and encouragement from a site-based mentor.</p>	<p><i>Level 1: Participants' Reactions</i></p> <ul style="list-style-type: none"> <li>● NNRPDP evaluation</li> <li>● CFG reflections</li> </ul> <p><i>Level 2: Participants' Learning</i></p> <ul style="list-style-type: none"> <li>● CFG reflections</li> <li>● Informal discussions</li> </ul> <p><i>Level 3: Organization support and change</i></p> <ul style="list-style-type: none"> <li>● New teacher and mentor reflections</li> </ul> <p><i>Level 4: Participants' use of new knowledge of skills</i></p> <ul style="list-style-type: none"> <li>● CFG reflections</li> </ul> <p>Informal discussions</p>

<b>Mentor teachers will:</b>	
Facilitate ongoing supportive site-based critical friends group meetings with new teachers.  Provide other support for new teachers as needed.	<i>Level 1: Participants' Reactions</i> <ul style="list-style-type: none"> <li>● NNRPDP evaluation</li> <li>● CFG reflections</li> </ul> <i>Level 2: Participants' Learning</i> <ul style="list-style-type: none"> <li>● CFG reflections</li> <li>● Informal discussions</li> </ul> <i>Level 3: Organization support and change</i> <ul style="list-style-type: none"> <li>● New teacher and mentor reflections</li> </ul> <i>Level 4: Participants' use of new knowledge of skills</i> <ul style="list-style-type: none"> <li>● CFG reflections</li> <li>● Informal discussions</li> </ul>

<b>Actions</b>
<b>Coordinator(s) will:</b>
Plan and facilitate RISE Induction prior to the start of school.  Provide ongoing support to site-based mentors through Mentor CFGs held over the course of the school year.
<b>Administrator(s) will:</b>
Provide resources and support to new teachers and mentors including time to meet for RISE CFG.

**NNRPDP Integration of Standards for Professional Learning**

Standards for Professional Learning guide our thinking when planning and preparing professional learning opportunities. The Professional Learning Plan (PLP) clarifies outcomes, roles, and responsibilities of stakeholders in the learning and also demonstrates the alignment of projects with the standards.

STANDARD	PROJECT ALIGNMENT
<p><b>LEARNING COMMUNITIES:</b> Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment.</p>	<p>All new teachers are encouraged to participate in a Critical Friends Group. The CFG structure will help new teachers develop strong collaborative relationships with each other and with their site-based mentor. Mentors will participate in a CFG facilitated by NNRPDP coordinators in which they will receive support for their mentoring role.</p>
<p><b>LEADERSHIP:</b> Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.</p>	<p>RISE mentors will develop capacity as they help new teachers navigate the successes and challenges of their first-year teaching.</p>
<p><b>RESOURCES:</b> Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning.</p>	<p>In order to provide the best support possible with limited time, NNRPDP coordinators and site-based mentors will ensure that CFG meetings begin and end in the allotted 2-hour time frame. Mentor CFGs will be held via the online meeting platform, Zoom, to reduce travel time so mentors can spend more time helping new teachers.</p>
<p><b>DATA:</b> Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.</p>	<p>Data from evaluations, surveys, and reflections will be gathered and analyzed for effectiveness of the RISE program.</p>
<p><b>LEARNING DESIGNS:</b> Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes.</p>	<p>RISE is based on current research around retaining and supporting new teachers, available resources, and past experience. The learning design includes 5 full days of induction to the district prior to the start of school along with ongoing site-based mentor support throughout the school year with mentors receiving ongoing support through NNRPDP.</p>
<p><b>IMPLEMENTATION:</b> Professional learning that increases educator effectiveness and results for all students; applies research on change and sustains support for implementation of professional learning for long-term change.</p>	<p>Since RISE is a year-long induction process with mentor support throughout the school year, new teachers have a greater chance of success. Mentors will also receive ongoing support as they expand their leadership skills.</p>

