2016-17 Annual Report

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The NNRPDP Annual Report presents an overview of the program and an account of the professional development done in Northeastern Nevada in the 2016-17 school year. To that end, the work itself is quantified in terms of coordinator time, curricular focus, and relevancy to state mandates, such as trainings in the Nevada Educator Performance Framework (NEPF) and the Nevada Academic Content Standards (NVACS). Data are provided for the region as a whole and then for each of the six school districts within the region. The day-to-day work, however, is best captured in the coordinator studies. The studies, which begin on page 27, highlight a sampling of a year's work and, taken as a whole, illustrate the collaboration between the NNRPDP and districts, schools, and teachers. One study illustrates the effectiveness of applying intervention strategies in a whole-school setting to address low student performance in math; two focus on coordinator support for grants; another examines the degree that raising awareness of content standards for science impacts instruction. The studies offer insight into the planning, delivery, and effectiveness of professional development that is commonplace throughout the region.

About Us

Service Area

As established by NRS 391A.120, the NNRPDP serves six school districts and 61 schools in six counties in Northeast Nevada's high desert. Schools range from four-year high schools of over 1,000 students to remote rural schools with fewer than 20. The service area—51,388 square miles—is slightly larger than the area of the states of Massachusetts, Maryland, Vermont, New Hampshire, and New Jersey combined. The region is diverse in landscape and rich in history and culture; mining, tourism and agriculture drive the economy. With the exceptions of the communities of Ely and Eureka, which are found on Highway 50 ("the loneliest road in America"), larger communities from Lovelock to West Wendover are peppered along 300 miles of the Interstate 80 corridor.

Regionally, student numbers have fluctuated little, from 16,944 in November 2015 to 16,759 in November 2016. The number of teachers and site administrators rose, primarily due to districts being able to fill vacancies that were delegated to long-term substitutes the previous year. (See Table 1.) The graduation rate regionally was 83% in 2016. According to the Nevada Department of Agriculture, 37% of students qualified for Free and Reduced Lunch in 2016. A majority—60%—of the region's students are white; 31% are Hispanic, and 5% Native American.

School District	Teachers 2015-16 / 2016-17	Administrators 2015-16 / 2016-17	Students 2015-16 / 2016-17
Elko	618 / 690	35 / 43	9,996 / 9,936
Eureka	26 / 30	2 / 2	276 / 242
Humboldt	227 / 203	15 / 15	3,421 / 3370
Lander	68 / 67	4 / 6	1,003 / 950
Pershing	53 / 62	4 / 5	634 / 626
White Pine	81 / 81	7 / 8	1,254 / 1,281
Learning Bridge Charter	9 / 9	1 / 1	175 / 180
Elko Institute Charter	9 / 9	2 / 2	185 / 174
Total	1,073 / 1,151	70 / 82	16,944 / 16,759

Table 1: Regional Numbers for Teachers, Administrators, and Students, 2015-16 and 2016-17

Governance Board

The NNRPDP's Governance Board has 14 voting members: the superintendents from each of the region's school districts, the president of Great Basin College, a dean from the college, and a teacher from each district. Nonvoting members include a representative from the state department of education and the program director. As stipulated by statute, the board reviews and approves the trainings provided by the NNRPDP and assures that trainings are of high quality and follow guidelines established by the legislature. Among its other duties, the board approves the budget and the hiring of staff as well as approving the more global work done in professional development across the region. As prescribed by state statute, the NNRPDP Governance Board meets at least twice each year. (See Appendix A for meeting agendas.) Meeting agendas and dates are set by the director after input from the board members. Meetings are held interactively.

Staff

The program director, seven regional coordinators, and office manager make up the staff of the NNRPDP. The director, who has a doctorate in Literacy Studies, has been with the program since July 2013. She works closely with district administrators and school leaders to design and oversee implementation of professional development that fulfills state mandates and serves the needs of teachers and administrators across the region. To that end, she meets regularly with coordinators to plan, evaluate, and refine work done at the site level, resulting in a dynamic rather than a static professional development model across the region.

The seven regional coordinators are responsible for providing on-site professional development for 1,233 teachers and administrators, a ratio of 1:176. Each has expertise in at least one curricular area and in associated pedagogies. The coordinators also invest in their own ongoing professional development, broadening their skill sets and knowledge to deliver required professional development in an increasingly demanding educational landscape. Each year coordinators also study an area of their own work, compile data, and produce a study of that work examining its effectiveness.

The NNRPDP office manager, who has been with the program for 14 years, creates the online coordinator time logs, compiles data from evaluations of trainings, and provides a list of the year's trainings, which indicates location, frequency, and outcome of each. Besides tracking expenses and assisting the director in preparing the annual budget, she prepares the agendas and minutes for each board meeting and disseminates information and provides a contact point for stakeholders concerning trainings and other professional development events and initiatives across the region.

Staff Professional Development

To refine their expertise and inform themselves on research and best practices in professional development, NNRPDP coordinators devote a portion of their time to their own PD. From July 2016 to May 2017, coordinators devoted 1,756 hours to workshops, conferences and reading current literature dedicated to professional development. Coordinator logs indicate that 66% of the professional development they engaged in pertained to the NEPF and 71% to the NVACS. Three percent of their professional development required travel out of state.

Structure

Operating under uniform standards established by the Statewide Council for the Coordination of the Regional Training Programs, the NNRPDP Governance Board's chief duty is to assure effective, high quality professional development in the six school districts in Northeastern Nevada. Rather than employing a hierarchical structure, the board, program director, and regional coordinators work as a collaborative triad to discern needs and design work to carry out initiatives required by the state legislature (e.g. Family Engagement and NEPF trainings). Contributing to this collaborative structure, six of the board members are school district superintendents who have firsthand

knowledge of the character and unique needs of the schools within their districts. Furthermore, the director and regional coordinators have established long-term working relationships with site administrators and teachers that allow for a flow of communication that ultimately impacts the work by refining it to meet district and site level needs. The structure of governance board-director-coordinators, which is both linear and circular, has evolved as an effective tool in assuring that professional development trainings in Northeastern Nevada meet the criteria established for effectiveness and high quality.

Funding

For the last several biennia the NNRPDP's operating budget has remained at $1,243,736 with a rollover of $13,373.96 from FY 2015-16. The budget for FY 2017-18 remains at $1,243,736.

Partnerships and Grants

For the past three years, NNRPDP coordinators facilitated and conducted trainings in math and science in support of a Math and Science Partnership grant through University of Nevada, Reno. This year they also provided support for the Nevada State Department of Education's Great Teaching and Leading Fund, which was awarded to the Elko County School District. In both instances, grant monies were used to pay for substitutes and teacher stipends. The NNRPDP received none of the grant monies though considerable coordinator time was devoted to support both grants.

Services

Several factors shape the services offered and carried out each year by the NNRPDP. Among those factors are state mandates, e.g. the Nevada Educator Performance Framework, which profoundly affect the delivery, scope, and content of the services themselves. The responsibility of designing services that best address the needs and circumstances of certified staff across the region is shared among the director, regional coordinators, and governance board. Emerging from those collaborations were the Teaching and Leading Academy (TALA) and the separate Teacher Academy. (See NNRPDP 5-Year Plan in Appendix B.) With program and NNRPDP staff support, teacher leaders and school administrators at five TALA schools collaborated to promote a shared vision of and shared responsibility for ongoing, site specific school improvement. Four participating schools were chosen from applicants in early 2015-16 and a fifth added in the spring. As a school's needs are identified and goals established, NNRPDP staff provide services in the form of workshops, coaching, mentoring, etc., tailored to meet those needs. In 2016-17, the collaborative teams at each have remained intact and each participated in an RTI series facilitated by regional coordinators.

In its third year and working with its third cohort of teachers, the NNRPDP Teacher Academy, again focused on the Instructional Practice Standards of the NEPF in the context of Critical Friends Groups facilitated by regional coordinators. Third cohort participants met five times for a full day and five half day meetings. Participants earned three university credits. Participants from the second cohort (2015-16) met five times in three-hour blocks and also earned three credits. A fourth cohort is planned for 2017-18; 48 teachers have been accepted.

Nevada Early Literacy Intervention Program (NELIP)

During the 2016-17 school year, regional coordinators devoted 531 hours working with elementary teachers, primarily in the Lander CSD and Jackpot in Elko County, to strengthen literacy instruction in reading and writing. Most of the on-site time in Lander County was devoted to coaching individual teachers in the primary grades. As a piece of the work in literacy at a Lander elementary school, two coordinators provided professional development via a week-long "residency" structured around the coordinators modeling both lessons and coaching and then having teachers take on both of those roles during the week. As one of the participants commented, "I think we were all able to grow and learn and see things we wanted to change in [our] classrooms. I think we will be more unified in our approach to teaching our ELA block. It is one thing to *talk* about things as a team, but it is a total other thing to

work together for a week as a team to *do* things." (Additional work in early literacy regionally is presented on page 61, "Reading Endorsement: A Collaboration between NNRPDP and UNLV.")

Request for Services

The NNRPDP's Request for Services provides districts and schools a means of addressing their professional development needs and scheduling services specifically tailored to meet those needs. The requests, which are made online, may be initiated by teachers or site or district administrators. Each request requires the approval of the school principal or district administrator. Upon receipt and approval of each request, the NNRPDP director selects a coordinator who will be responsible for facilitating and/or delivering the professional development needed. The coordinator then works with the appropriate administrator to schedule sessions, identify desired outcomes and, where indicated, plan for follow up.

Nearly 25% of the Requests for Services for the 2016-17 school year were made prior to July 2016, indicating a shift away from last minute requests for professional development made to fill scheduling gaps in a school's calendar. More significantly, the requests reflect a growing year-to-year culture of professional development emphasizing continuity and measurable outcomes among several districts.

Of the 97 requests for services received by the NNRPDP, approximately 12% are requests for coaching individual teachers or administrators. While the majority of coaching assists teachers who are strong instructors, a few of these requests help fulfill a district's responsibility to provide remediation for certified staff who have failed to meet minimum performance standards. Coordinators who provided the coaching spent a majority of their on-site time (76%) in classroom observations and 24% in professional conversations with the individuals receiving the coaching. In cases where the purpose of the coaching was to provide remediation for substandard performance, significant improvement was the exception rather than the rule.

Distribution of Work and Resources Regionally

Coordinator time is divided into five categories—Preparation, Travel, Professional Conversation, Instructional Training, and Classroom Observation*. The total hours for each category are recorded in time logs which provide a picture of how time is distributed as well as dates, curricular focus, and the district and school where work occurs. In 2016-17, coordinators devoted 2,659 hours (50%) in on-site work (i.e. professional conversation, instructional training, and classroom observation) and 1,849 hours (34%) in preparation. Travel accounted for 16% of coordinator time, down from 18% in 2015-16. (See Figure 1.)

**Professional conversations* include any event or activity where coordinators are not directly providing PD but are providing feedback or expertise (e.g. debriefing, task force work, committee work, PLC meetings, etc.); *instructional training* is direct instruction provided to a group of educators; *classroom observation* includes any form of observing teachers in a classroom setting (walkthroughs, data collection, etc.).

Year-to-year fluctuations in time devoted to work in each district are primarily driven by districts themselves, their perceived needs, and by state initiatives, which often require multiple years to implement successfully. An additional factor determining the allocation of time—and thereby dollars—is the number of teachers and administrators in each district. Furthermore, to fulfill their professional development needs, individual districts may require considerable resources one year, fewer the next, and even fewer the next. (See Figure 2 and Table 2.) In 2016-17, the Elko County School District, with 60% of the region's teachers accounted for 47% of the total coordinator time devoted to districts and 46% of the total coordinator cost per district. The Humboldt County School District, with 18% of the region's teachers, accounted for 13% of coordinator time and 14% of the total coordinator cost per district. The White Pine County School District, with 7% of the region's teachers, accounted for 21% of the total coordinator time devoted to districts and 21% of the total coordinator cost per district.

The three-year comparisons of coordinator time devoted to each district illustrated in Figure 2 are best seen as a profile of district-driven demands for professional development and the NNRPDP's need to shift resources each

year to fulfill those needs. The NNRPDP's 5-Year Plan, last revised in 2015, provides a template for the region's professional development and both reflects and addresses ongoing work in the districts. (See Appendix B.)

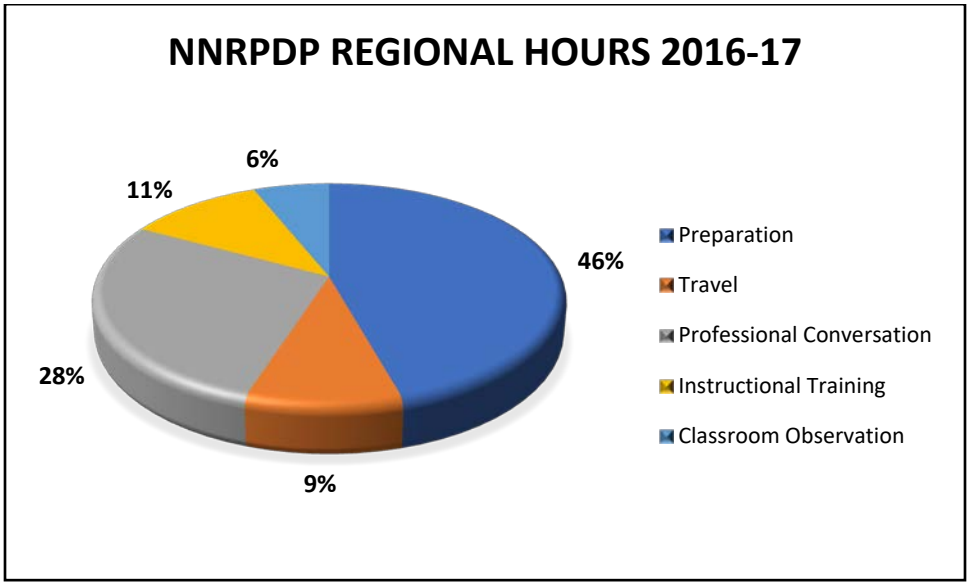

Figure 1: NNRPDP Regional Hours

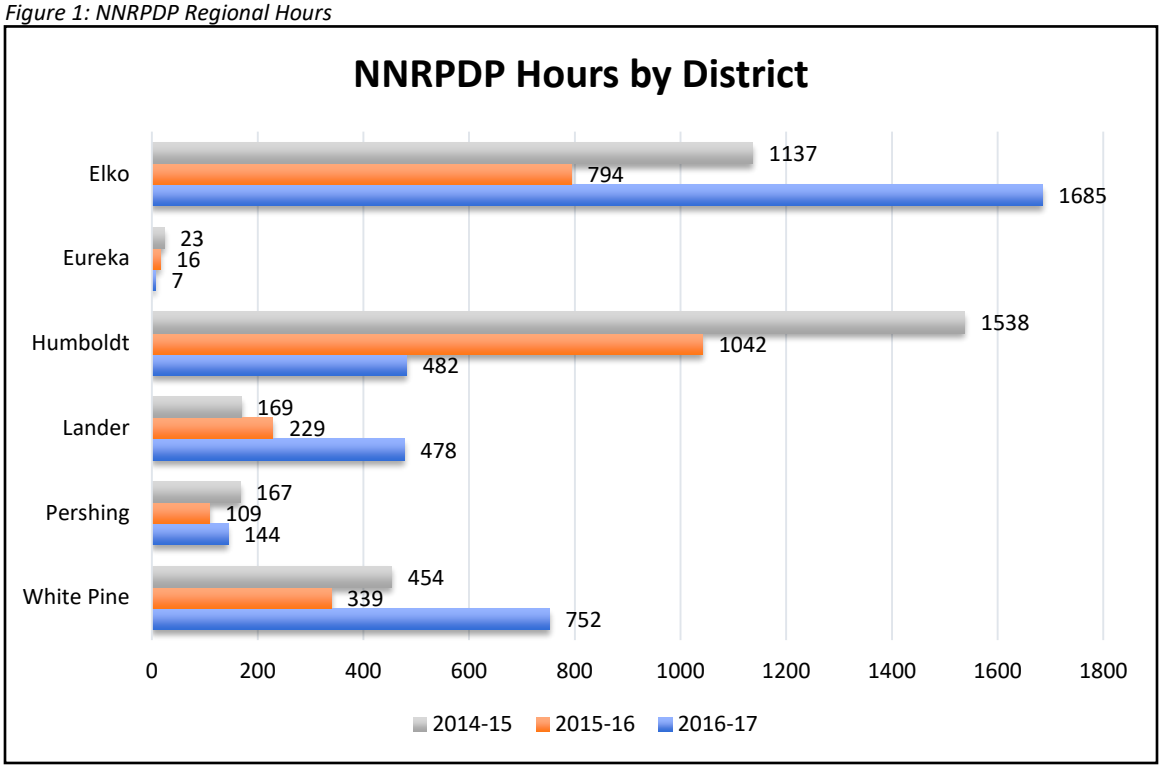

Figure 2: NNRPDP Hours by District

District* Served	Total No. of Certified Staff**	Percent of Region's Certified Staff**	Cost of Coordinator Time	Cost per Total No. of Certified Staff**	Cost per Unduplicated No. of Certified Staff**	Percent of Certified Staff** Receiving Training
Elko	733	60%	$124,353.53	$169.65	$196.65	67%
Eureka	32	3%	$505.40	$15.79	$56.15	28%
Humboldt	218	18%	$36,794.93	$168.78	$296.71	82%
Lander	73	6%	$35,974.24	$492.79	$620.24	79%
Pershing	67	6%	$10,360.70	$154.63	$647.54	24%
White Pine	89	7%	$57,657.83	$647.84	$655.20	99%

Table 2: Cost of Coordinator Time by District

*Figures are for work devoted to a district but not work done in more than one district (e.g. NELIP, TALA, etc.)
** Includes teachers and administrators

Trainings

Broadly used to describe the majority of professional development work done by the NNRPDP, the term "trainings" encompasses work that ranges from single event presentations to multiple event workshops focusing on pedagogy, curriculum, or newly initiated performance frameworks. A training may be designed simply to provide information or ultimately be designed to result in the implementation of a particular strategy, protocol, or evaluative criteria.

Of the 275 trainings done between July of 2016 and June of 2017, 11% focused on assessment, 65% on content area, and 24% on pedagogy. Awareness was the outcome of 14% of the trainings, knowledge was the outcome of 38%, and implementation the outcome of 47%. Overall, 777 teachers, 68% of the total in the region, received professional development training from the NNRPDP. (See Table 3.) (See Appendix C for a list of the year's trainings and Appendix D for Scope of Work.) See the Work section of this report for details of specific trainings.

Number of Teachers, Administrators, and Others	Trained/Regional
Number of Trainings = 275	
Unduplicated Teachers = 777	Duplicated Teachers = 3516
Unduplicated Administrators = 91	Duplicated Administrators = 265
Unduplicated Others = 59	Duplicated Others = 110
Unduplicated Paraprofessionals = 27	Duplicated Paraprofessionals = 62
Totals = 932	Totals = 3953
Focus of Training:	
Assessment	11%
Content Area	65%
Pedagogy	24%
Length of Training:	
Up to 3 hours	58%
1 day	31%
Contiguous days	11%
Size of Group:	
Fewer than 10	20%
11 to 30	54%
30+	26%
Credit:	
Graduate/In-service	43%
In-service	2%
NA	55%
Outcome:	
Awareness	14%

Number of Teachers, Administrators, and Others	Trained/Regional
Knowledge	38%
Implementation	47%
Trained by:	
Regional Coordinator	96%
Other	4%

Table 3: Regional Trainings

Indicators of Quality

To measure the effectiveness and quality of the NNRPDP's work, teachers and administrators participating in trainings complete an online evaluation that asks participants to rate, among other things, the presenter's skills and knowledge and the degree that the training will improve teaching skills. Since the implementation of the evaluation form, mean ratings have remained consistently high, though regional totals in 2016-17 indicate a slight decline from previous years. In 2015-16, 1,084 evaluations were completed and 1,608 in 2016-17, an increase likely due to the continued diligence of coordinators in gathering that data. Besides the differences in the number of evaluations completed from year to year, the training content and audience also shift. For instance, evaluations from the Humboldt County School District accounted for 27% of the total evaluations in 2015-16 and 9% in 2016-17; nonetheless, from year to year, the shifts in ratings are statistically insignificant and the overall inference is that over the years the NNRPDP's professional development work is perceived by teachers and administrators to be of high quality. (See Table 4 for five year comparisons of mean ratings regionally.)