STANDARD	PROJECT ALIGNMENT
<p><b>EQUITY:</b>  <b>Professional learning that increases educator effectiveness and results for all students focuses on equitable access, opportunities and outcomes with an emphasis on addressing achievement and opportunity disparities between student groups.</b></p>	<p>Understanding and implementing NEPF standards is a major focus of RISE. The emphasis on equity for all students is reflected throughout the standards.</p>
<p><b>CULTURAL COMPETENCY:</b>  <b>Professional learning that increases educator effectiveness and results for all students facilitates educator’s self-examination of their awareness, knowledge, skills, and actions that pertain to culture and how they can develop culturally-responsive strategies to enrich educational experiences for all students.</b></p>	<p>Participants will be given opportunities to examine their knowledge, skills, and actions throughout the year. For instance, during RISE induction, teachers will participate in a “student profile” activity designed to examine awareness about cultural responsiveness. Both new teachers and mentors will read and discuss articles pertaining to cultural competence during CFG.</p>

**Appendix J: Teacher Academy Cohort 5 PLP**



**Teacher Academy Cohort 5 2018 -19 Professional Learning Plan  
TA Professional Learning Plan PLP 2018-19**

<b>District:</b> Regional	<b>School:</b> Regional K-12	<b>Coordinator(s):</b> All NNRPDP coordinators
<b>Administrator(s):</b>	<b>Audience:</b> K-12 Teachers	<b>Location:</b> Elko, Nevada

<b>Outcomes</b>	<b>Evidence</b>
<b>Teachers will:</b>	
Teachers will improve instructional practice through the implementation of high-leverage instructional standards known as Nevada Educator Performance Framework (NEPF).	<p><i>Level 1: Participants' Reactions</i></p> <ul style="list-style-type: none"> <li>● <i>NNRPDP evaluation</i></li> <li>● <i>CFG reflections</i></li> </ul> <p><i>Level 2: Participants' Learning</i></p> <ul style="list-style-type: none"> <li>● <i>Post affective questionnaire responses</i></li> <li>● <i>CFG reflections</i></li> <li>● <i>CFG inquiry goals, progress and reflection</i></li> <li>● <i>Informal discussions</i></li> </ul> <p><i>Level 3: Organization support and change</i></p> <ul style="list-style-type: none"> <li>● <i>Teacher artifacts in CFG (e.g. student work, inquiry artifacts, etc.)</i></li> </ul> <p><i>Level 4: Participants' use of new knowledge of skills</i></p> <ul style="list-style-type: none"> <li>● <i>Post affective questionnaire responses</i></li> <li>● <i>CFG reflections</i></li> <li>● <i>CFG inquiry goals, progress and reflection</i></li> <li>● <i>Informal discussions</i></li> </ul>
Teachers will foster student learning and growth by changes in teacher practice through implementation of NEPF.	<p><i>Level 5: Student Learning Outcomes</i></p> <ul style="list-style-type: none"> <li>● <i>CFG inquiry goals, progress and reflection</i></li> <li>● <i>Teacher artifacts in CFG (e.g. student work, inquiry artifacts, etc.)</i></li> </ul>

<b>Actions</b>
<b>Coordinator(s) will:</b>
Research, design, and facilitate Teacher Academy Cohort 5.

<b>Administrators will:</b>
Approve and support teacher participation in Teacher Academy Cohort 5.

Dates	Plan/Schedule
<b>August 9, 2018</b>	Orientation “Need for Change” presentation by Aaron Hansen Critical Friends Group
<b>September 18, 2018</b>	NEPF standard 4, presented by NNRPDP Coordinators Critical Friends Group
<b>October 1, 2018</b>	Critical Friends Collaborative Group meeting
<b>October 16, 2018</b>	NEPF standard 5, “Assessment” presented by NNRPDP Coordinators Critical Friends Group
<b>October 29, 2018</b>	Critical Friends Collaborative Group meeting
<b>November 13, 2018</b>	NEPF standard 2, “Cognitive Demand” presented by John Antonetti
<b>November 26, 2018</b>	Critical Friends Collaborative Group meeting
<b>January 15, 2019</b>	NEPF standard 1, “Activating Prior Knowledge” presented by NNRPDP Coordinators Critical Friends Group
<b>January 28, 2019</b>	Critical Friends Collaborative Group meeting
<b>February 12, 2019</b>	NEPF standard 3, “Meaning Making” presented by NNRPDP Coordinators. Final reflection and questionnaire

### **NNRPDP Integration of Standards for Professional Learning**

Standards for Professional Learning guide our thinking when planning and preparing professional learning opportunities. The Professional Learning Plan (PLP) clarifies outcomes, roles, and responsibilities of stakeholders in the learning and also demonstrates the alignment of projects with the standards.