Beyond the 11 standard rating questions, this year respondents were required to provide a reflection on the training and comment specifically on what from the training will be transferred into practice and how implementing the knowledge gained in the training will affect student learning. Although the comments varied widely, the tenor of the comments was uniform. The reflections and feedback were characterized by brief, positive statements that ranged from praise for the presenter and content to the more generic compliments, e.g. "good job" or "great class." Approximately 16% chose not to provide feedback. Comments on how the training will affect student learning were the most detailed and, again, overwhelmingly positive, ranging from "greatly" to "Being more efficient and confident about what I am doing will help me complete more running records in a shorter amount of time so I can focus on their needs from the running records." Overall, the comments from teachers reflected and validated the numerical ratings of trainings. Further follow up, particularly on the trainings' impact over time, would provide another dimension of the efficacy of the NNRPDP's work.

n=1608 *(Scale: 1 = not at all, 3 = to some extent, 5 = to a great extent)*	2012-13	2013-14	2014-15	2015-16	2016-17
1.The training matched my needs.	4.44	4.56	4.55	4.63	4.46
2. The training provided opportunities for interactions and reflections.	4.66	4.79	4.81	4.84	4.73
3. The presenter's experience and expertise enhanced the quality of the training	4.73	4.72	4.77	4.77	4.70
4. The presenter efficiently managed time and pacing of the training.	4.70	4.73	4.74	4.78	4.71
5. The presenter modeled effective teaching strategies.	4.59	4.61	4.63	4.68	4.60
6. The training added to my knowledge of standards and/or my skills in teaching subject matter content.	4.46	4.52	4.50	4.55	4.39
7. The training will improve my teaching skills.	4.48	4.51	4.54	4.56	4.42
8.I will use the knowledge and skills from this training in my classroom or professional duties.	4.57	4.63	4.65	4.68	4.51
9. This training will help me meet the needs of diverse student populations (e.g., gifted and talented, ELL, special ed., at-risk students).	4.36	4.38	4.49	4.39	4.32
10. My learning has prompted me to change my practice.	NA	NA	NA	4.24	4.11
11. My learning today will affect students' learning.	NA	NA	NA	4.52	4.35

Table 4: Mean Ratings Regionally

Five Year Plan

Planning, which focuses both the short- and long-term work of the NNRPDP, is a critical component of the NNRPDP's work. Staff meet regularly to critique, shape, and refine work done within the context of each academic year, and the NNRPDP's 5-Year Plan, most recently revised in 2015, provides a map for the ongoing and anticipated professional development needs of the region's certified staff. (See Appendix B for 5-Year Plan.)

NNRPDP Work in Districts and Charter Schools, 2016-17

Following are brief descriptions of each school district within the region and a summary of NNRPDP hours. Included also are training summaries and comparisons of the mean ratings of evaluations within the district and the region as a whole. Similar summaries for charter schools follow the district summaries.

Elko County School District

Largest geographically (17,203 square miles) and in student population (9,936, 59% of students in the region), the Elko County School District has 16 grammar schools, two middle schools, and seven high schools. As of November 2016, the district employed 690 teachers and 43 administrators. In 2015-16, 60% of the students were white, 31% Hispanic, and 6% Native American. Thirty-five percent of the students qualify for Free and Reduced Lunch. The district's graduation rate for 2016 was 85%.

The NNRPDP devoted 1,685 hours to professional development in the Elko County School District. The majority of coordinator time (44%) was devoted to professional conversation, instructional training, and classroom observation. Preparation accounted for 43% of coordinator time.

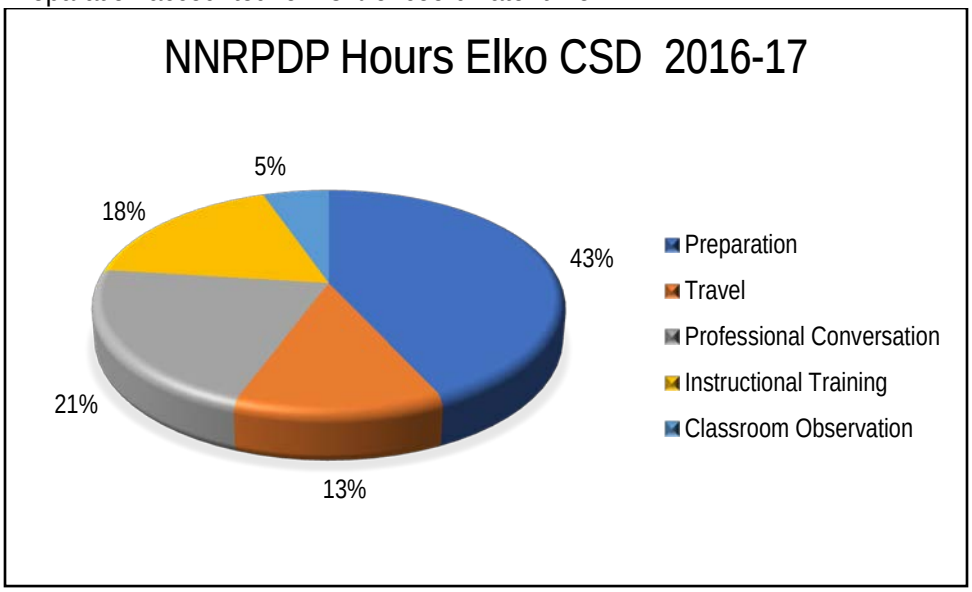

Figure 3: NNRPDP Hours Elko CSD

Those attending trainings in the Elko County School District in 2016-17 completed 977 evaluations, 61% of all evaluations done in the region. In each category, district averages exceeded those of the region. (See Table 5.) Of the 154 trainings done in the district, 7% focused on assessment, 73% on content area, and 20% on pedagogy. Awareness was the outcome of 10% of the trainings, knowledge was the outcome of 46%, and implementation the outcome of 44%. Overall, 62% of the teachers in the district received professional development training from the NNRPDP. (See Table 6.)

n=977 *(Scale: 1 = not at all, 3 = to some extent, 5 = to a great extent)*	Region	District
The training matched my needs.	4.46	4.56
The training provided opportunities for interactions and reflections.	4.73	4.79
The presenter's experience and expertise enhanced the quality of the training.	4.70	4.77
The presenter efficiently managed time and pacing of training.	4.71	4.76
The presenter modeled effective teaching strategies	4.60	4.71
This training added to my knowledge of standards and/or my skills in teaching subject matter content.	4.39	4.50
The training will improve my teaching skills.	4.42	4.52
I will use the knowledge and skills from this activity in my classroom or professional duties.	4.51	4.60
This training will help me meet the needs of diverse student populations (e.g., gifted and talented, ELL, special ed., at-risk students).	4.32	4.45
My learning has prompted me to change my practice.	4.11	4.19
My learning today will affect students' learning.	4.35	4.43

Table 5: Elko CSD Mean Ratings

Number of Teachers, Administrators, and Others	Trained/Elko
Number of Trainings = 154	
Unduplicated Teachers = 429	Duplicated Teachers = 1792
Unduplicated Administrators = 62	Duplicated Administrators = 104
Unduplicated Others = 19	Duplicated Others = 61
Unduplicated Paraprofessionals = 15	Duplicated Paraprofessionals = 19
Totals = 525	Totals = 1976
Focus of Training:	
Assessment	7%
Content Area	73%
Pedagogy	20%
Length of Training:	
Up to 3 hours	55%
1 day	31%
Contiguous days	14%
Size of Group:	
Fewer than 10	18%
11 to 30	52%
30+	30%
Credit:	
Graduate/In-service	57%
In-service	5%
NA	38%
Outcome:	
Awareness	10%
Knowledge	46%
Implementation	44%
Trained by:	
Regional Coordinator	92%
Other	8%

Table 6: Elko CSD Trainings

Eureka County School District

Smallest geographically (4,176 square miles) and in student population (242, 1.5% of students in the region), the Eureka County School District has two grammar schools and one junior high school / high school. As of November 2016, the district employed 30 teachers and two administrators. In 2015-16, 83% of the students were white, 9% Hispanic, and 7% Native American. The district's graduation rate for 2016 was 100%.

The NNRPDP devoted seven hours to professional development in the Eureka County School District in one professional development event. The majority of coordinator time (43%) was devoted to preparation and 43% to travel. Instructional training accounted for 14% of coordinator time. (See Figure 9.)

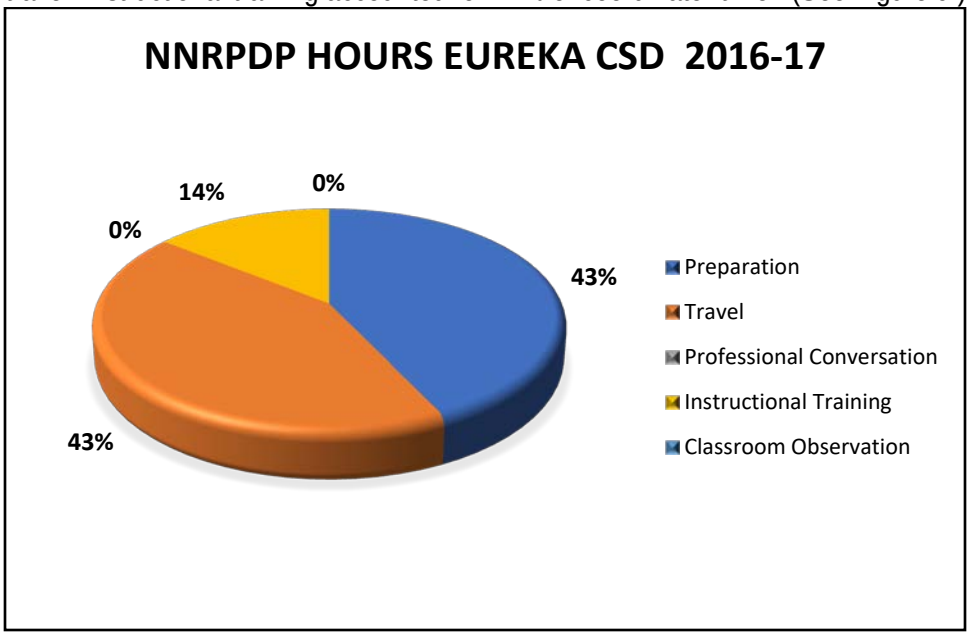

Figure 4: NNRPDP Hours Eureka CSD

Those attending the one training in the Eureka County School District in 2016-17 completed nine evaluations, less than 1% of all evaluations done in the region. In three categories, district averages exceeded those of the region. In eight of the 11, district averages fell below those of the region. (See Table 7.) Of the one training done in the Eureka County School District, seven teachers, 23% of the total in the district, received professional development training from the NNRPDP in 2016-17. The focus of the training was pedagogy and the outcome was awareness. (See Table 8.)

n=9 *(Scale: 1 = not at all, 3 = to some extent, 5 = to a great extent)*	Region	District
The training matched my needs.	4.46	4.56
The training provided opportunities for interactions and reflections.	4.73	4.67
The presenter's experience and expertise enhanced the quality of the training.	4.70	4.67
The presenter efficiently managed time and pacing of training.	4.71	4.89
The presenter modeled effective teaching strategies	4.60	4.86
This training added to my knowledge of standards and/or my skills in teaching subject matter content.	4.39	3.88
The training will improve my teaching skills.	4.42	3.38
I will use the knowledge and skills from this activity in my classroom or professional duties.	4.51	4.44
This training will help me meet the needs of diverse student populations (e.g., gifted and talented, ELL, special ed., at-risk students).	4.32	3.71
My learning has prompted me to change my practice.	4.11	3.63
My learning today will affect students' learning.	4.35	3.56

Table 7: Eureka CSD Mean Ratings

Number of Teachers, Administrators, and Others Trained/Eureka	
Number of Trainings = 1	
Unduplicated Teachers = 7	Duplicated Teachers = 7
Unduplicated Administrators = 2	Duplicated Administrators = 2
Unduplicated Others = 1	Duplicated Others = 1
Unduplicated Paraprofessionals = 0	Duplicated Paraprofessionals = 0
Totals = 10	Totals = 10
Focus of Training:	
Assessment	
Content Area	
Pedagogy	100%
Length of Training:	
Up to 3 hours	100%
1 day	
Contiguous days	
Size of Group:	
Fewer than 10	100%
11 to 30	
30+	
Credit:	
Graduate/In-service	
In-service	
NA	100%
Outcome:	
Awareness	100%
Knowledge	
Implementation	
Trained by:	
Regional Coordinator	100%
Other	

Table 8: Eureka CSD Trainings

Humboldt County School District

Second largest geographically (9,641 square miles) and in student population (3,370, 20% of students in the region), the Humboldt County School District has eight grammar schools, two middle or junior high schools, one junior high / high school combination, and one high school. As of November 2016, the district employed 203 teachers and 15 administrators. In 2015-16, 55% of the students were white, 37% Hispanic, and 5% Native American. Forty-one percent of the students qualify for Free and Reduced Lunch. The district's graduation rate for 2016 was 76%.

The NNRPDP devoted 482 hours to professional development in the Humboldt County School District. The majority of coordinator time (49%) was devoted to professional conversation, instructional training, and classroom observation. Preparation accounted for 21% of coordinator time.

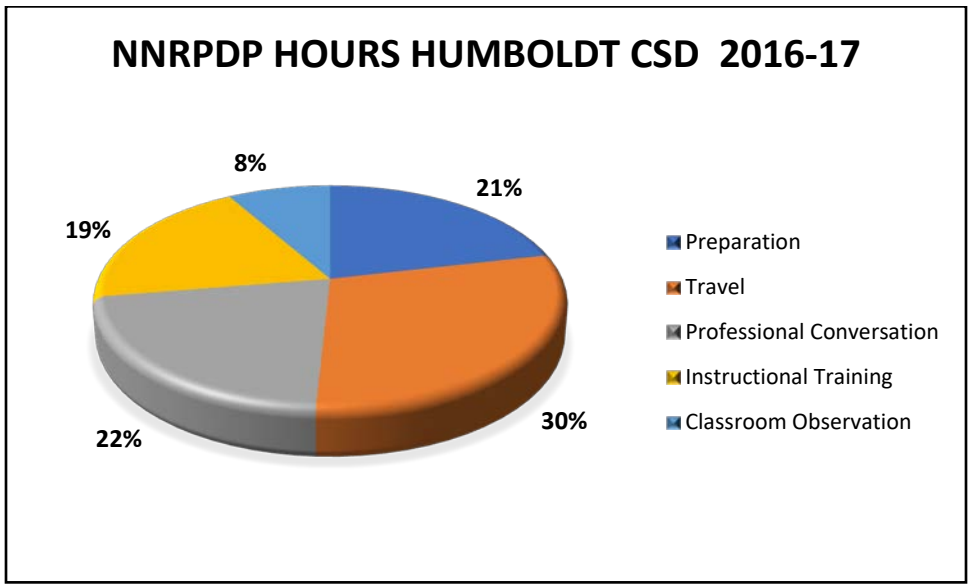

Figure 5: NNRPDP Hours Humboldt CSD

Those attending trainings in the Humboldt County School District in 2016-17 completed 144 evaluations, 9% of all evaluations done in the region. In each category, district averages were below those of the region. (See Table 9.) Of the 73 trainings done in the Humboldt County School District between July of 2016 and June of 2017, 10% focused on assessment, 67% on content area, and 23% on pedagogy. Awareness was the outcome of 9% of the trainings, knowledge was the outcome of 39%, and implementation the outcome of 52%. Overall, 167 teachers, 82% of the total in the district, received professional development training from the NNRPDP. (See Table 10.)

n=144 *(Scale: 1 = not at all, 3 = to some extent, 5 = to a great extent)*	Region	District
The training matched my needs.	4.46	4.22
The training provided opportunities for interactions and reflections.	4.73	4.66
The presenter's experience and expertise enhanced the quality of the training.	4.70	4.44
The presenter efficiently managed time and pacing of training.	4.71	4.58
The presenter modeled effective teaching strategies	4.60	4.35
This training added to my knowledge of standards and/or my skills in teaching subject matter content.	4.39	4.18
The training will improve my teaching skills.	4.42	4.14
I will use the knowledge and skills from this activity in my classroom or professional duties.	4.51	4.27
This training will help me meet the needs of diverse student populations (e.g., gifted and talented, ELL, special ed., at-risk students).	4.32	4.04
My learning has prompted me to change my practice.	4.11	3.86
My learning today will affect students' learning.	4.35	4.18

Table 9: Humboldt CSD Mean Ratings

Number of Teachers, Administrators, and	Others Trained/Humboldt
Number of Trainings = 73	
Unduplicated Teachers = 167	Duplicated Teachers = 519
Unduplicated Administrators = 11	Duplicated Administrators = 87
Unduplicated Others = 12	Duplicated Others = 14
Unduplicated Paraprofessionals = 0	Duplicated Paraprofessionals = 0
Totals = 190	Totals = 620
Focus of Training:	
Assessment	10%
Content Area	67%
Pedagogy	23%
Length of Training:	
Up to 3 hours	47%
1 day	43%
Contiguous days	10%
Size of Group:	
Fewer than 10	22%
11 to 30	38%
30+	40%
Credit:	
Graduate/In-service	40%
In-service	0%
NA	60%
Outcome:	
Awareness	9%
Knowledge	39%
Implementation	52%
Trained by:	
Regional Coordinator	99%
Other	1%

Table 10: Humboldt CSD Trainings

The Lander County School District encompasses 17,203 square miles and has a student population of 950, 6% of the region's total. The district has two grammar schools, one junior high school, and two high schools. As of November 2016, the district employed 67 teachers and six administrators. In 2015-16, 59% of the students were white, 33% Hispanic, and 4% Native American. Thirty percent of the students qualify for Free and Reduced Lunch. The district's graduation rate for 2016 was 80%.

The NNRPDP devoted 478 hours to professional development in the Lander County School District. The majority of coordinator time (41%) was devoted to professional conversation, instructional training, and classroom observation. Preparation accounted for 34% of coordinator time.

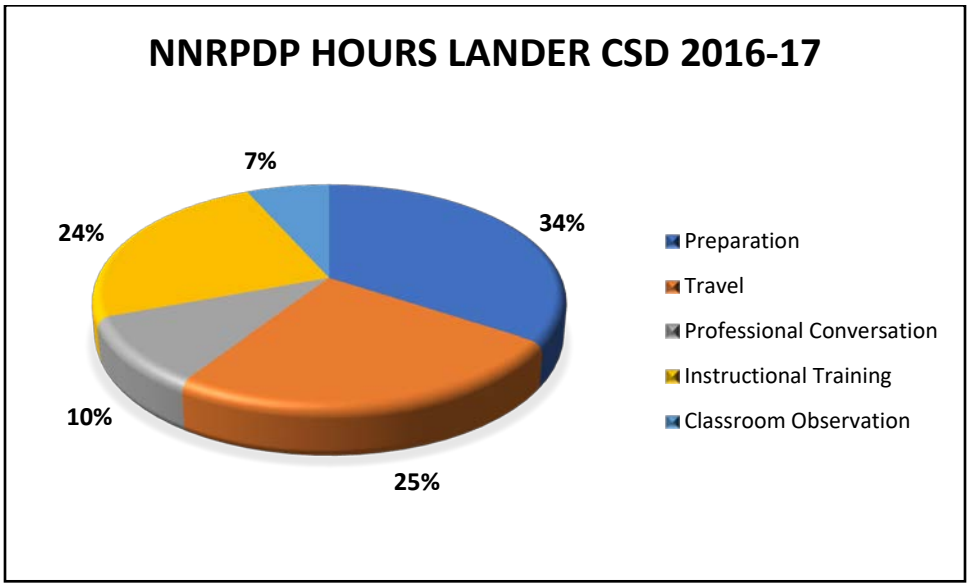

Figure 6: NNRPDP Hours Lander CSD

Those attending trainings in the Lander County School District in 2016-17 completed 298 evaluations, 19% of all evaluations done in the region. In each category, district averages fell below those of the region. (See Table 11.) Of the 46 trainings done in the Lander County School District between July of 2016 and June of 2017, 17% focused on assessment, 63% on content area, and 20% on pedagogy. Awareness was the outcome of 22% of the trainings, knowledge was the outcome of 20%, and implementation the outcome of 58%. Overall, 56 teachers, 84% of the total in the district, received professional development training from the NNRPDP. (See Table 12)

n=298 *(Scale: 1 = not at all, 3 = to some extent, 5 = to a great extent)*	Region	District
The training matched my needs.	4.46	4.15
The training provided opportunities for interactions and reflections.	4.73	4.59
The presenter's experience and expertise enhanced the quality of the training.	4.70	4.54
The presenter efficiently managed time and pacing of training.	4.71	4.60
The presenter modeled effective teaching strategies	4.60	4.37
This training added to my knowledge of standards and/or my skills in teaching subject matter content.	4.39	4.07
The training will improve my teaching skills.	4.42	4.17
I will use the knowledge and skills from this activity in my classroom or professional duties.	4.51	4.30
This training will help me meet the needs of diverse student populations (e.g., gifted and talented, ELL, special ed., at-risk students).	4.32	4.04
My learning has prompted me to change my practice.	4.11	3.89
My learning today will affect students' learning.	4.35	4.13

Table 11: Lander CSD Mean Ratings

Number of Teachers, Administrators, and Others	Trained/Lander

Number of Teachers, Administrators, and Others	Trained/Lander
Number of Trainings = 46	
Unduplicated Teachers = 56	Duplicated Teachers = 470
Unduplicated Administrators = 3	Duplicated Administrators = 11
Unduplicated Others = 3	Duplicated Others = 4
Unduplicated Paraprofessionals = 9	Duplicated Paraprofessionals = 36
Totals = 71	Totals = 521
Focus of Training:	
Assessment	17%
Content Area	63%
Pedagogy	20%
Length of Training:	
Up to 3 hours	64%
1 day	27%
Contiguous days	9%
Size of Group:	
Fewer than 10	16%
11 to 30	63%
30+	21%
Credit:	
Graduate/In-service	16%
In-service	0%
NA	84%
Outcome:	
Awareness	22%
Knowledge	20%
Implementation	58%
Trained by:	
Regional Coordinator	99%
Other	1%

Table 12: Lander CSD Trainings

Pershing County School District

The Pershing County School District encompasses 6,307 square miles and has a student population of 626, approximately 4% of the region's total. The district has two grammar schools, one middle school, and one high school. As of November 2016, the district employed 62 teachers and five administrators. In 2015-16, 52% of the students were white, 31% Hispanic, and 8% Native American. Fifty-two percent of the students qualify for Free and Reduced Lunch. The district's graduation rate for 2016 was 83%.

The NNRPDP devoted 144 hours to professional development in the district. Forty percent of coordinator time was devoted to professional conversation, instructional training, and classroom observation. Preparation accounted for 17% and travel for 43% of coordinator time. (See Figure 18.)

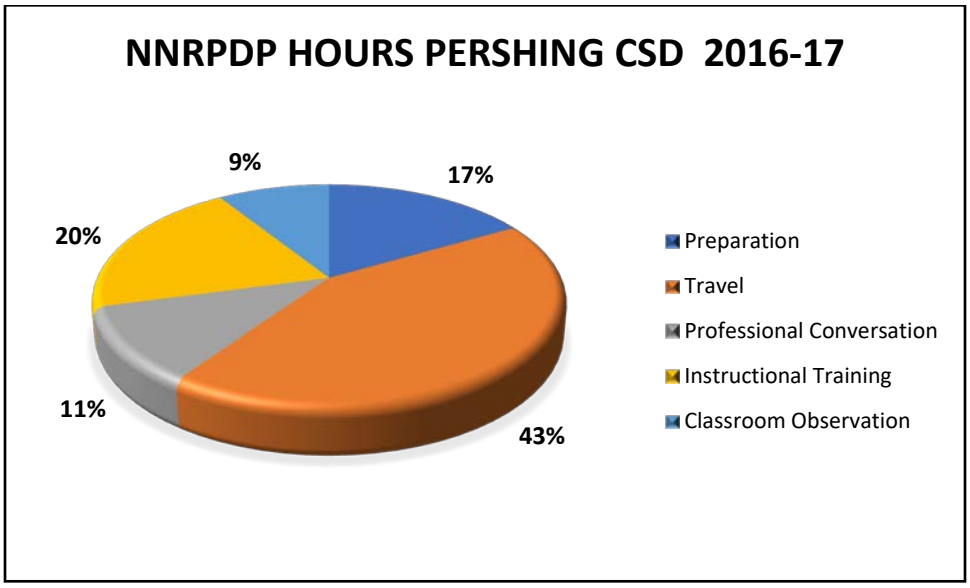

Figure 7: NNRPDP Hours Pershing CSD

Those attending trainings in the Pershing County School District in 2016-17 completed 10 evaluations, approximately 1% of all evaluations done in the region. In each category, district averages exceeded those of the region. (See Table 13.) Of the nine trainings done in the Pershing County School District between July of 2016 and June of 2017, 100% focused on content area. Knowledge was the outcome of 44%, and implementation the outcome of 56%. Overall, 13 teachers, 25% of the total in the district, received professional development training from the NNRPDP. (See Table 14.)

n=10 *(Scale: 1 = not at all, 3 = to some extent, 5 = to a great extent)*	Region	District
The training matched my needs.	4.46	5.00
The training provided opportunities for interactions and reflections.	4.73	5.00
The presenter's experience and expertise enhanced the quality of the training.	4.70	5.00
The presenter efficiently managed time and pacing of training.	4.71	5.00
The presenter modeled effective teaching strategies	4.60	4.90
This training added to my knowledge of standards and/or my skills in teaching subject matter content.	4.39	5.00
The training will improve my teaching skills.	4.42	4.80
I will use the knowledge and skills from this activity in my classroom or professional duties.	4.51	4.80
This training will help me meet the needs of diverse student populations (e.g., gifted and talented, ELL, special ed., at-risk students).	4.32	4.90
My learning has prompted me to change my practice.	4.11	4.70
My learning today will affect students' learning.	4.35	4.90

Table 13: Pershing CSD Mean Ratings

Number of Teachers, Administrators, and Others	Trained/Pershing
Number of Trainings = 9	
Unduplicated Teachers = 13	Duplicated Teachers = 50
Unduplicated Administrators = 3	Duplicated Administrators = 11
Unduplicated Others = 0	Duplicated Others = 0
Unduplicated Paraprofessionals = 0	Duplicated Paraprofessionals = 0
Totals = 16	Totals = 61
Focus of Training:	
Assessment	0%
Content Area	100%
Pedagogy	0%
Length of Training:	
Up to 3 hours	90%
1 day	10%
Contiguous days	0%
Size of Group:	
Fewer than 10	95%
11 to 30	0%
30+	5%
Credit:	
Graduate/In-service	85%
In-service	
NA	15%
Outcome:	
Awareness	0%
Knowledge	44%
Implementation	56%
Trained by:	
Regional Coordinator	100%
Other	

Table 14: Pershing CSD Trainings

White Pine County School District

Third largest geographically (8,897 square miles) and in student population (1,281, 8% of students in the region), the White Pine County School District has four grammar schools, one middle or junior high school, one combined junior high school, and one high school. As of November 2016, the district employed 81 teachers and eight administrators. In 2015-16, 74% of the students were white, 15% Hispanic, and 4% Native American. Thirty-nine` percent of the students qualify for Free and Reduced Lunch. The district's graduation rate for 2016 was 83%.

The NNRPDP devoted 752 hours to professional development in the White Pine County School District. The majority of coordinator time (63%) was devoted to professional conversation, instructional training, and classroom observation. Preparation accounted for 33% of coordinator time.

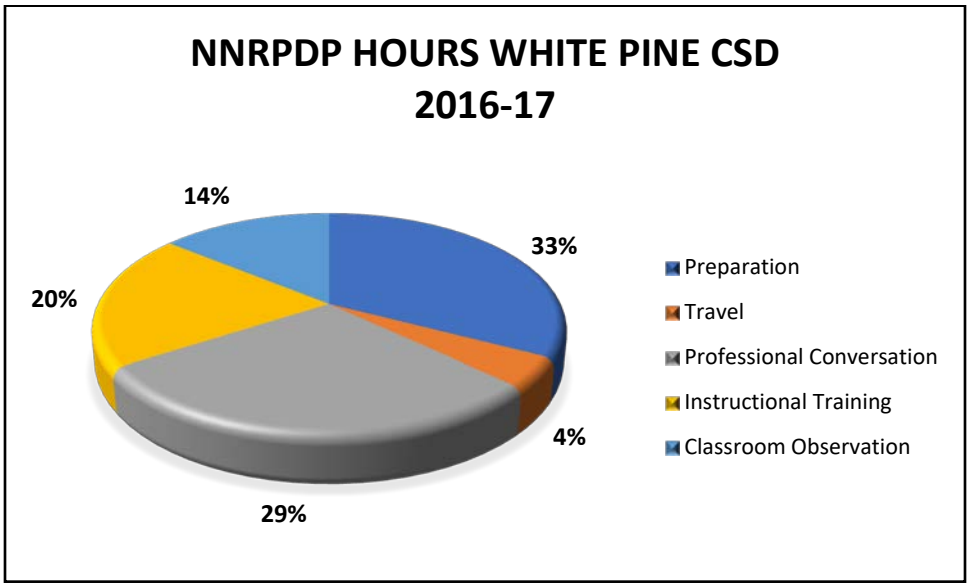

Figure 8: NNRPDP Hours White Pine CSD

Those attending trainings in the White Pine County School District in 2016-17 completed 170 evaluations, 11% of all evaluations done in the region. District averages exceeded those of the region in seven of the 11 categories. (See Table 15.) Of the 92 trainings done in the White Pine County School District between July of 2016 and June of 2017, 12% focused on assessment, 56% on content area, and 32% on pedagogy. Awareness was the outcome of 12% of the trainings, knowledge was the outcome of 39%, and implementation the outcome of 49%. Overall, 100% of the teachers in the district received professional development training from the NNRPDP. (See Table 16.)

n=170 *(Scale: 1 = not at all, 3 = to some extent, 5 = to a great extent)*	Region	District
The training matched my needs.	4.46	4.54
The training provided opportunities for interactions and reflections.	4.73	4.72
The presenter's experience and expertise enhanced the quality of the training.	4.70	4.73
The presenter efficiently managed time and pacing of training.	4.71	4.66
The presenter modeled effective teaching strategies	4.60	4.55
This training added to my knowledge of standards and/or my skills in teaching subject matter content.	4.39	4.47
The training will improve my teaching skills.	4.42	4.52
I will use the knowledge and skills from this activity in my classroom or professional duties.	4.51	4.55
This training will help me meet the needs of diverse student populations (e.g., gifted and talented, ELL, special ed., at-risk students).	4.32	4.28
My learning has prompted me to change my practice.	4.11	4.14
My learning today will affect students' learning.	4.35	4.39

Table 15: White Pine CSD Mean Ratings

Number of Teachers, Administrators, and Others	Trained/White Pine
Number of Trainings = 92	
Unduplicated Teachers = 81	Duplicated Teachers = 606
Unduplicated Administrators = 7	Duplicated Administrators = 46
Unduplicated Others = 28	Duplicated Others = 28
Unduplicated Paraprofessionals = 4	Duplicated Paraprofessionals = 5
Totals = 120	Totals = 685
Focus of Training:	
Assessment	12%
Content Area	56%
Pedagogy	32%
Length of Training:	
Up to 3 hours	72%
1 day	21%
Contiguous days	7%
Size of Group:	
Fewer than 10	22%
11 to 30	67%
30+	11%
Credit:	
Graduate/In-service	21%
In-service	0%
NA	79%
Outcome:	
Awareness	12%
Knowledge	39%
Implementation	49%
Trained by:	
Regional Coordinator	100%
Other	

Table 16: White Pine CSD Trainings

NNRPDP's service area has two public charter schools, Learning Bridge, located in Ely, and, in Elko, the Elko Institute for Academic Achievement. The schools are similar in size and staff. Together they have 18 teachers, three administrators, and 354 students.

The NNRPDP devoted 140 hours to professional development between the two charter schools in 2016-17. The majority of coordinator time (37%) was devoted to classroom observation, 19% to professional conversation and 10% instructional training.

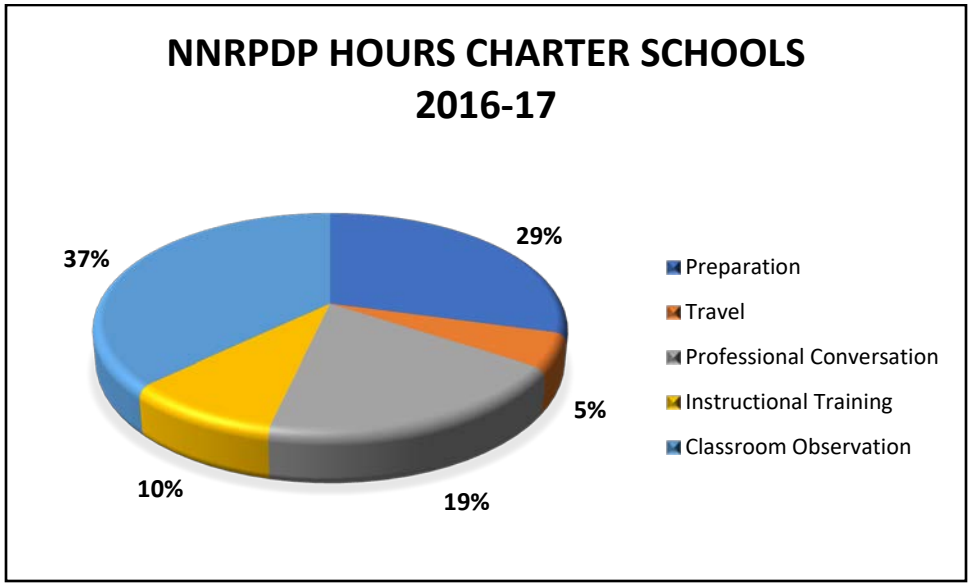

Figure 9: NNRPDP Hours Charter Schools

Those attending trainings in the two charter schools in 2016-17 completed 21 evaluations. In all but one category, mean ratings exceeded the regional average. In the exception—
the presenter modelling effective teaching strategies—the mean rating equaled the regional average. (See Table 17.)

n=21 *(Scale: 1 = not at all, 3 = to some extent, 5 = to a great extent)*	Region	Charter Schools
The training matched my needs.	4.46	4.55
The training provided opportunities for interactions and reflections.	4.73	4.81
The presenter's experience and expertise enhanced the quality of the training.	4.70	4.86
The presenter efficiently managed time and pacing of training.	4.71	4.90
The presenter modeled effective teaching strategies	4.60	4.60
This training added to my knowledge of standards and/or my skills in teaching subject matter content.	4.39	4.74
The training will improve my teaching skills.	4.42	4.65
I will use the knowledge and skills from this activity in my classroom or professional duties.	4.51	4.75
This training will help me meet the needs of diverse student populations (e.g., gifted and talented, ELL, special ed., at-risk students).	4.32	4.59
My learning has prompted me to change my practice.	4.11	4.40
My learning today will affect students' learning.	4.35	4.72

Table 17: Charter Schools Mean Ratings

Coordinator Studies

Math Power

Public educators work hard to help their students achieve at high levels. Nevada Academic Content Standards (NVACS) describe the content and skills determined to help Nevada's children be prepared for *their* futures. Today's data rich world provides educators insight into the specific needs of individual students. However, richness in data doesn't imply an automatic improvement in student achievement. In an effort to improve achievement, educators, faced with challenges related to the complexity of teaching, have turned to targeted interventions aimed at helping a few students. Interestingly, the foundation of multi-tiered interventions like Response to Intervention (RTI), is solid instructional practice. When more than 20% of students are in need of targeted intervention there exists a greater need for improved instructional practices and opportunities aimed at helping more than a targeted few.

Intervention structures and designs have become a regular part of School Performance Plans focused on student achievement and academic improvement. Often these structures include extra classes for students struggling with specific content, missing regular class instruction to attend intervention, or being assigned to after school tutoring. These experiences are met with varied perceptions, as well as a wide range of student background and content knowledge. Current research about how children learn, as well as the impact of mindset on learning, deserve careful consideration in designing interventions.

Instructional Context

McGill Elementary School, a small rural school in the White Pine County School District made adjustments to the daily schedule allowing for reading and mathematics intervention to occur bi-weekly. In 2016-2017 nearly 50% of McGill Elementary student population fell into free and reduced lunch (FRL) and the school has spent several years as a Title I focus school. Last year, 2015-2016 Nevada reported 55%-67% of students in grades 3-5 not proficient in mathematics. McGill Elementary had a reported 60% and 80% of students not proficient in mathematics. Additionally, prior Criterion Reference Test data indicated a need for improved mathematics achievement by McGill students.

McGill Elementary continues to work on improving their star rating and more importantly, student achievement. Under the direction of the principal, the teachers were invited to make decisions as to how the scheduled intervention time would be used. The assistance of a NNRPDP regional coordinator was requested to facilitate discussion around what kind of mathematics intervention was needed and how the school might best use the intervention time to meet the needs of their students.

Initial Data and Planning

The NNRPDP coordinator met with the teachers early in September, 2016 and led them through a protocol to determine why a large percentage of students were not proficient in mathematics. For example, many young students have less than proficient number sense, but why is that? According to Dr. Jo Boaler, mathematics education professor at Stanford University, "Students who struggle do not have less potential, they have not had the opportunities that other students have received" (p. 2). Stakeholders considered how to structure and provide additional opportunities to assist students in working toward their potential as well as improving their mathematics achievement. Three outcomes were determined. First, rather than focusing the intervention plan on a few students the intervention would be provided for *all* students. Second, the intervention would be designed to help *all* students grow their number sense. And third, the intervention would help *all* students develop an understanding of growth mindset and its role in learning, specifically in learning mathematics.

Through continued discussion and attention to Boaler's research it was determined that experiences like playing games involving critical thinking, using dice, counting spaces, etc. were experiences some children had more than others. Additionally, engaging in mathematical conversations with peers and adults about patterns and mathematical ideas were experiences that enable students to develop number sense and efficacy as learners of

mathematics. Boaler's work in conjunction with much discussion led the teachers to conclude that an intervention which provided these experiences for *all* students was exactly what was needed at McGill Elementary.

Learning Design

The coordinator, teachers, and principal collaborated to create a plan for the bi-weekly 30 minute mathematics intervention and assume the roles necessary for its success. The NNRPDP coordinator would organize and create the intervention lesson plans, collect various types of data, and support the teachers in the facilitation of the intervention lessons. Teachers and paraprofessionals were assigned heterogeneous teams of either grades K-2 students or grades 3-5 students and facilitated the lessons with their team. The principal expected quality execution of the intervention lessons and provided support.