Standard	Alignment
<b>LEARNING COMMUNITIES: Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment.</b>	All Teacher Academy teachers will participate in a Critical Friends Group (CFG) which enabled them to be part of a professional learning community. The CFG format supports teachers to develop strong collaborative relationships that focus on improving instruction while supporting one another.

Standard	Alignment
<p><b>LEADERSHIP:</b> Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.</p>	<p>Sharing ideas, information and resources among Teacher Academy participants and with colleagues at school campuses is an expectation of the Teacher Academy. This capacity building expectation is woven into the Teacher Academy through learning tasks, professional reading and reflection of learning.</p>
<p><b>RESOURCES:</b> Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning.</p>	<p>The NNRPDP monetarily supports the Teacher Academy participants by providing the time and resources for the learning. The schools and districts provide support by allowing the teachers to attend this professional development opportunity during contract time.</p>
<p><b>DATA:</b> Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.</p>	<p>Data will be collected from questionnaires, inquiries, reflections, and the NNRPDP evaluation to ensure the effectiveness of the Teacher Academy.</p>
<p><b>LEARNING DESIGNS:</b> Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes.</p>	<p>The Teacher Academy design is carefully created based on effective professional learning research, as well as teacher feedback from previous years. Sessions will include active engagement, modeling, reflection, metacognition, application, feedback, and professional reading to support acquisition of understanding and application of understanding into practice. NNRPDP coordinators will debrief presentations, teacher reflections and feedback and make necessary adjustments.</p>
<p><b>IMPLEMENTATION:</b> Professional learning that increases educator effectiveness and results for all students; applies research on change and sustains support for implementation of professional learning for long-term change.</p>	<p>The duration of the Teacher Academy, as well as the interim CFG will support extended learning. Collaborative learning in CFG will reinforce new learning in Teacher Academy. The CFG inquiry, professional reading, and analysis of student work will offer ongoing and extended learning opportunities around the NEPF.</p>
<p><b>OUTCOMES:</b> Professional learning that increases educator effectiveness and results for all students aligns its outcomes with educator performance and student curriculum standards.</p>	<p>The outcome of Teacher Academy Cohort 5 and CFGs are to improve instructional and pedagogical practices through the implementation of the Nevada Educator Performance Framework’s (NEPF) high-leverage instructional standards. Teacher</p>

Standard	Alignment
	Academy Cohort 5 will focus on the first two goals of NEPF, 1) foster student learning and growth aligned to Nevada Academic Content Standards and 2) improve educators' instructional practices.
<p><b>EQUITY:</b>  <b>Professional learning that increases educator effectiveness and results for all students focuses on equitable access, opportunities and outcomes with an emphasis on addressing achievement and opportunity disparities between student groups.</b></p>	<p>The Teacher Academy Cohort 5 will address equity for all students by providing strategies to reach all students through scaffolds and extensions for differentiation. Teacher effectiveness will be enhanced by using the research of each standard to plan and implement inquiry with all of their students.</p>
<p><b>CULTURAL COMPETENCY:</b>  <b>Professional learning that increases educator effectiveness and results for all students facilitates educator's self-examination of their awareness, knowledge, skills, and actions that pertain to culture and how they can develop culturally-responsive strategies to enrich educational experiences for all students.</b></p>	<p>The Nevada Educator Performance Framework (NEPF) specifically includes all students. Professional learning includes teacher structuring the classroom environment to enable collaboration, participation, and a positive affective experience for all students. It also aligns with an indicator that teachers operate with a deep belief that all children can achieve regardless of race, perceived ability and socio-economic status.</p>

**Appendix K: EIAA Reading Workshop PLP**



**EIAA Reading Workshop  
2018-19**

<b>District:</b> Charter	<b>School:</b> EIAA	<b>Coordinator(s):</b> Ketra Gardner
<b>Administrator(s):</b> Ashley Perkins	<b>Audience:</b> K-8 Teachers	<b>Location:</b> Elko, Nevada