Organizing and creating the intervention lessons would require a great deal of time. The administrator was concerned that his teachers did not have time to do this part of the work. The coordinator offered to create the lessons needed to meet the three objectives above. The coordinator created a shared Google folder to organize the documents and lesson plans and insured that all adult facilitators and the administrator had access to these shared documents. The coordinator met with the teachers and paraprofessionals to familiarize them with the contents and organization of the folder.

Due to the connotations associated with the term intervention, the teachers chose to call the intervention by a different name. The intervention became known as Math Power and all involved, teachers and students felt this name provided a positive message about engaging in the mathematics intervention.

Unique lessons were created for each intervention session. The purpose of the first few lessons was to help the teams get to know each other and celebrate the opportunity to engage in mathematics together. Subsequent lessons were designed to address the outcomes of the intervention, developing a positive mindset about engaging in and learning mathematics and improving number sense. The lessons were created in such a way as to be appropriate for both the K-2 and 3-5 Math Power teams. Lesson plans provided consistency in format and expectations for all participants. Each lesson began with a dot talk or number talk where students had the opportunity to express their thinking, hear the thinking of their peers, and build their belief that they have important mathematical ideas. Following the talk was an experience that would support one of the objectives of the intervention. The experiences provided in the lessons included card games, dice games, number counting games, trial and error games, looking for and describing patterns, working with place value, and strategic decision making, to name just a few.

Additionally, every other Tuesday was game day where Math Power teams would play a math game of their facilitator's choosing. Children need a variety of experiences engaging in numbers in a variety of ways in order to develop and grow their number sense. "Especially for younger students, play is the most powerful place of learning. It creates safe and accessible situations for experimentation, risk taking, mental dexterity and social problem solving" (Mraz & Hertz, 2015). Through games children can practice counting, cardinality, subitizing, strategizing, as well as practice mathematics operation skills. A variety of math games were played on game day and many teams developed favorite games to play together.

Measurement and Discussion

It was determined that Measured Academic Progress Assessment (MAP) data in the Number and Operations in Base Ten (NBT) strand would be the best measure of the impact of the Math Power intervention on number sense for all students. The key data collected represents individual student growth in the NBT Domain for all students from fall 2016 to spring 2017 in comparison to previous year's growth. Anecdotal evidence of students' mindset and

overall Math Power experience was collected at the end of the intervention. Additionally, facilitators completed a survey to evaluate their perception of the success of the intervention and to collect ideas for improved implementation in 2017-2018.

The following two charts show a normal distribution analysis of the growth of *all* McGill students. Chart 1 shows the distribution of fall to spring growth in MAP NBT domain with the Math Power intervention. Chart 2 shows the distribution of fall to spring growth in MAP NBT domain for the previous year, without the Math Power intervention. Observable in this analysis is a positive shift in the average NBT growth from 10.06 to 13.21. The data from 2015-2016 appears to be skewed right indicating fewer students with more than average growth. This is not the case for this year's data. Particularly notable is the large increase of growth between 10 and 25 points for students during the Math Power intervention.

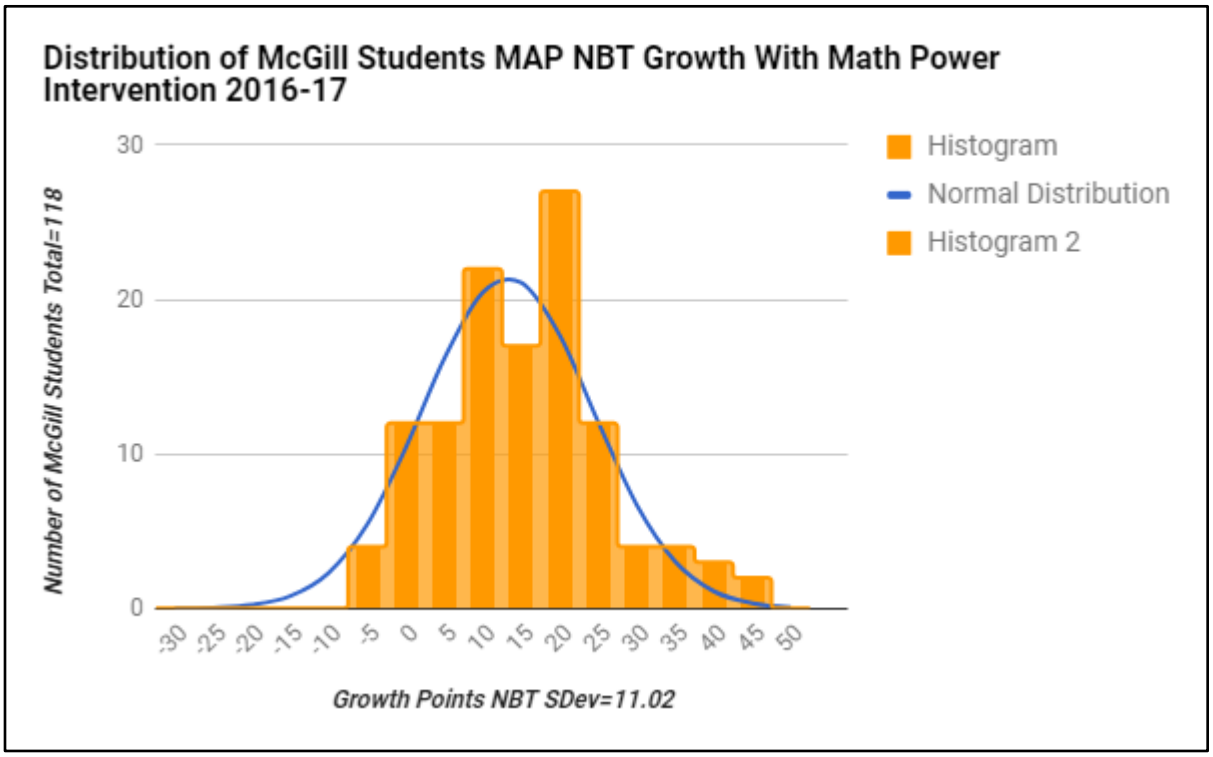

Figure 10: Growth with Math Power Intervention

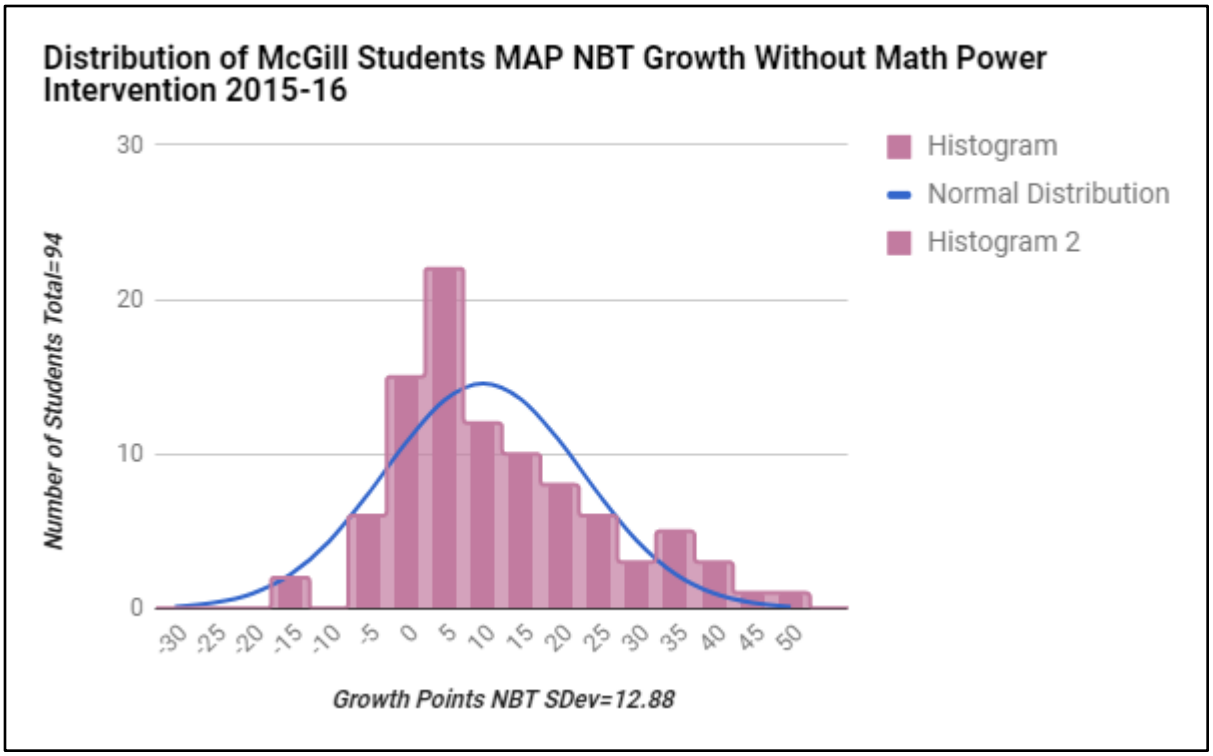

Figure 11: Growth without Math Power Intervention

In order to measure the impact of the Math Power intervention on students' mindset, students were asked to respond to what they like best about Math Power and what they learned. All students kindergarten through 5th grade were asked to write or draw a representation of their response. The written responses reflect strong growth messages about the intervention as well as learning mathematics in general. The student responses included:

You work together and when you work together you can do anything.
I like math power because it makes me smarter and it's really fun. I like working together as a team and getting things done.
I like that I get to do math and that it's not about getting it right.
I like math power because we get to help each other and it makes math easier.
I learned in math power that you don't need to be fast in math because the slower you are you have a better chance of getting the problem right.

The student responses provide evidence of growth mindset beliefs about engaging in mathematics. Students chose to describe their experience with growth mindset responses that included valuing working together, hearing the ideas of others, brain growth through learning, creativity of mathematics, and valuing mistakes. Younger students who chose to draw their response to the questions drew happy faces as well as students engaged in doing or talking about mathematics. In fact, 71% of the young students who drew pictures drew happy faces and 61% of their drawings showed students engaged in doing mathematics together. It is clear by the student comments and drawings that the growth mindset lessons and structure of the intervention had a positive impact.

Figure 12: Student Comments and Drawings

When surveyed, 100% of the facilitators indicated they would like to continue using and improving the Math Power intervention next year. Additionally, each facilitator reported a positive affective experience for themselves and the students in their Math Power teams.

Conclusion

Math Power intervention has proven to be a success for all involved. According to Christine Hertz and Kristine Mraz, authors of *Mindset for Learning*, "Having a classroom culture of joy and risk taking and growth is integral to students' learning" (2015). This play, joy, risk taking, social problem solving, and growth is evident in the student comments as well as in the MAP data for the NBT strand of the Nevada Academic Content Standards.

Typically, interventions are created to target students who are performing below grade level or have specific areas of need as is described in the RTI framework prevalent in education today. This unique intervention, co-created by the NNRPDP coordinator and McGill Elementary teachers, was designed to help *all* students grow in two areas, number sense and growth mindset. It is clear from the data that these two important objectives of this work were met. The NNRPDP coordinator, teachers, paraprofessionals, and administrator at McGill Elementary will continue to work together to improve and execute another year of Math Power in 2017-2018.

References

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Mraz, K., & Hertz, C. (2015, November 9). 'Mindset for learning' author discusses reinforcing agency, attitudes. Interview by E. McIntyre. Retrieved from Education Dive News

Parent Partnerships

The Nevada State Board of Education recognizes that it is the partnership between parents and schools that is the fundamental cornerstone for ensuring a child's success. In order to enhance this partnership, the Nevada State Board of Education adopted six essential standards in September, 2015. These standards promote Nevada's vision of parental partnerships for the future. Based on building awareness to this partnership, a Northeastern Nevada Regional Professional Development Program (NNRPDP) regional coordinator developed a parent involvement and family engagement course encompassing this vision. The outcomes of this learning opportunity were to identify parental skills, define parental roles, and develop strategies through the Question Formulation Technique (QFT) and Framework for Accountable Decision Making (FADM). These strategies are found in *Partnering With Parents to Ask the Right Questions* (Santana, Rothstein, Bain, 2016) and serve to increase parental involvement and family engagement.

The Parental Involvement and Family Engagement Standards are:

Standard 1: Welcoming all families into the school community.
Standard 2: Communicating effectively.
Standard 3: Supporting student well-being and academic success.
Standard 4: Speaking up for every child.
Standard 5: Sharing power.
Standard 6: Collaborating with community.

The specific strategy, skills, and roles utilized for the learning opportunity include the following:

One Strategy:

The QFT "provides a rigorous process that helps all people develop the ability to ask their own questions" (p. 21, Santana, Rothstein, & Bain, 2016).

This empowering technique provides the groundwork on which the two skills and three parental roles are based.

Two Skills:

Parents formulate and use questions effectively.

Parents participate effectively in decisions that affect them using the Framework for Accountable Decision Making (FADM).

Teachers develop an awareness and understanding of these two specific skills and support parents in acquiring them.

Three Roles:

Support: Parents support their children's education at home.
Progress monitor: Parents monitor their children's' progress.
Advocacy: Parents advocate for their children when necessary.

Through inclusive use of both the QFT and the FADM, parents and teachers are supported in communication, collaboration, and a sharing of power which leads to supporting student well-being and academic success.

Instructional Context

The parental involvement and family engagement course was offered to the Northeast Nevada region. The schools in this region service students that are both ethnically and socioeconomically diverse. Northeastern Nevada encompasses a large geographical range, with many small towns and rural areas, so the course was designed to accommodate distance learning. Teachers in grades preK-12, administrators, counselors, and liaisons were invited to participate.

Initial Data and Planning

Current practice of engaging families in schools was informally assessed. Many schools in the surrounding region begin the school year with open house events, occasional family nights, parent teacher conferences, phone calls, and written communication (derived from participant questionnaire responses). These activities demonstrate a desire on the part of the schools to communicate with parents.

The Parental Involvement and Family Engagement Standards provide a guide for developing practices within schools to build family partnerships. Many regional districts and schools struggle to fully engage in effective practices to implement these standards. Based on participants' responses to questionnaires, teachers are also in need of ideas for creating partnerships with parents within the context of the Parental Involvement and Family Engagement Standards. This evidence suggests that what is needed is two-way communication, support for academic success, advocacy, and the sharing of power. This course was designed to address these needs and support teachers in meeting the parental involvement and family engagement standards.

Learning Design

The learning design of the parent involvement and family engagement course was informed by Guskey's Five Levels of Professional Development and based on Learning Forward's Standards for Professional Learning. This learning opportunity also incorporated readings, discussions, and reflections encompassing the six essential parental involvement and family engagement standards.

The course was delivered through a combination of live/IAV classes and online work in Canvas. The live/IAV portion of the course met three times for two hours at the beginning, middle, and end of the course. The Canvas online portion of the course was ongoing, and provided a means of collaboration, discussion, and reflection.

Measurement

Participants' reactions were measured using the NNRPDP evaluation form and reflections. Participants' learning was measured using pre and post questionnaire responses and responses to *I used to think…Now I think* prompts. Organization support and change was measured using online responses to discussion questions. Participants' use of new knowledge of skills was measured using online responses to discussion questions and questionnaire responses. Student learning outcomes were measured using the NNRPDP evaluation and online responses to discussion questions.

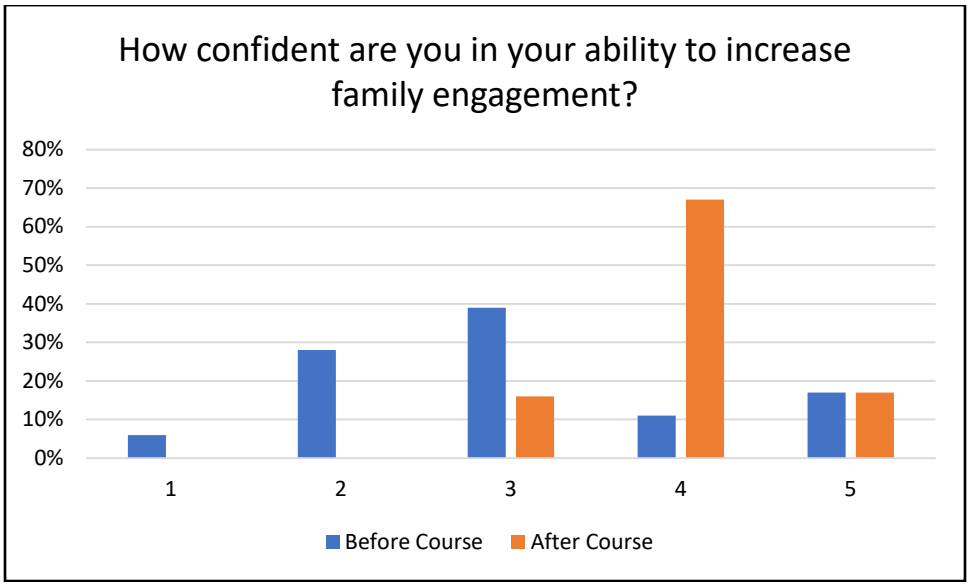

Figure 13: Confident in Increasing Family Engagement

The *ability to increase family engagement* (Figure 13) displays participants' level of confidence in their ability to increase family engagement following the course. Clear growth is noted, growing from 10% to 65% of participants feeling much more confident in their abilities.

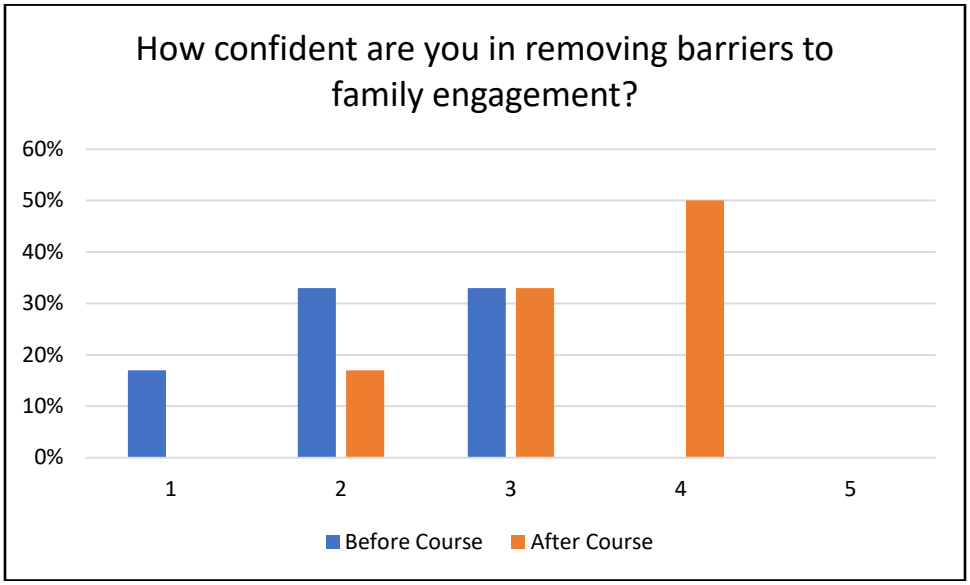

Figure 14: Confident in Removing Barriers

The *barriers to family engagement* (Figure 14) displays participants' level of confidence in their ability to remove barriers to family engagement following the course. Clear growth is noted, growing from 0% to 50% of participants feeling much more confident in removal of barriers.

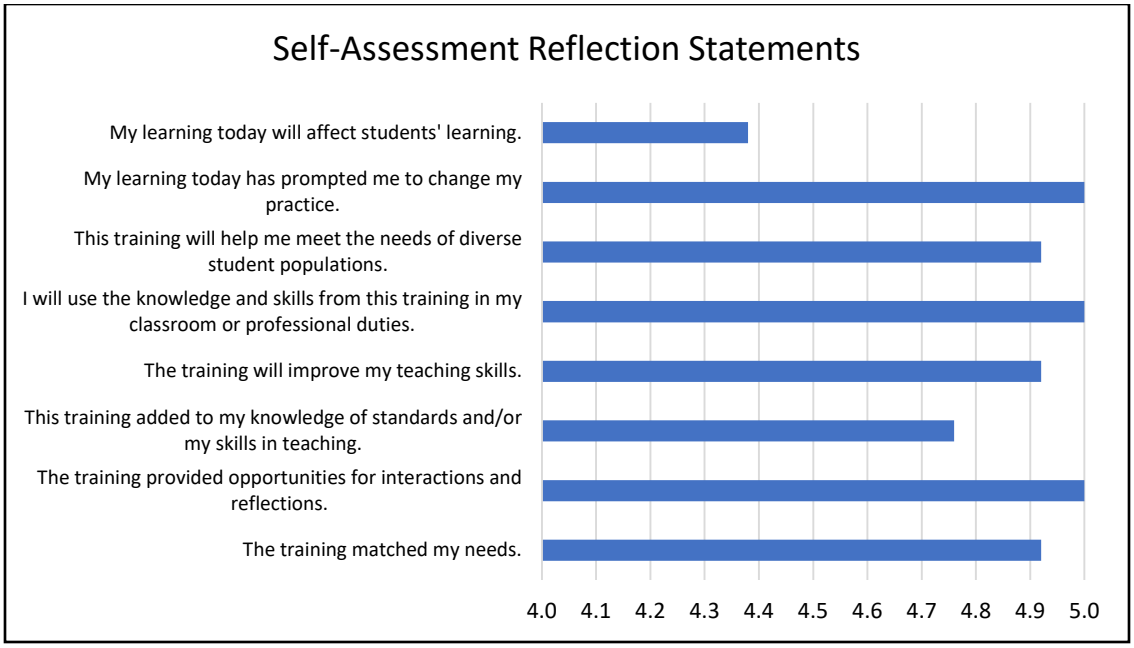

Figure 15: Reflection Statements

Self-assessment (Figure 15) displays participants' self-assessment reflections of the impact of the learning. Participants used a Likert scale, and rated how well the professional learning met their needs as well as prompted them to change their practice.

Responses collected from *I used to think…Now I think…*prompt indicated a significant change in perception. Many participants believed family partnerships to be outside of their abilities. Following the course training using the QFT and FADM, participants are not only aware, but are also encouraged and hopeful about their ability to create parent and family partnerships. Responses are noted along with the parental engagement and family engagement standard they address:

<u>Standard 1: Welcoming all families into the school community</u>

- *I used to think that having parents involved could cause problems, now I think that it is a necessity.*
- *I used to think that parents refused to attend school functions because they just didn't care. Now I think they may feel uncomfortable, unwelcome or unimportant.*

<u>Standard 2: Communicating effectively</u>

- *That if we could get parents just to come to school and volunteer that would be enough, but I see now that we need to teach parents how to be engaged and advocate for their child. We need to teach parents how to ask questions. So many times I say, "Do you have any questions?" They usually say "no." But if I worded that differently and tried the QFT I think many more questions would arise.*
- *I used to think that family engagement was a one size fits all now I think that there are so many different circumstances to consider. Parents need to be involved and the QFT protocol gives them the skills to get their needs met. I also now think more about parents' roles with regards to their child education and the different ways they can fulfill their roles.*

<u>Standard 3: Supporting student well-being and academic success; Standard 4: Speaking up for every child; and Standard 5: Sharing power</u>

- *I used to think it was the parents' responsibility to be involved in their child's education. Now I think it is the school's responsibility to create the foundation for family engagement.*
- *It was scary to invite parents to ask questions, but now I see how by teaching them one strategy, two skills and three roles they will truly become partners with the school and together teachers and parents will produce higher student achievement.*

Participants also noted the strength of the QFT strategy as a means of benefiting themselves as well as the parents they serve:

- *I used to think that there was not even one method to use with attempting to engage families now I know that with the QFT this is not true.*
- *I used to think I had no idea how to help families of students become more involved in their child's education, but now I think I have a great model in the QFT technique.*
- *I used to think the QFT was only for students but now I think that the QFT will be a valuable tool to reaching and engaging parents in their child's education.*
- *I used to think I couldn't help parents participate at school. Now I think I am almost there.*

Conclusion

Based on these data, the participants met the outcome of awareness of strategies, skills, and roles to increase parental involvement and family engagement. Participants indicated a greater understanding of parental partnerships and some participants felt confident enough to implement the QFT with parents, which exceeded the course outcome. Participant responses also indicated a need for follow-up courses designed to facilitate the QFT and FADM as they begin implementation to build parent partnerships within their schools. Further professional development opportunities are imperative to support teachers as they learn and apply strategies, skills, and roles that help build successful parent partnerships.

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Turn-Around Grant Support

Context and Initial Planning

Humboldt County School District (HCSD) was awarded a state sponsored Turn-Around grant for two of their schools, Winnemucca Jr. High and French Ford Middle School. The district partnered with Northern Nevada Regional Professional Development Program (NNRPDP) for additional support in strategic planning in leading the implementation of the PLC at Work process and hired Solution Tree to provide training and additional support. The overarching goal of the two year project was to begin development of a "guaranteed and viable curriculum" that allowed for a seamless spiraling of expected levels of learning from the middle school to the junior high.

The district defined guaranteed and viable curriculum to mean an established understanding of what is expected that a student should learn within a grade level regardless of the teacher they happen to have. They determined they would measure the establishment of guaranteed and viable curriculum through collaborative teacher team developed common assessments of essential standards. In short, teacher teams would be guided through the process of unwrapping the English Language Arts Nevada Academic Content Standards (NVACS), and develop assessments representing the intended rigor levels at each of the grade levels, along with any necessary accompanying documents, like rubrics or models of student work.

Learning Design

To support teams in doing the work, a number of foundational steps needed to occur. First, a guiding coalition was established at the district level that would have the primary role of guiding the work. Team members were selected to be representative of the various groups within the project: district leaders, school administration and various teachers. The team received training on three different days, led by the NNRPDP leadership consultant and district leaders to explain the role of the team and to begin establishing a vision for the work. The team developed norms and roles, to not only help the team better establish a culture of mutual trust and a clear vision for the work, but to model and help support the team as they replicated similar processes with the teacher teams they were expected to lead.

At the outset, the team agreed upon the need for the providing clarity with regard to expectation for teacher teams. Recognizing that a challenge in any large scale initiative is providing clear direction and support, the team made it a priority to be as transparent as possible. As examples of the team's efforts to provide clarity, they met with all teachers to present the intentions of the grant and turn-around efforts on multiple occasions and to answer questions. The coalition created, published and helped teams understand the document entitled "The Steps of An Ideal Team." (See Appendix E.) Another example of their efforts is their production of a vocabulary list to clarify commonly used, but ambiguous terms such as curriculum, essential standards, success criteria, I can statements, common assessment, and formative assessment. The team shared these documents, reviewing them with teachers in an effort to clarify what the work of a true PLC team is.

The team lobbied and garnered the support from the local board of trustees to hold professional development days throughout the year in order to build shared knowledge among all teachers. Using the funds awarded by the state for the project, the team hired a PLC presenter from Solution Tree to present to the whole staff, originally planning five days interspersed throughout the school year. However, the team changed course in October after two of the scheduled trainings. It was clear to the team that the presenter was not able to provide the specific training needed to reach the goal of developing common assessments at each grade level. The team hired a new trainer specific to English Language Arts and another specific to Mathematics Instead of targeting all staff during professional development days, the team would sub teachers by subject to work with the hired specialists.

While the training, specific to subjects of language arts and math, was continuing on a bimonthly basis, the NNRPDP leadership consultant continued to provide coaching to the district and school level leaders. The coaching centered on troubleshooting and progress monitoring PLC processes as well as troubleshooting some of the pushback from staff. The district level guiding coalition also continued to meet periodically to review progress

and provide support about how to deal with resistant teacher teams or those teams who seemed to be struggling. This support took place through frequent phone conferences and in-person monthly meetings.

Progression throughout the Year

The guiding coalition met at least once per month until December. By December it was clear that each of the schools was moving at different paces, due to the amount of time each of the schools was able to devote to the work. As a natural progression from tighter to looser leadership, a conscious choice was made to reduce the number of district guiding coalition meetings so that school level guiding coalitions could begin directing the work more responsively at each individual site.

Each of the school's guiding coalitions met with district leadership and the NNRPDP leadership consultant to help assess their progress and then help troubleshoot challenges and determine next steps. Despite being responsive to each team's needs, various universal goals were set along the way to ensure systemic progress was being made. For example, after working with the district guiding coalition to establish behavioral norms, the goal was set to help every team within the two schools do the same by mid-September. Another universal goal was established to ensure that every team had gone through the steps leading up to developing at least one unit summative assessment by January. From there, teams were expected to administer the assessment and share results for the primary purposes of improving student learning and improving professional practice.

Results

In the first year of this multiyear turn-around initiative, it is likely too early to know the direct impact of these efforts on student achievement. What can be said with confidence is that teachers are clearer about what they expect students to learn. Units have been established. These units include essential standards identified, assessments created, models of proficient student work established, rubrics generated that describe proficiency, and a means for tracking student progression toward proficiency. All of this work has been created collaboratively, which has developed professional capacity among teacher teams.

Although the work has been extremely valuable, it is far from done. Much work is needed to continue to develop units. In addition, much support is necessary to help teachers begin using these team generated tools to the fullest potential, namely assessing and intervening in a timely way with their students. The project has illustrated that progress is possible, but takes intense focus and resources, like training, strong leadership, consistent support, and time. Humboldt's efforts, not without challenges, have outlined processes others could use as a pattern as they approach systemic change through the implementation of the PLC at Work processes.

Discussion

Although most of the teams had engaged in collaborative work before, actually unwrapping standards, building assessments at the appropriate rigor levels, along with the necessary accompanying documents, proved to be a challenge for most teams. As one might expect, some teams have been able to make more progress than others. Despite the challenges and the numerous other initiatives that schools are always engaged in, much progress has been made at defining in clear terms a "guaranteed and viable curriculum" that spirals between the two schools. (See Appendix F.)

Conclusion

Helping teacher teams understand what the work really is and then helping them work effectively and efficiently with each other as grade level or subject teams takes high levels of leadership capacity. It takes an adept group of leaders to clarify what the work is and to manage the sociology of group dynamics and cultural change. Much support is necessary for leadership teams as they develop their skills. Equal to the need for high capacity is drive and focus. In today's educational climate, it is easy to get distracted from the concentrated effort it takes to do the hard work described herein. In the face of so many initiatives, new laws, and demands placed upon schools, leaders' attention is easily diverted from instruction and curriculum, the core of what makes an instructional leader

an actual leader of instruction capable of improving learning. Perhaps the greatest challenge schools face in actually doing this hard work, is staying the course. They have to not only have the discipline to say "no" to the next good thing, but they must have support at the district level and state level to do so.

Support for New Teachers

Recruiting teachers is an initial investment. Retaining teachers is money in the bank. Teacher attrition, due to leaving the district or leaving the profession, is common (more than 300,000 in the first year) (Fensterwald, 2015) and costly (an estimated $8.5 billion dollars a year, nationally) (Podolsky, Kini, Bishop, Darlin-Hammond, 2016). Teacher turnover is costly not only in a monetary sense but in terms of school culture, the forward trajectory of a school, and most importantly, student achievement and well-being. If the money spent on replacing teachers were spent on retaining teachers, the impact could quickly compound.

Instructional Context

Over a decade ago, in a proactive approach to retaining teachers, Elko County School District (ECSD) began the RISE (Retain, Induct, Support, Encourage) program to support new teachers - not just teachers beginning their career, but veteran teachers newly-hired by the district. The program was created with the core belief that "an induction process is the best way to send a message to our teachers that we value them and want them to succeed and stay" (ECSD RISE Brochure).

Initially, RISE support included five full days in the summer prior to school starting (one of which was spent at the school site meeting colleagues and setting up the classroom) as well two full days out of the classroom during the school year. As RISE gained momentum in the following years, instructional coaches were hired by the district to support new teachers in their schools; however, due to lack of funding, coaches were later removed from the program leaving a deficit of on-site, ongoing support. In order to continue the RISE program despite continuing budget cuts, ECSD partnered with NNRPDP to provide services.

Initial Data and Planning

When two NNRPDP coordinators began facilitating the RISE program for Elko County School District several years ago, the program was limited to the initial week-long orientation prior to the start of school plus two full days during the school year. While the time spent prior to school starting benefited new teachers, two days out of the classroom during the school year seemed disconnected, not to mention stressful, for teachers as they prepared for substitutes and anticipated lost instructional time. It was apparent that RISE was missing a critical piece. This realization came through informal conversations with participants and principals as well as more formal feedback gathered through evaluations. In addition, research studies consistently show that the components of new teacher induction programs that have the most impact include mentorship and collaboration with colleagues (Podolsky, Kini, Bishop, Darling-Hammond, 2016).

While putting coaches back in schools was not an affordable option, NNRPDP coordinators devised a plan to add value to the program and support the original outcome to "send a message to...teachers that we value them and want them to succeed and stay" (ECSD RISE Brochure). The coordinators approached the district with a proposal to continue with the five days prior to school starting, but also add site-based mentors in each school to support new teachers.

At the start of the 2016-17 school year, Elko County School District hired between 75 and 80 teachers including regular education teachers, special education teachers, and a handful of speech teachers and other special services. Of those new hires, 64 teachers in 17 schools were given the opportunity of support through the new RISE mentor program.

Learning Design

Mentors for each school were chosen by principals. The mentors received support from NNRPDP coordinators and they, in turn, supported newly-hired teachers at their schools.

Critical Friends Groups

Critical Friends Groups (CFG) are a protocol-driven form of Professional Learning Community (PLC). The coordinators chose to implement CFGs as the vehicle for regular professional mentorship and collaborative support for new teachers. Principals were encouraged to choose mentors from their school who had participated in CFGs themselves and were familiar with the protocols coordinators planned to use. 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.

Rounds of Professional Learning

Mentors, who were paid a stipend by the district as a token of appreciation for the extra work required in their role, came together for an initial orientation provided by NNRPDP coordinators. (See RISE Mentor Contract – Appendix G.) Thereafter, mentors participated in rounds spaced over the course of the year receiving support from NNRPDP coordinators through participation in a mentor Critical Friends Group and then giving similar support to new teachers at their site by facilitating a CFG at their school. Each round consisted of:

- Attending a mentor CFG facilitated by NNRPDP.
- Finding and adding to a bank of a vetted textual resources (peer-reviewed articles, worthy blog posts, etc.) via the online Canvas learning platform that all mentors could access to support the specific needs of their new teachers.
- Facilitating a new teacher CFG modeled after the one they experienced with NNRPDP coordinators.
- Reflecting on the CFG experience.

Protocols

In order to provide relevant support and consistency, the coordinators chose to use the same two protocols in every CFG which mentors then used in the CFG they facilitated at their school. Since all teachers benefit from reading and discussing worthy professional literature and all teachers face dilemmas that they need collaborative support to resolve, the following two protocols were used:

1. 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.
2. 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.

Each two-hour mentor CFG, facilitated by NNRPDP coordinators, followed a predictable agenda including reading a section of the text, *Creating Cultures of Thinking* by Ron Ritchhart, and processing the text through the Three Levels of Text Protocol, and engaging in The Consultancy Dilemma Protocol.

After engaging in the Mentor CFG facilitated by NNRPDP coordinators, mentors scheduled and facilitated a CFG with teachers at their school. This on-site CFG also included reading and processing a text (of the mentor's choosing) using the Three Levels of Text Protocol and engaging participants in the Consultancy Dilemma Protocol.

Responsibilities

Principals

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

Mentors (See RISE Mentor Schedule of Responsibilities, Appendix H.)

- Attend an 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 (see RISE School Site Checklist for Mentors Appendix I for list of items to address).
- Participate in a Mentor CFG (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. (See Appendix J for sample agenda.)
- Schedule, plan, and facilitate five New Teacher CFGs over the course of the school year with new teachers at their school site(s).
- Submit a written reflection on Canvas for each of the five CFGs facilitated.
- Identify and share among mentors at least five vetted resources with new teachers over the course of the school year.
- 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 CFGs for mentors over the course of the school year which would serve as a model for mentors to then replicate at their school site.
- Setup and monitor shared documents for mentors to gather, vet, and share with one another to support new teachers.
- 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 2016-17 RISE program in terms of the RISE mission to support and encourage newly hired teachers and "send a message to teachers that we want them to succeed and stay" (ECSD RISE Brochure). Data was collected from RISE participants and from RISE mentors in the form of surveys 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 Likert scale 1-5 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 4) My learning today will affect students' learning.

Participants were given the same survey to rate the effectiveness of the on-going, site-based support they received from their RISE mentor and/or the CFG they experienced.

Reflections

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

Survey

Additionally, while not part of the intent of the study, the coordinator collected data from RISE mentors in the form of the same 4-question survey given to RISE participants to determine the effect being a RISE mentor had on teachers.

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 5 Days Prior to Start of School

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.

> *This "work" has been fun – the way it was presented was interesting, got us to know each other better, promoted team work and gave us valuable info from other teachers. It also is a reflection of how we should teach. I have a lot to learn and enjoy hearing stories from others on new ideas. We all want to do a great job teaching **all** our students. We want to make a difference.*
>
> *This morning's 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.*
>
> *We had a great class without just sitting through a lecture. Like my students, I like to talk and move around…My goal is to establish rules and procedures right from the beginning.*
>
> *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.*
>
> *I like the introduction of new strategies and procedures we can use in the classroom. As a first-year teacher, this information is extremely valuable to help me educate my students in a new and varied way. I appreciate the interaction with my fellow colleagues throughout the district; it makes it feel like the entire district is a team.*

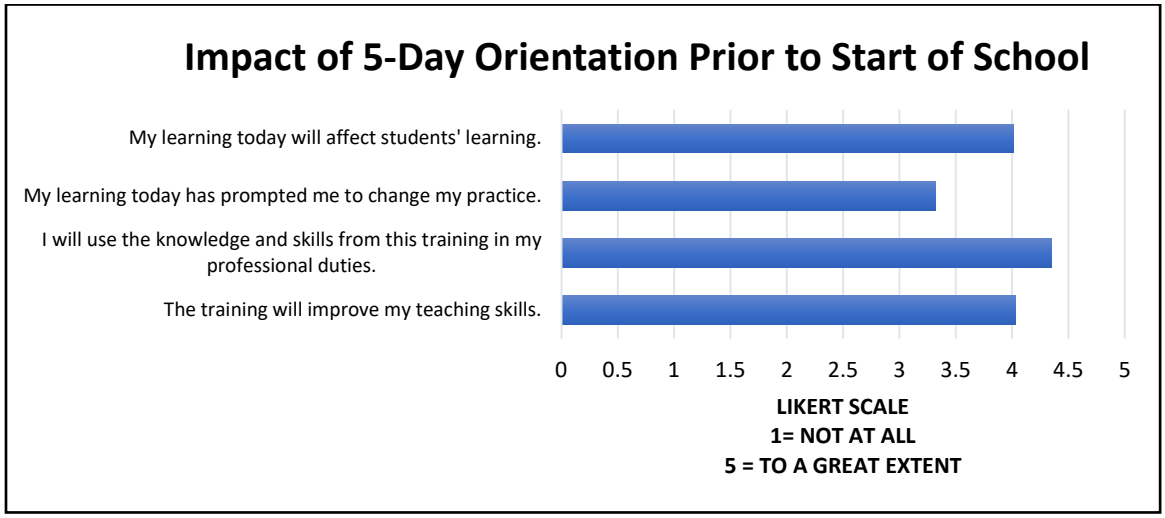

Figure 16: Impact of Orientation

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.