<b>Outcomes</b>	<b>Evidence</b>
<b>Teachers will:</b>	
<ul style="list-style-type: none"> <li>• Provide students opportunities to read in a reading workshop with a focus on NVACS.</li> <li>• Collaborate in a multi-grade level team to refine their reading workshop teaching skills, including daily reading workshop (4 or 5 days weekly), the mini-lesson, and analysis of student writing using learning progressions and ongoing conferring with students.</li> <li>• Participate in coaching.</li> </ul>	<ul style="list-style-type: none"> <li>• The NNRPDP evaluation form and reflections will be used to assess Level 1 of Guskey’s Professional Development Evaluation, participants’ reactions.</li> <li>• Participants’ learning, Level 2, will be assessed using responses to <i>I used to think...Now I think...</i> prompt, as well as comparisons of pre and post-survey responses. Organization support, Level 3, as evidenced in the District’s Request for Service.</li> <li>• Participants’ use of new knowledge, Level 4, will be assessed using the NNRPDP evaluation form, reflections, and responses to the prompt <i>I used to think...Now I think...</i></li> <li>• Level 5, student learning outcomes, will be evaluated using the NNRPDP evaluation form and reflections.</li> <li>• Teacher Pre/post survey from fall to spring</li> <li>• Overall Reading MAP data from spring to spring</li> </ul>
<b>Students will:</b>	
<ul style="list-style-type: none"> <li>• Read daily</li> <li>• Meet or exceed expected MAP growth norms in overall reading</li> </ul>	<ul style="list-style-type: none"> <li>• Overall reading MAP assessment fall 18-19–spring 18-19</li> </ul>

Outcomes	Evidence
by reading daily in a workshop structure.	

Actions
<b>Coordinator(s) will:</b>
Provide monthly professional learning about reading units of study. Provide coaching support of teachers implementing reading units of study.
<b>Administrators will:</b>
Provide time during the workday for professional learning about reading units of study.

**NNRPDP Integration of Standards for Professional Learning**

Standards for Professional Learning guide our thinking when planning and preparing professional learning opportunities. The Professional Learning Plan (PLP) clarifies outcomes, roles, and responsibilities of stakeholders in the learning and also demonstrates the alignment of projects with the standards.

STANDARD	PROJECT ALIGNMENT
<b>LEARNING COMMUNITIES:</b> Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment.	A learning community will be formed with the staff (one per grade level K-8) for one large group of roughly 12-15 and smaller groups of both grade bands and heterogeneous groups. Monthly professional learning will provide the forum for this community. The learning community participants will discuss implementation success, reflect on readings, and focus on beliefs about reading. In this community, learners will explore reading pedagogy and research about best practices while reflecting on personal practice and implementation.
<b>LEADERSHIP:</b> Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.	The PLP is designed to develop capacity in all participants and support systems for ongoing professional learning.

STANDARD	PROJECT ALIGNMENT
<p><b>RESOURCES:</b> Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning.</p>	<p>Human resources include one NNRPDP coordinator as well as the teaching staff at EIAA willing to commit to monthly professional learning meetings, implementation of reading workshop, and coaching.</p>
<p><b>DATA:</b> Professional learning that increases educator effectiveness and results for all students, uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.</p>	<p>Analysis of pre-assessment of participants' current awareness and understanding of Reading Workshop provides the structure and content of this Professional Learning (PL). The recursive response will be provided through analysis of teacher responses to discussions, reflections on learning, evaluations, and surveys.</p>
<p><b>LEARNING DESIGNS:</b> Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes.</p>	<p>Guskey's Five Levels of Professional Development and the Standards for Professional Learning are the basis for this professional learning. The learning includes opportunities to identify personal and professional relevancy through reflection, inquiry, practical engagement, collaboration, and the interconnection, integration, and application of concepts.</p>
<p><b>IMPLEMENTATION:</b> Professional learning that increases educator effectiveness and results for all students; applies research on change and sustains support for implementation of professional learning for long-term change.</p>	<p>Participants are provided with tools to support their efforts in making essential instructional shifts required to successfully implement Reading Workshop. Continued support of outcomes will be made available to all stakeholders upon request.</p>
<p><b>EQUITY:</b> Professional learning that increases educator effectiveness and results for all students focuses on equitable access, opportunities and outcomes with an emphasis on addressing achievement and opportunity disparities between student groups.</p>	<p>Teachers will learn effective pedagogical practices that provide equitable access, opportunities, and outcomes for all students.</p>
<p><b>CULTURAL COMPETENCY:</b> Professional learning that increases educator effectiveness and results for all students facilitates educator's self-examination of their awareness, knowledge, skills, and actions that pertain to culture and how they can develop culturally-responsive strategies to enrich educational experiences for all students.</p>	<p>The recursive process of increasing pedagogical knowledge and implementation along with self-reflection and changes in the implementation of reading workshop supports teachers as they develop culturally-responsive strategies for all students.</p>