RISE Participants - Impact of Year-Long, Site-Based Mentor Component

Having a designated mentor on-site who led multiple Critical Friends Groups over the course of the year, many of whom went above and beyond the expectation checking in with mentees, answering questions, and making themselves available to mentees as needed, was supportive for new teachers.

> *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.*
>
> *My mentors were wonderful and helpful at every turn of the year. I felt comfortable asking even the silliest of questions to them. They were very approachable and have made this first year much easier for me. I give them a solid 4 on the standard based grading system.*
>
> *I would participate in CFG and peer coaching again.*
>
> *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.*

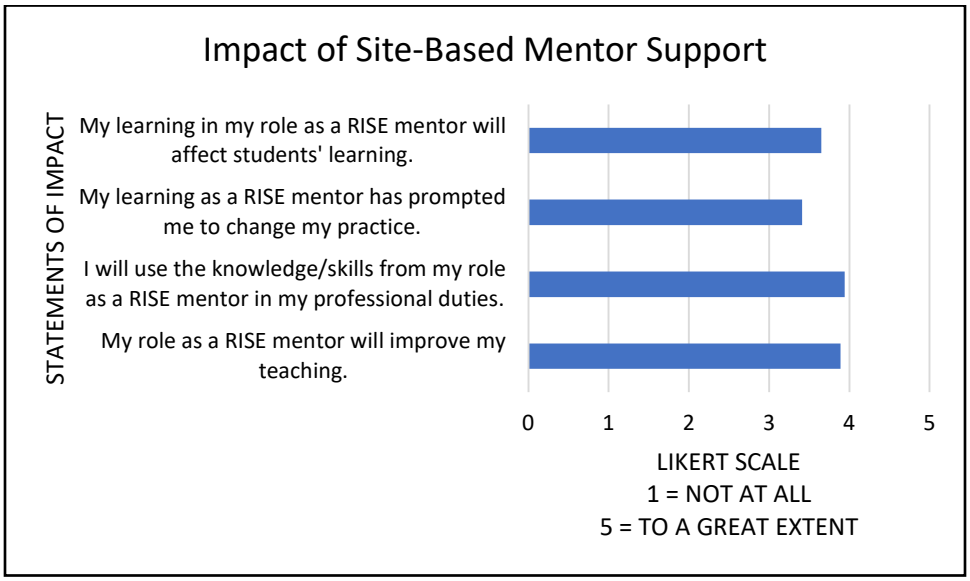

Figure 17: Impact of Mentor Support

Results from the 4-question survey used to assess the effectiveness of site-based RISE mentor support through CFGs show a positive impact overall. Nearly 70% of participants rated 3 of the 4 questions in the 4-5 range on a Likert scale where a rating of 1 indicates not at all and a rating of 5 indicates to a great extent. It appears that participants found participation in collaborative meetings with their RISE mentor more valuable in a larger professional sense than impactful to student learning and changing practice.

RISE Mentors – Value of Being a RISE Mentor

While the reason for implementing the mentor component to RISE was to benefit and support newly-hired teachers, the data indicate the experience was at least as beneficial to the mentor teachers themselves. Survey data, written reflections, and anecdotal evidence all show that the role of mentor helped teachers develop knowledge and skills of leadership, collaboration, and reflection that they wouldn't otherwise have developed that they can apply in their classrooms and other professional duties.

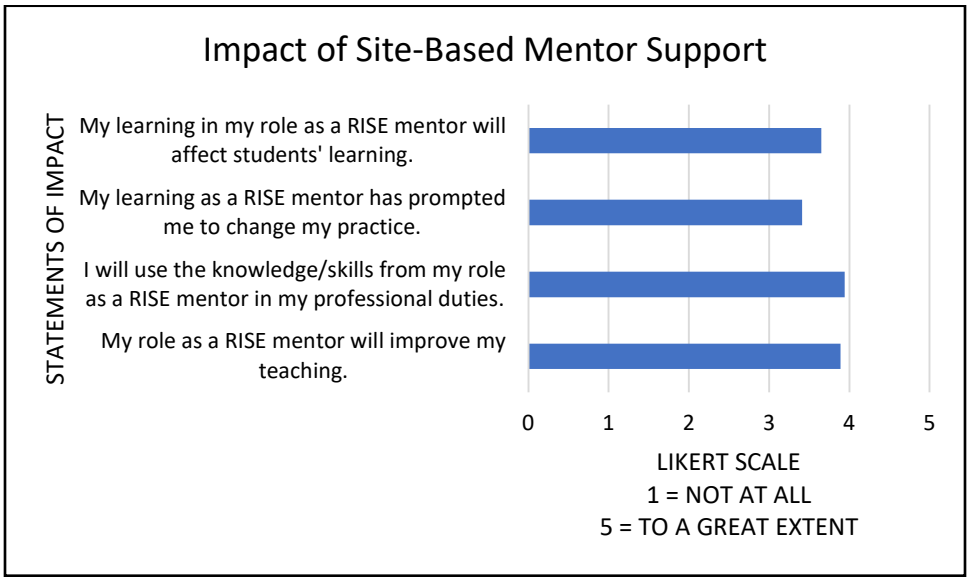

Figure 18: Impact of Site-Based Mentor Support

> *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.*
>
> *Collaboration leads to better teaching practices which students will benefit from. I enjoyed sharing ideas with my new colleagues and have learned along with them.*
>
> *During the past 3 years NNRPDP has been the most effective and efficient PDP that I have been involved in my 20 years of teaching. From the RISE Teacher Academy to CFGs and Mentor programs I have learned to be a teacher who works smarter and not harder. The most valuable part has been the collaboration with like minded professionals who want to get the most out of their teaching for their students. Sharing strategies, philosophies, lesson plans and just having someone to reflect and provide feedback into what I am doing has been so beneficial. I cannot say enough good things about what NNRPDP is doing.*
>
> *Working with new teachers is so interesting because it forces the mentor to reflect on their own practice to answer many critical questions about instruction, assessment, and curriculum. This reflection has helped me understand my practice better so that I can provide my students with more differentiated instruction, relevant curriculum, and meaningful assessments.*
>
> *When teachers feel supported and challenged in a way that inspires and honors them, they gain confidence in their abilities to do hard things as teachers. They then trust enough to be truthful and vulnerable about their challenges. I hope I have done enough of this for them. If so, their confidence will show up in their ability to take control of their classroom management, planning, and personal lives.*

By sharing protocols and engagement strategies with other teachers, not only should teaching practices be more effective but if we are all sharing and implementing many of the same strategies in our classrooms it begins to shape the cultural environment and students will pick up that there is a shared vision and approach to teaching and learning.

It has allowed me to be more focused on why I teach and the importance my role as a teacher affects students' lives forever.

I really hope it made a difference for the mentee and their students. As far as my own class, I believe the most value is in having a teacher than is enjoying their work.

Observations, Perceptions, Reflections. Working with other teachers has taught me to be more observant to the hidden aspects of my classroom that I might not see had I not first seen what other teachers were missing when I observed them. I have also learned to be more aware of how students and staffs might have a different perception than what I have. Our perceptions are our reality but our reality might not always be an accurate assessment of the situation. It is good to listen to others to see how they perceive situations and information. Reflection is a daily must. Why was I successful, why do I feel unsuccessful, what can I change/control, what must I learn to accept and work around? These are all things that I must remember to reflect on daily.

While they were not required to complete the written reflection (or any other) portion of the survey, RISE mentors took the time to insightfully share how this experience deeply impacted them as professionals.

Conclusion

With limited funding and staff, ECSD and NNRPDP added a valuable layer of support to the RISE program. Based on survey data and reflections, RISE effectively supports new teachers through both the 5-day orientation prior to school starting and through site-based mentor support provided through collaborative CFG meetings. The addition of mentors in each school to provide guidance for new teachers through CFG meetings and in other informal ways had the most impact on the 18 mentors themselves. While not yet ideal, the change made to the RISE program is certainly an upgrade that adds a layer of critical support for new teachers that demonstrates the commitment that Elko County School District values them and wants them to succeed and stay.

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Teacher Academy: Strengthening Pedagogy through NEPF

In 2011, Nevada's legislators passed AB222, a bill requiring the Nevada State Board of Education to establish a statewide performance evaluation system for teachers. This system is known as the Nevada Educator Performance Framework (NEPF), which includes *Nevada's Instructional Evaluation Protocol.* (See Appendix K.) The goals of the NEPF are to foster student learning and growth, improve educators' instructional practice, inform human capital decisions based on a professional growth system, and engage stakeholders in the continuous improvement and monitoring of a professional growth system.
There are five high-leverage instructional standards included in the protocol:

1. New Learning is Connected to Prior Learning and Experience
2. Learning Tasks have High Cognitive Demand for Diverse Learners
3. Students Engage in Meaning-Making through Discourse and Other Strategies
4. Students Engage in Metacognitive Activity to Increase Understanding of and Responsibility for Their Own Learning
5. Assessment is Integrated into Instruction

In addition to the five standards, the protocol includes indicators describing each standard (three to four indicators per standard) with four performance levels for each indicator. The NEPF standards apply to instructional practice across all grade bands and subject areas. A core concept embedded in each standard is responsive pedagogy: teachers' daily practice should be responsive to the needs and backgrounds of their students. Successful implementation of these standards is based on teacher knowledge and awareness of the NEPF.

In response to the need to increase knowledge and awareness of NEPF, NNRPDP developed Teacher Academy. The primary outcome of Teacher Academy is to strengthen and support teachers' instructional pedagogy through the lens of the NEPF. The learning outcome for teachers is to enhance students' critical thinking by changes in teacher practice through the implementation of the NEPF.

The first Teacher Academy cohort began in the 2014-15 school year, followed by cohort 2 and 3 in 2015-16 and 2016-17. During these three years, 133 teachers have participated in Teacher Academy.

Instructional Context

Elko, Humboldt, Lander, Eureka, White Pine, and Pershing counties make up the NNRPDP service area. Each year, an invitation to participate in Teacher Academy is offered to teachers in all six rural school districts. Teachers chosen to participate in Teacher Academy include elementary and secondary teachers, veteran teachers, and new teachers, grade level teachers from public and charter schools, content specialists, as well as special education teachers and Advanced Placement (AP) teachers.

The diverse range of teacher participants and the students they serve is typical for rural northern Nevada. Ethnic diversity characterizes most of the region's school districts with approximately one-third of the students across the region qualifying for free or reduced lunch. Teachers' daily practice varies widely, as does responsiveness to the needs and backgrounds of students.

The selection process to become a participant in the Teacher Academy is three-fold. To ensure the support of administration, the initial step is nomination by the school principal. After being nominated, teachers can apply to become a member of the Teacher Academy. The third component is the actual selection of teachers based on their responses to questions on the application. The selection committee consists of the eight NNRPDP coordinators who design and facilitate the professional learning experiences in the Teacher Academy.

Initial Data and Planning

New demands require change (Murray, 2014) and change requires support. The Teacher Academy, focused on strengthening instructional pedagogy aligned to the NEPF, provides that support assisting teachers to understand and implement the NEPF standards.

The precursor to planning the Teacher Academy was for NNRPDP coordinators to learn and understand the NEPF standards and indicators themselves. This involved collaborative learning with the Nevada Department of Education, attending NEPF trainings, and independently analyzing the guidance documents as well as the literature reviews. Additionally, coordinators read and studied John Murray's book *Designing and Implementing Effective Professional Learning* as well as Thomas Guskey's *Five Levels of Professional Development* (2002), which were instrumental in choosing the format and planning for this professional development opportunity.

Learning Design

Teacher Academy cohorts met as a whole group for full-day content trainings and as small groups for half-day professional collaborative groups called Critical Friends Group (CFG™).

Whole-group content trainings, focused on the NEPF standards and indicators, included understanding the meaning of the standards, how they are organized and how they relate to one another along with evidence sources, examples of instructional strategies aligned to the standards, and the research that supports each standard. In addition, teacher participants were treated to reputable guest speakers carefully selected, based on expertise and experience. Well-known speakers such as Margaret Heritage, Warren Berger, Sarah Schuhl, and John Almarode were knowledgeable about the attributes of the NEPF as well as inspirational.

Small-group CFGs met for the last hour of the full-day training and for a half-day session bi-monthly between Teacher Academy full-day trainings. These small groups focused on reflecting and receiving feedback on implementing the focus standard. This design promoted the integrity of each CFG as they worked collaboratively to improve their work and that of their students, continually striving for excellence through shared goals, norms, and values.

Because the majority of participants live in the Elko area, full-day Teacher Academy learning opportunities were held in Elko, Nevada. However, many teachers from districts outside of Elko County had to travel more than 200

miles to attend these one-day trainings. Teachers were grouped by proximity to create CFGs, which were held locally for each group.

The learning design of Teacher Academy evolved over the three years, based on teacher feedback and reflections, as well as input from principals and superintendents. (See Academy Syllabi Appendix L.) Over the three-year period of Teacher Academy, three other factors that impacted each year's design are noteworthy:

- *Saturation of teachers in the region that participated in Teacher Academy*
- *Increased understanding of NEPF by teachers as it filtered into schools as the mandatory evaluation tool*
- *NNRPDP's funding to offer this professional learning opportunity*

	Number of Participants	Structure	Duration of Academy	Face-to-Face Contact hours	SUU Credits
Cohort I 2014-15	72	August orientation 8 full days 8 half-day CFGs	9 months Aug.- May	76	5
Cohort 2 2015-16	38	August orientation 5 full days 5 half-day CFGs	7 months Aug.- March	50	3
Cohort 3 2016-17	22	August orientation 5 full days 5 half-day CFGs	6 months Aug. – Feb.	50	3

Table 18: Teacher Academy Cohort Comparisons

Cohort 1 was divided into two groups in order to accommodate the number of participants in the training room. Consecutive training days were held for each group and the content was identical (2 days each for NEPF Standards 2, 4, and 5 and 1 day for NEPF Standards 1 and 3).
Cohorts 2 and 3 dedicated one full day training to each of the five NEPF standards.

August orientation day consisted of Teacher Academy expectations, building community, experiencing a protocol, an introduction to CFG and a motivational presentation entitled "A Need for Change."

An Alumni CFG was offered to past Teacher Academy participants. These teachers met in small groups 3-4 times over the course of the year. These CFGs were teacher-driven and focused on student learning. The collaborative practice of reflection and feedback was essential to the continued learning of Alumni CFG participants.
Measurement

Teacher Academy participant reflections, NNRPDP evaluations, and a post survey were the primary measurements used to assess the implementation changes teachers made in instructional practices. Participants' goal setting and progress toward meeting those goals provided an additional layer of evidence for change in instructional pedagogy.

Reflection and Feedback

Participants completed an open-ended reflection and feedback paper after every Teacher Academy session and CFG. To support teachers in reflecting deeply, reflection prompts from the National School Reform Faculty were provided. NNRPDP coordinators evaluated these reflections and feedback during planning. Sample prompts included:

- *In what ways have you gotten better at this kind of work?*

- *What problems did you encounter while you were experiencing this (CFG meeting, protocol, activity)? Did you solve them? How?*
- *How do you feel about this work? What parts of it do you particularly like?*
- *What did/do you find frustrating about it?*
- *What were your goals around this (CFG meeting, protocol)? Did your goals change as you went through this experience?*

NNRPDP Evaluation

The NNRPDP evaluation consists of seven self-assessment statements which are rated using a Likert scale. Participants completed this evaluation after every session and every half-day CFG.

Post Survey

In the spring of 2017, participants from all three years were asked to respond to a questionnaire designed to measure various attributes of their learning regarding Teacher Academy. Fifty-one percent of past participants responded to questions regarding:

- understanding of NEPF
- confidence in implementation
- use of protocols
- strategies and practices learned
- individual learning that impacted instructional pedagogy.

Goal Setting and Progress

At the culmination of each CFG, teachers routinely created a goal based on the content learning of CFG or Teacher Academy. Reflection on progress was recorded in a shared document and reported during the CFG. The goal setting and reporting protocol provided evidence of teachers changing instructional practice aligned to the NEPF.

Results and Discussion

The findings clearly demonstrate that Teacher Academy participants gained a greater understanding of the NEPF standards and indicators. Changes in instructional pedagogy aligned to the NEPF are also evident.
Statements relating to use of protocols and strategies required to meet the NEPF standards and indicators include:

- *Having the protocols and learning strategies modeled for me has been very instrumental in designing my own lessons.*
- *Gaining exposure to all of the various protocols that can be used to enhance a classroom discussion!*
- *Gaining more information on implementing NEPF and receiving strategies to implement in the classroom. Also, being reflective on my teaching to discover areas of strength and areas to improve upon.*

Collaborative support statements include:

- *Best practices to use in the classroom and a support system of teachers from across grade levels and schools.*
- *My biggest take away was probably the connections with others and the networking generated.*
- *I can say that in all 22 years in teaching, and Critical Friends Groups have been the most beneficial and had the highest impact on my...instruction.*

Knowledge of the NEPF standards and best practices include:

- *I thought that the 2014-15 year was very dynamic. The speakers were amazing! I grew as a professional that year. I would love a chance to join the CFG alumni.*

- *The presentation on indicator 4.1 has caused me to be very mindful to make sure kids know what they are learning, why they are learning it, and how to teach them to reflect on whether or not they have learned a concept.*
- *KEEP IT GOING! Continue on with Alumni CFG s as well. Keep it going until CFG's are embedded into every school in the district. The work that NNRPDP does is invaluable. I cannot say enough about the benefits of Teacher Academy, the CFG, and the culture of professional collaboration that it has cultivated. I now look for ways to continue to collaborate with professionals outside the halls and beyond my school walls. I wish that we could have a team of NNRPDP people in our schools, in every school to act as teacher-leaders on site, full time.*
- *NEPF is just really good teaching!!!! It is also our evaluation protocol, but I don't see it in that light because of Teacher Academy. Through Teacher Academy I walked away with a deep understanding of what really good teaching is because of NEPF.*
- *That students can have ownership over their own learning if given the chance.*
- *That the NEPF is basically solid "best practices" I have a much deeper understanding of what each standard and indicator mean because of Teacher Academy.*

The collective self-assessment statements from all Teacher Academy participants in the three years ranged from 4.2 to 4.9 on a Likert scale from 1 to 5 where a rating of 1 indicates not at all and a rating of 5 indicates to a great extent. This confirms significant learning derived from Teacher Academy by the majority of participants.

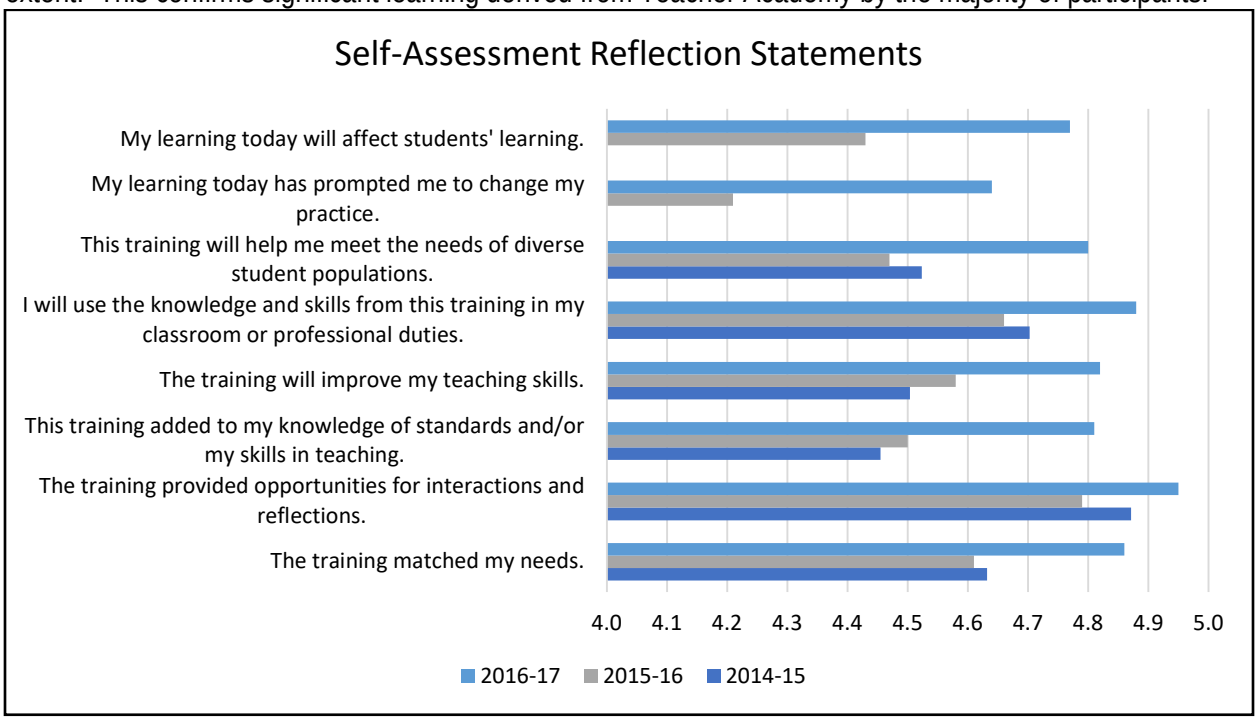

Figure 19: Self-Assessment Reflection Statements

Data collected from the post-survey questionnaire indicate a high percentage of teachers feel Teacher Academy had a great impact on their instructional pedagogy.
Based on the 51% of teachers who responded to the questionnaire, patterns of increased deep and moderate understanding of the NEPF prevail, as does teacher confidence in implementation of the standards.

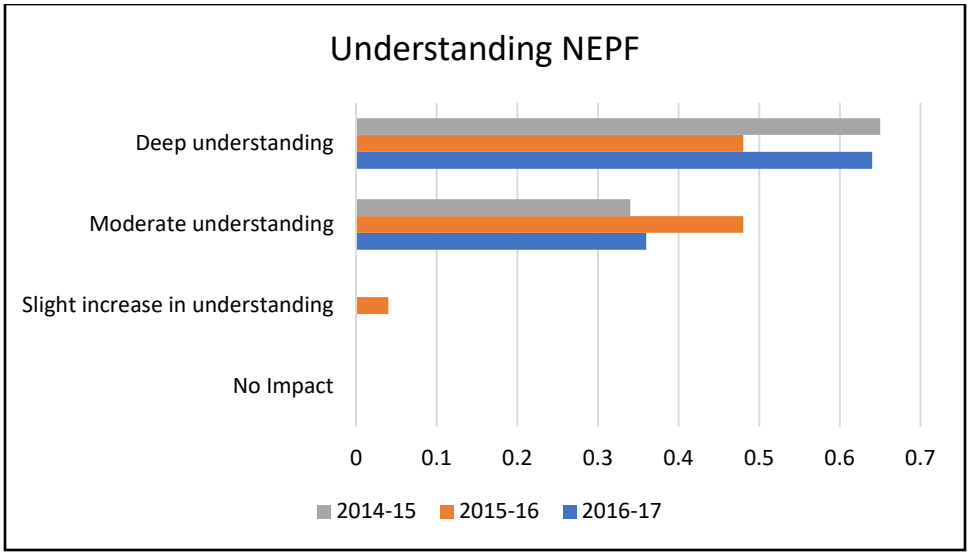

Figure 20: Understanding NEPF

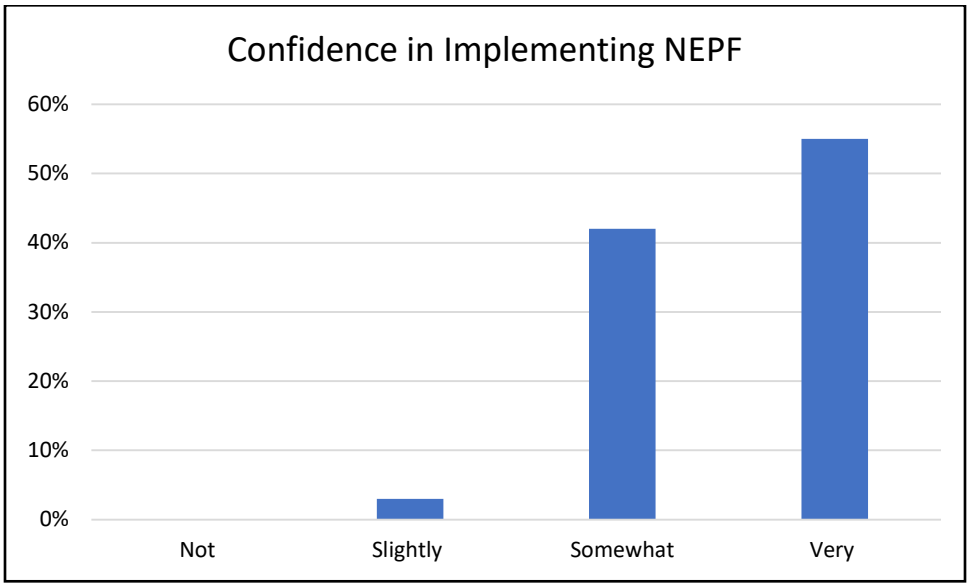

Figure 21: Confidence Implementing NEPF

The questionnaire revealed that 41% of respondents use the protocols, strategies, or instructional practices introduced in Teacher Academy with students more than 50% of their instructional time. The significance of this data on teachers who participated one to three years ago reveals the impact of the professional development.

During CFG, teachers were asked to set goals based on their learning from both Teacher Academy and CFG content. A shared Google document hosting all goals assisted in the effort to deprivatize practice enhancing the collaborative nature of CFG. In addition, teachers reported their progress and wrote reflections on this shared document. The table below shows two examples of teacher goals, progress, and reflections.

Goal	Progress	Reflection
I want to work on some new ways to engage students in discourse. Specifically, I would enjoy continuing with the Chalk Talk, Write Around, and Transitions. The more I use specific protocols the more they become part of everyday teaching.	I manage two more chalk talks when teaching Ag magazine. I also tried the write around in my literacy block on response to questioning.	I like that students can see each other's data or opinion(s).
Use thinking routines in my novel reflections	I incorporated "Think Puzzle Share" and "See Think Wonder" at the culmination of chapter reading to help students process their thinking.	I love the thinking routines. It has really helped my students be more aware of their own thinking and how to consider different perspectives. They have also become more clear about how to add examples and reasons to their opinions

Figure 22: Teacher Goals, Progress, and Reflections

Tangential Benefits

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

- Teachers often summarized Teacher Academy as rejuvenating
- Teachers felt more confident to share what they learned, not only with their students, but also with their colleagues
- Teachers indicated the value of professional interactions during Teacher Academy
- Teachers stated being more reflective of their instructional practices than before attending Teacher Academy

The questionnaire asked teachers to rank the secondary benefits in order of greatest impact to least impact on them personally. Although the results did not show great disparity between the four benefits, professional interactions were valued more than the others. The graph below indicates the breakdown of the ranking.

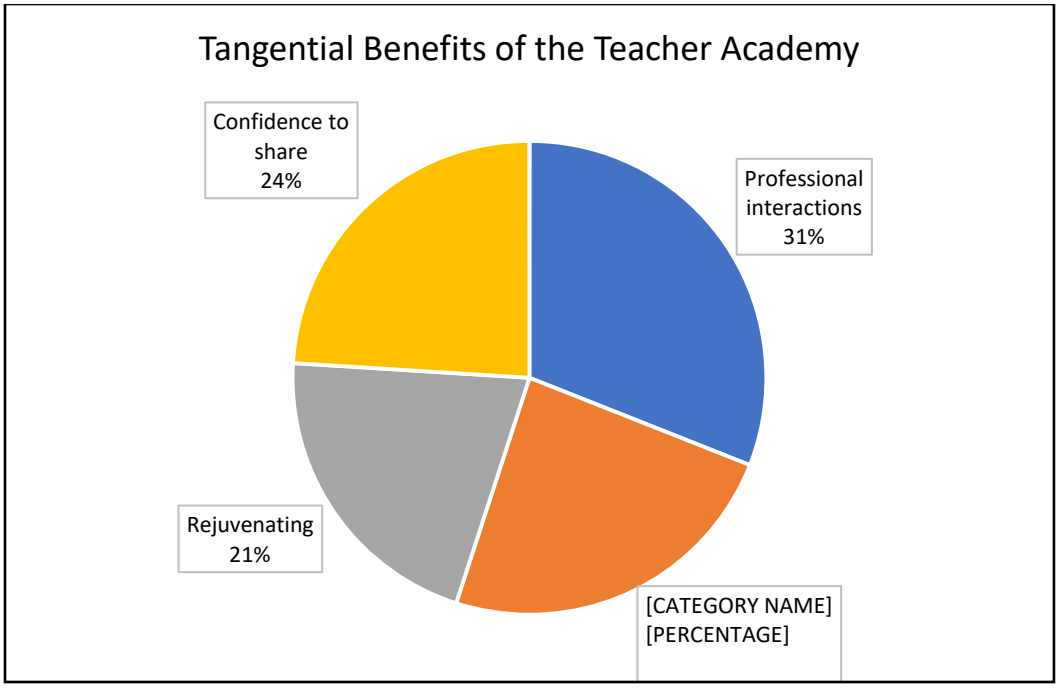

Figure 23: Tangential Benefits

Conclusion

Results clearly demonstrate a correlation between teachers' understanding of the NEPF standards and indicators and their confidence in implementation of high quality instructional pedagogy through the lens of the NEPF. The culmination of evidence is a strong indication of teachers' effectiveness and responsiveness to the needs and backgrounds of their students. In addition, teachers noted other benefits associated with Teacher Academy such as professional interactions and being more self-reflective of teaching practices. These unexpected benefits enhanced their experience during Teacher Academy and have the potential to transfer to many areas of professional practice.

Cohort 4 will take place in the 2017-18 school year. As a tribute to the success of Teacher Academies, 56 teachers have applied and many past participants have shown interest in continued learning through the Alumni CFG. This tribute both reflects and indicates the need for continued professional development around NEPF and the value of Teacher Academy from across the region.

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Reading Endorsement: A Collaboration between NNRPDP and UNLV

Introduction

Both the Nevada Early Literacy Intervention Program (NELIP) and the more recent Nevada Read by Grade Three Act (RBG3) puts forth policy addressing Nevada primary students' literacy instruction. NELIP legislates professional development for Kindergarten, 1st, 2nd, and 3rd grade teachers on methods for teaching fundamental reading skills. These skills include phonemic awareness, phonics, vocabulary, fluency, comprehension, and motivation. Similarly, RBG3 require school districts to develop a K-3 literacy plan designed to improve the literacy of these students which includes specific instruction on phonological and phonemic awareness, decoding skills, reading fluency, and specific instruction on reading comprehension. The stakes are very high for Nevada's children. According to the current language of this legislation, if students do not achieve adequate proficiency in reading before the completion of 3rd grade, they may be retained unless adequate cause for exemption is established.

The important literacy instruction supported through NELIP and required by RBG3 policy depends upon nuances of classroom quality. Examples include a safe and uplifting physical environment, effective classroom management, and appropriate motivation strategies. (McLean, Sparapani, Toste, Connor, 2016). Consistent scheduling structures and providing adequate time for students to be engaged in acceptable literacy work are also essential (Allington, 2013). Moreover, teachers need sufficient content knowledge and pedagogical knowledge of literacy instruction necessary for increased student achievement (Grossman, 1990; Shulman, 1986, 1987).

The Northeastern Nevada Regional Professional Development Program (NNRPDP) has offered various forms of teacher support in these high-quality literacy instruction requisites. NELIP-focused book study groups, literacy lesson demonstrations, classroom observations with feedback, and RBG3 content related workshops are examples of such offerings. Helping teachers develop a rich and insightful expertise in the complexities of effective literacy instruction continues to be our goal. The opportunity for teachers to study literacy instruction theory and related peer-reviewed research publications often included in graduate school courses seemed a logical extension to previous professional development. Therefore, the NNRPDP collaborated with both the University of Nevada, Las Vegas (UNLV) and the Southern Nevada Regional Professional Development Program (SNRPDP) to offer teachers in northeastern Nevada five of the six graduate courses required by the Nevada Department of Education to earn a reading endorsement.

The intended outcomes from this cohort experience were both specific to each course and general to the cohort. In general, cohort members would increase knowledge of the International Literacy Association Reading Standards for Professionals (2010). These standards are organized into six categories: a) foundational knowledge, b) curriculum and instruction, c) assessment and evaluation, d) diversity, e) literate environment, and f) professional learning and leadership. Outcomes for increased content and pedagogical knowledge specific to each course is discussed in the next section. This report elaborates on the 2016-2017 NNRPDP Reading Endorsement Cohort. First, an instructional context and initial data used to guide planning are briefly addressed. Next, the learning design is given, including a description of each course and specific learning outcomes. Finally, the report concludes with an account of cohort member evidence of learning and discussion.

Instructional Context

The northeastern Nevada region includes six school districts. Four of the six smaller districts, isolated in nature, employ 30 or fewer kindergarten through fifth-grade teachers and function on a four-day school week. The remaining two districts are large in comparison, employing approximately 200 and 100 kindergarten through fifth-grade teachers, respectively. These districts teach a traditional five-day school week. Literacy instruction methodologies vary between districts as well as between schools and classrooms within some of these districts. Many schools adopt multiple curriculums and resources searching for what might best help their students as

readers and writers. Rich and sophisticated academic knowledge influencing program and material decisions seems limited.

Elementary school teachers in this region who have not taken advantage of learning in previous NELIP and RBG3 professional development offerings from the NNRPDP have been informed of the RBG3 legislation through casual hallway chatter and short anecdotes during staff meetings. A small percentage of ambitious teachers (generally the same teachers attending past NELIP and RBG3 professional development) have taken advantage of learning opportunities designed for RBG3 *Learning Strategists*. These learning strategists have been charged with further educating teachers in their schools about the legislative requirement and literacy instruction expectations. At this point in the RBG3 roll out, most teachers seem to have more questions than answers and most learning strategists admit limited confidence in answering questions. Based on these anecdotes, a sense of urgency for increased learning and improved literacy instruction was apparent.

Initial Data and Planning

The instructional context described above acted as initial data for the planning of the Reading Endorsement Cohort. As stated previously, teachers in the region expressed concern about improving literacy instruction in their schools. RBG3 learning strategists found themselves inundated with questions about best practices in literacy instruction without confidence in their own knowledge of best practices. Also, random literacy curriculum and materials were being selected and purchased based on questionable literacy instruction expertise.

Initial planning for the Reading Endorsement Cohort began in May, 2016. A questionnaire designed to measure teacher interest in the cohort was sent to all elementary teachers in the region. Questionnaire responses were quickly returned indicating a high level of interest among the teachers. Logistical planning followed. Through a collaborative effort between the SNRPDP and NNRPDP directors and the UNLV College of Education, access was provided to a list of accepted reading endorsement courses along with established course syllabi. The NNRPDP director and three NNRPDP regional coordinators assigned as literacy specialists worked together as facilitators of the Reading Endorsement Cohort. Course documents were reviewed to determine appropriate cohort-related timelines and teaching responsibilities for each facilitator.

Learning Design

Given the vast geographical distances between school districts in the northeastern region of Nevada, it was determined to use a combination of technologies for course content delivery. Interactive Audio Video (IAV) was used for synchronous class attendance; the Canvas learning management system in combination with Google Drive tools were used for both synchronous class collaboration efforts and asynchronous course work during the days between sessions. Four of the five graduate courses were taught in ten-week sections starting in August and concluding the end of May. The fifth course was taught over four weeks in June as a practicum with cohort members tutoring.

Table 1 provides course information organized by four consistent categories: a) reading course text and peer-reviewed research, b) informal and formal writing assignments, c) in school application, and d) in class presentations of learning. Note the formal writing assignment of a critical article review was repeated in each of the first four courses. This formal writing assignment required the selection of a high quality article from a professional educational journal (e.g. *The Reading Teacher, English Journal, Reading Research Quarterly, Journal of Adolescent & Adult Literacy, Journal of Educational Psychology*). This review included a comprehensive summary of the content, an evaluation of the article, and reflection of the in-class discussion of chosen article. Additionally, for each reading assignment cohort members engaged in various before, during, and after reading exercises to model best practices and engage critical thinking skills. The total corpus of reading also included additional research

articles, videos, and web resources. Following Table 1 each course is listed according to order taught, with a brief description, intended outcomes, and required text.

Table 1. Reading endorsement courses taught as of this report.

Course	CILR 601 Foundations of Literacy Learning	CILR 607 Comprehensive Literacy Instruction	CILR 610 Content Area Literacy	CILR 621 Assessment in Literacy
Required Course Text Books (n=)	3	1	1	2
Peer-reviewed journal articles (n=)	6	6	6	6
Writing Requirements	Critical Article Review	Critical Article Review; Weekly Micro-blogging entries related to new learning; Weekly Blogging entries about required text reading; Weekly responses to classmate blog entries; Weekly reflections generated collaboratively about assigned reading	Critical Article Review; Weekly explanation and analysis of ongoing inquiry project; Learning plan and reflection; Written summary and evaluation of three peer-reviewed articles and blog posts; Written evaluation of three mentor texts	Critical Article Review
Application bridging theory and practice	Taught and then reflected on behaviors via a theoretical perspective, named and explained the specific theory/model	Best practices literacy learning strategy selection and implementation (n=5)	Created and teach a learning plan integrating ideas learned in the course. Weekly ongoing inquiry related to topics included in the course	Detailed analyses of student assessment results including interpretation of results, next steps for student learning, and reflection of the process
Presentation	PechaKucha presentation of critical learning from selected textbook chapter	Slide presentation and lesson demonstration of one strategy	Public product presented to class and to a targeted audience beyond the class	Slide presentation of critical learning from selected textbook chapter

Table 19: Reading Endorsement Courses Taught

CILR 601 Foundations of Literacy Learning. The goals of this course were to more strongly establish the interactions of theory, practice, and management in a variety of contexts and with a range of student abilities. Cohort members had the opportunity to consider the foundations of literacy education in relation to their own educational histories and current teaching circumstances. Critical questions for reflection during this course included the following: What would you keep in your teaching knowing what you know about the theoretical perspective that are demonstrated in your actions? What is best for kids? Why do you do what you do? What evidence for or against that practice (theoretical or otherwise) is out there? How could you defend your practices?

Required Course Text:

- Historical, Theoretical and Sociological Foundations of Reading in the United States (2010)
- Standards for Reading Professionals—Revised (2010)
- Lenses on Reading: An Introduction to Theories and Models (2012)

CILR 607 Comprehensive Reading (Literacy) Instruction. This course was a study of the historical developments, theoretical underpinnings, and practical applications of a comprehensive approach to literacy instruction. Participants examined a) literacy instruction philosophies, b) current, research-based classroom literacy practices effective for all students, c) evidence-based strategies for literacy learning and teaching, and d) new perspectives related to specific issues within the literacy field, including New Literacies. Through professional readings, class discussions, and classroom-based projects, course expectation were for participants to gain a comprehensive understanding of literacy instruction best practices based on research. Also, to explore and appreciate applications of New Literacies, including blogging and microblogging.
Required course text:

- *Best practices in literacy instruction 5th edition* (2015)

CILR 610 Content Area Literacy. This course was designed to provide a study of content area literacy. Participants explored literacy processes and strategies that may be implemented within the content-areas to improve students' reading, writing, and oral language development. Intended learning outcomes included knowledge development of topics related to content-area literacy (e.g. classroom discourse, text complexity and text selection, disciplinary literacy, vocabulary, comprehension instruction, writing instruction, and project-based literacy instruction). Participants also evaluated texts both quantitatively and qualitatively, applying readability formulas for selecting appropriate text materials.
Required course text:

- *Inside information: Developing powerful readers and writers of informational text through project-based instruction* (2014)

CILR 621 Assessment in Literacy. This course was designed to allow the examination of naturalistic procedures in literacy instruction. Cohort members were expected to field test selected assessment procedures. Strategies for improving instruction were presented with a focus on Response to Intervention (RTI) and differentiated instruction. Intended learning outcomes included knowledge development of selected literacy assessment tools (e.g. spelling inventory, reading interest inventory, concept of print and concept of word assessments, and informal writing and reading assessments).
Required course text:

- *Informal reading inventory: Preprimer through grade 8* (2015)
- *Words their way: Word study for phonics, vocabulary, and spelling instruction. 6th edition* (2016)

CILR 622 Practicum in Diagnosis & Instruction of Literacy Difficulties. This course provided instruction in principles, materials and techniques for the diagnostic/prescriptive teaching of reading and writing. Instruction included record

keeping, report writing, and electronic submission of assignments. This practicum experience occurred after the submission of this report and therefore will not be addressed further.