**Appendix L: High School Math Curriculum Material Implementation PLP**



**High School Math Curriculum Material Implementation  
2018-19**

<b>District:</b> Northeast Region	<b>School:</b> Regional High School	<b>Coordinator(s):</b> Tom Reagan
<b>Administrator(s):</b>	<b>Audience:</b> Secondary Math Teachers	<b>Location:</b>

<b>Outcomes</b>	<b>Evidence</b>
<b>Teachers will:</b>	
<ul style="list-style-type: none"> <li>• Provide students opportunities to construct mathematical understanding with a focus on NVACS.</li> <li>• Collaborate in weekly department meetings focusing on implementation of new curriculum materials. Collaboration will include lesson pacing, technical troubleshooting, and rigor expectations.</li> <li>• Participate in coaching.</li> </ul>	<ul style="list-style-type: none"> <li>• Teacher post survey on rigor</li> <li>• Overall EOC I and EOC II data from 2017-18 and 2018-19</li> </ul>
<b>Students will:</b>	
<ul style="list-style-type: none"> <li>• Study math daily.</li> <li>• Show gains on end of course exams EOC I and EOC II.</li> </ul>	<ul style="list-style-type: none"> <li>• EOC I and EOC II scores comparison from 2017-18 to 2018-19</li> </ul>

<b>Actions</b>
<b>Coordinator will:</b>
Provide professional learning about rigor expectations of NVACS math standards. Provide coaching support of teachers implementing math curriculum materials.

<b>Actions</b>
<b>Administrators will:</b>
Provide time during the workday for professional learning about NVACS math standards.

### **NNRPDP Integration of Standards for Professional Learning**

Standards for Professional Learning guide our thinking when planning and preparing professional learning opportunities. The Professional Learning Plan (PLP) clarifies outcomes, roles, and responsibilities of stakeholders in the learning and also demonstrates the alignment of projects with the standards.

<b>STANDARD</b>	<b>PROJECT ALIGNMENT</b>
<b>LEARNING COMMUNITIES:</b> Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment	A learning community will be formed with the seven-member math department. Weekly professional learning will provide the forum for this community. The learning community participants will discuss implementation success and troubleshoot technical difficulties.
<b>LEADERSHIP:</b> Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning	The PLP is designed to develop capacity in all participants and support systems for ongoing professional learning.
<b>RESOURCES:</b> Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning	Human resources include one NNRPDP coordinator, as well as the teaching staff at Lowry High School willing to commit to weekly professional learning meetings, implementation of math curriculum materials, and coaching.
<b>DATA:</b> Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.	Analysis of pre-assessment of participants' current awareness and understanding of Reading Workshop provides the structure and content of this Professional Learning (PL). The recursive response will be provided through analysis of teacher responses to discussions, reflections on learning, evaluations, and surveys.

STANDARD	PROJECT ALIGNMENT
<p><b>LEARNING DESIGNS:</b> Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes</p>	<p>Guskey’s Five Levels of Professional Development and the Standards for Professional Learning are the basis for this professional learning. The learning includes opportunities to identify personal and professional relevancy through reflection, inquiry, practical engagement, collaboration, and the interconnection, integration, and application of concepts.</p>
<p><b>IMPLEMENTATION:</b> Professional learning that increases educator effectiveness and results for all students; applies research on change and sustains support for implementation of professional learning for long-term change</p>	<p>Participants are provided with tools to support their efforts in making essential instructional shifts required to successfully implement Pearson enVision Math series. Continued support of outcomes will be made available to all stakeholders upon request.</p>
<p><b>EQUITY:</b> Professional learning that increases educator effectiveness and results for all students focuses on equitable access, opportunities and outcomes with an emphasis on addressing achievement and opportunity disparities between student groups.</p>	<p>Teachers will learn effective pedagogical practices that provide equitable access, opportunities, and outcomes for all students.</p>
<p><b>CULTURAL COMPETENCY:</b> Professional learning that increases educator effectiveness and results for all students facilitates educator’s self-examination of their awareness, knowledge, skills, and actions that pertain to culture and how they can develop culturally-responsive strategies to enrich educational experiences for all students.</p>	<p>The recursive process of increasing pedagogical knowledge and implementation along with self-reflection and changes in the implementation of the math curriculum supports teachers as they develop culturally-responsive strategies for all students.</p>