To complete the reading endorsement qualifications, cohort members must complete one of two additional courses. Cohort members may elect to take CIL 604 Literacy Instruction for Young Children or CIL 680 Contemporary Literature Children and Young Adults. These courses will be accessed online through UNLV directly.

Measurement

Participants. The cohort launched in August with 24 members representing three of the six districts in the region (White Pine, Elko, and Humboldt). After completion of the first course, seven cohort members admitted the rigorous expectations of the graduate course were more than anticipated. Therefore, the second course launched in early October with 17 of the 24 original cohort members. Again, by the end of this ten-week section a number of teachers admitted feeling overwhelmed, deciding to drop the program. In January, the third course began with 11 of the original cohort while bringing on one new cohort member. The fourth course began in mid-March with seven of the original cohort while retaining the one new cohort member from the previous course. This report provides a view of learning based on the experience as a whole by the seven consistent cohort members.

Measurement Tool. Due to the timing of this report, data will not reflect learning from the Practicum in Diagnosis & Instruction of Literacy Difficulties class. Each of the seven cohort teachers completed a twenty-item questionnaire during the last hour of the seventh of ten Assessment in Literacy class sessions. Teachers were asked to answer questions from memory only. The first twelve questions asked teachers to rate their knowledge of the six standards for reading specialist. Instructions for these items follow:

> For each standard, rate where you stood in level of knowledge or application both before starting the reading endorsement and now, after the completion of more than half of the required expectations: On a scale of 1 to 5, one being little knowledge or application, five being expert level of knowledge or application. (Reading Endorsement Questionnaire, 2017)

Descriptions of each standard were listed followed by a Likert scale for “before endorsement classes” and another for “after most endorsement classes”. The remaining eight questions were open response requiring recall of course content and application of learning with the final item asking for general feedback about the cohort experience. These open response questions are listed below.

CILR 601 Foundations of Literacy Learning

- *Name at least four theory/models of learning that you learned this year and describe each as best you can.*

CILR 607 Comprehensive Reading Instruction

Name at least four best practices for teaching literacy (reading, writing, word study) and explain why they are considered best practices.

- *What are “New Literacies”? Why are they important? Give an example of best practices for teaching New Literacies to students.*

CILR 610 Content Area Literacy

- *How and why is content-area literacy and project based learning a good fit?*
- *Name at least three components of literacy that content-area teachers should address and how they might integrate them with content.*

CILR 621 Assessment in Literacy

- *What is the purpose of administering a Spelling Inventory?*
- *What is the purpose of administering an IRI?*

Results and Discussion

Self-report Likert score data indicates an increase in knowledge of the six standards for reading specialists. A description of each standard as published on the International Literacy Association (ILA) website is included followed by questionnaire results for the given standard. Notice the ILA original text uses the term “candidates” in reference to educators working to become literacy specialists.

Standard One Foundational Knowledge

Literacy specialists

> understand major theories and empirical research that describe the cognitive, linguistic, motivational, and sociocultural foundations of reading and writing development, processes, and components, including word recognition, language comprehension, strategic knowledge, and reading–writing connections. Candidates understand the historically shared knowledge of the profession and changes over time in the perceptions of reading and writing development, processes, and components. Candidates understand the role of professional judgment and practical knowledge for improving all students’ reading development and achievement. (International Literacy Association, 2010)

Of the seven cohort members, self-report of knowledge or application of this standard before the reading endorsement courses was generally low. Two rated themselves a one, four rated themselves a two and one candidate provided a rating of three. Data addressing knowledge after most endorsement classes suggests a clear increase in learning. Six rated themselves a four and one provided a rating of five. This increase makes sense as foundational knowledge of literacy instruction was addressed in each course. The essential understanding of professional judgment and practical knowledge for improving student learning will bring a critical stance to classroom instruction and curriculum and material selection.

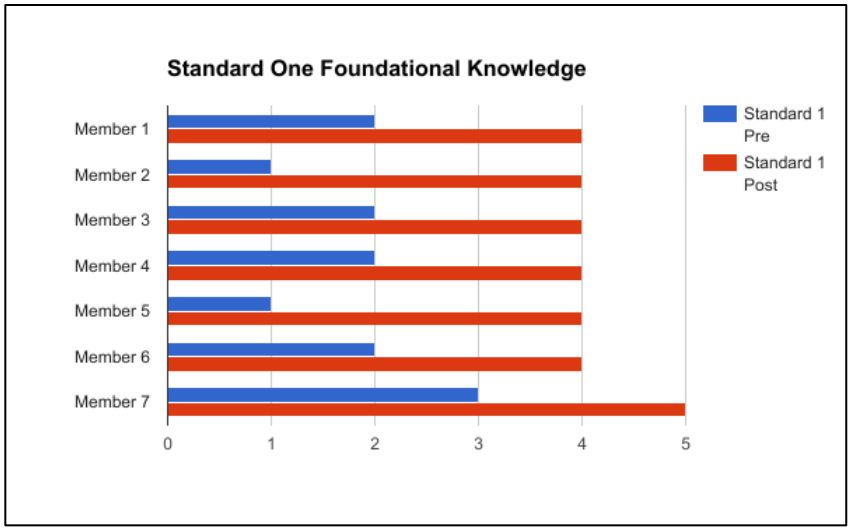

Figure 24: Standard One

Standard Two Curriculum and Instruction

Literacy specialists

> use foundational knowledge to design or implement an integrated, comprehensive, and balanced curriculum. Candidates use appropriate and varied instructional approaches, including those that develop word recognition, language comprehension, strategic knowledge, and reading–writing connections. Candidates use a wide range of texts (e.g., narrative, expository, and poetry) from traditional print, digital, and online resources. (International Literacy Association, 2010)

Results for this standard are similar to the foundational knowledge pre and post data. Two rated themselves a one, four rated themselves a two and one candidate provided a rating of three. Data addressing knowledge after most endorsement classes suggests a clear increase. Six rated themselves a four and one provided a rating of five. Again, these data suggest cohort members gained both knowledge and confidence in best practices for literacy instruction. What these data do not indicate is a level of best practices implementation in their classrooms. Through the course assignments of application and presentation there is evidence of implementation but it is unknown if this work was completed just for a course assignment or if real change in literacy instruction was maintained by cohort members.

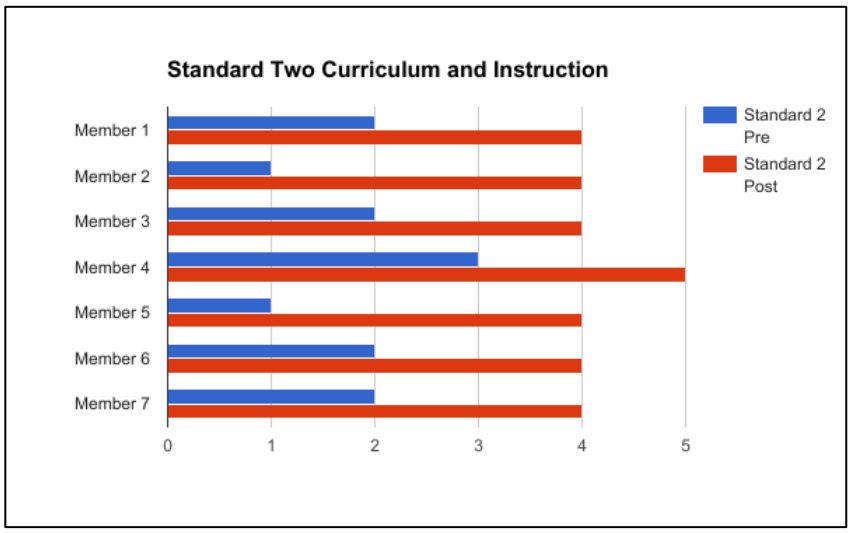

Figure 25: Standard Two Curriculum and Instruction

Standard Three Assessment and Evaluation

Literacy specialists

> understand types of assessments and their purposes, strengths, and limitations. Candidates select, develop, administer, and interpret assessments, both traditional print and electronic, for specific purposes. Candidates use assessment information to plan and evaluate instruction. Candidates communicate assessment results and implications to a variety of audiences. (International Literacy Association, 2010)

Data collected suggests less growth compared to standards one and two. This makes sense given cohort members were only half way through their course focused on assessment and evaluation. Before this course self-report results show one respondent at a one, three at a level two and three at a level three of knowledge and application. The post data suggests a bit of movement indicating one student at a level three and six students at a four. It is anticipated after completing the assessment course and practicum experience cohort members will gain even more confidence and knowledge in this area.

Figure 26: Standard Three

Standard Four Diversity

Literacy specialists

> recognize, understand, and value the forms of diversity that exist in society and their importance in learning to read and write. Candidates use a literacy curriculum and engage in instructional practices that positively impact students' knowledge, beliefs, and engagement with the features of diversity. Candidates develop and implement strategies to advocate for equity. (International Literacy Association, 2010)

For the diversity category, cohort members recorded higher levels of knowledge and application before the endorsement courses. Three self-reported a level two, one provided a level three score and three admitted a level four score. The post scores suggest movement from five of the seven cohort members. Six reported a level four score and one self-reported a level five score. Three maintained their level four score.

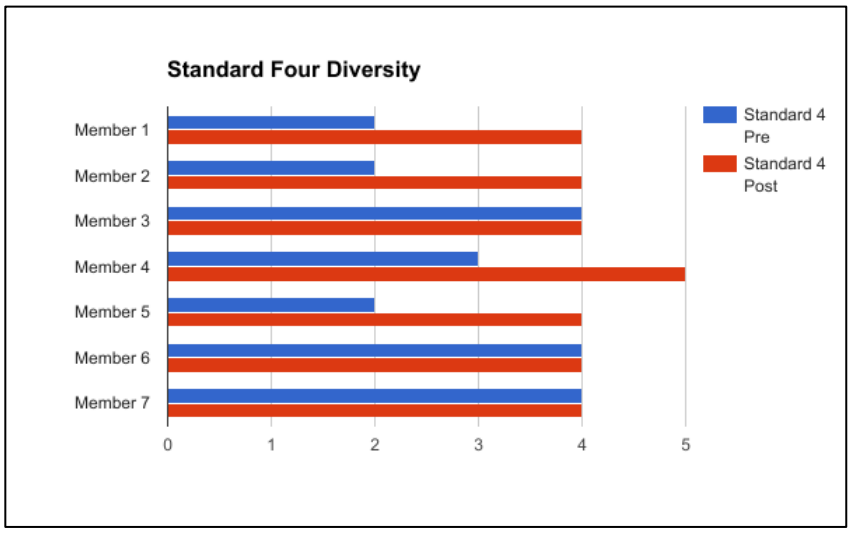

Figure 27: Standard Four

Literacy specialists

> design the physical environment to optimize students' use of traditional print, digital, and online resources in reading and writing instruction. Candidates design a social environment that is low risk and includes choice, motivation, and scaffolded support to optimize students' opportunities for learning to read and write. Candidates use routines to support reading and writing instruction (e.g., time allocation, transitions from one activity to another, discussions, and peer feedback). Candidates use a variety of classroom configurations (i.e., whole class, small group, and individual) to differentiate instruction. (International Literacy Association, 2010)

A clear representation of increased knowledge or application of literate environment is suggested with all seven cohort members rating themselves a three or lower on the before endorsement class questionnaire. The post data shows five at a level four and two at a level five of knowledge and application. Continuous discussion of classroom and school environment cloaked each course. Many teachers shared concern for limited access to quality literature for their students. They were also troubling through a restructuring of schedules and student seating to support a student-centered classroom supporting collaboration, conversation, presentation, and application of literacy activities. This move from "business as usual" for improved literacy instruction evolved over the months. This was not something observed immediately or even within one course. This is a reminder of the stretch of time required for meaningful and significant change to take place for many educators.

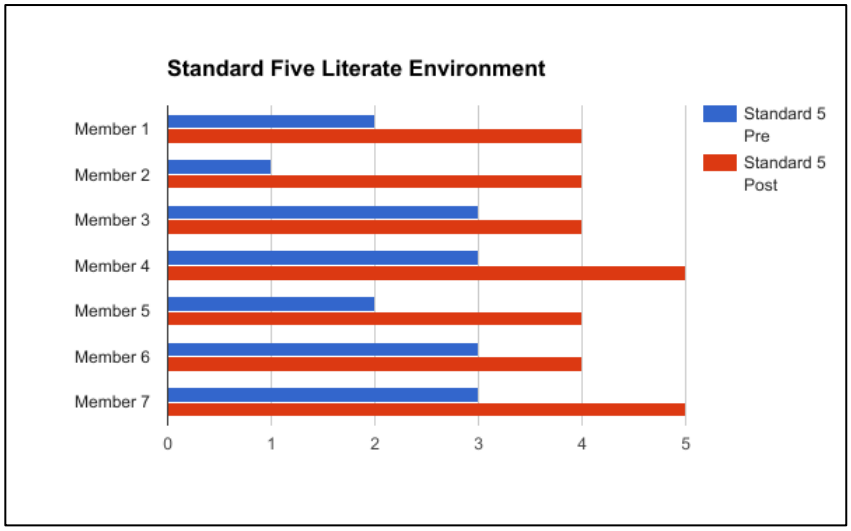

Figure 28: Standard Five

Literacy specialists

> demonstrate foundational knowledge of adult learning theories and related research about organizational change, professional development, and school culture. Candidates display positive dispositions related to their own reading and writing and the teaching of reading and writing, and pursue the development of individual professional knowledge and behaviors. Candidates participate in, design, facilitate, lead, and evaluate effective and differentiated professional development programs. Candidates understand and influence local, state, or national policy decisions. (International Literacy Association, 2010)

Before and after endorsement course results for the professional learning and leadership standard indicated less growth in knowledge and application than any of the previous standards. Four of the seven cohort members indicated a level two of standard application. Two indicated a level three and one provided a level four score. The post data indicates two students maintained their self-report score of two and three respectively. Four admitted a level four application and one indicated a level five. The individuals maintaining their low scores invites further reflection. How can a professional development learning opportunity build a willingness to engage at the leadership level? Why do so many educators reject leadership opportunities? For teachers self-reporting higher professional learning and leadership scores, how are they performing in this capacity? How will they continue to grow as leaders? Many educators leave the classroom once they achieve a higher level of professional learning and leadership. What incentives can be offered to keep more teacher-leaders in the classrooms?

Figure 29: Standard Six

Open Response Items

Open Response items for each course indicate an increase in both content and pedagogical knowledge related to literacy instruction. An overview of cohort member responses associated with each course are summarized including an example response.

Foundations of Literacy Learning. Name at least four theory/models of learning that you learned this year and describe each as best you can.

- 15 different theories related to literacy learning were listed
- Theories repeated by multiple students include behaviorism, constructivism, schema theory, and transactional theory of reading.
- Of the 28 theories named and described one was described incorrectly and four were listed without descriptions.

The evidence displays an awareness of various theories influencing the teaching and learning of literacy. The following example response illustrates this learning:

> Transactional theory of reading - this theory developed, by Louisa Rosenblatt, describes the complex nature of the reading process between the reader and the text. It describes in detail how each reading experience is unique to reader based on the prior knowledge of the reader and the unique understanding of the text. (Reading Endorsement Cohort Member, 2017)

Comprehensive Reading (Literacy) Instruction. Cohort members were asked to name and explain at least four best practices for teaching literacy and explain their understanding of New Literacies.

- 18 literacy instructional practices supported by research were named.
- 23 of the 28 instructional practices were adequately described.
- Best practices named repeatedly include explicit instruction of literacy strategies, dynamic vocabulary instruction, text diversity, writing instruction, and elements related to student motivation.

The selected example response related to motivation is absent of literacy-specific content but captures an important element to successful instruction. Motivating learners as readers and writers was a significant topic in the comprehensive literacy instruction course.

> Effectively motivating students - students who are engaged learners experience better school outcomes. One of the major factors in student learning is being able to use a variety of methods to truly engage students in learning. Engaged students are learning while non-engaged students are minimally learning. Learning is an active process that requires a certain level of attention. (Reading Endorsement Cohort Member, 2017)

When asked about New Literacies, six of the seven cohort members adequately captured an expected understanding as demonstrated in the following:

> …where information is readily available with a touch of a button or a swipe of a finger, knowledge seekers have to be selective connoisseurs of accurate and appropriate informational sources. New literacies include social media sites, blogs, vlogs, digital articles, apps, etc. (it is an evolving list). These literacies are one of the primary ways in which people access information…. (Reading Endorsement Cohort Member, 2017)

Content Area Literacy. How and why is content-area literacy and project based learning a good fit? Name at least three components of literacy that content-area teachers should address and how they might integrate them with content.

- Key terms used in responses arguing good fit between literacy and project based learning include voice, choice, audience, integration, relevant, communication, presentation
- Common literacy components listed: reading, writing, listening, speaking

Recognizing the significance of content area literacy was a course goal. It is clear this teacher understands the value of content area literacy:

> Content-area literacy is authentic and helps students learn how to read, write, listen, and speak through learning about science, math, or social studies in authentic ways. Students are more motivated to learn when the assignment is relevant and purposeful. Content-area literacy and project based learning are a good fit because students participate in problem solving, connecting, and discussing while working on content area projects. For example, students can learn about the importance of recycling through creating a recycling program in the school while providing the necessary information to the school. (Reading Endorsement Cohort Member, 2017)

Assessment in Literacy. What is the purpose of administering a Spelling Inventory and an informal reading inventory?

- All 7 responded appropriately explaining the purpose of the selected assessment tools.
  Specific to the spelling inventory one teacher stated:
  The purpose of the spelling inventory is to determine a child's stage of spelling development and really hone in on their proximal zone of development to facilitate acquisition of the skills needed to become better spellers, readers, and writers. It also helps teachers develop dynamic groups for differentiated instruction. (Reading Endorsement Cohort Member, 2017)

Because cohort members were only mid-way through the assessment in literacy course a full representation of course learning is not possible for this report.

In addition to gaining literacy related content and pedagogical knowledge as a result of the Reading Endorsement Cohort, it is noteworthy to mention indirect benefits. For example, reading endorsement teachers took advantage of opportunities to observe exemplar literacy instruction in neighboring districts. Specifically, a kindergarten teacher networked with other primary teachers to see effective early literacy instruction in action. Moreover, it was observed, on several occasions, use of content from endorsement courses in district-level RBG3 workshops facilitated by Reading Endorsement Cohort members and their district colleagues. These examples highlight only two occasions where the reading endorsement directly linked to the important literacy instruction supported through NELIP and required by RBG3 policy.

Conclusion

Sufficient teacher content and pedagogical knowledge of literacy instruction is necessary for increased student achievement. An understanding of classroom quality nuances impacting student achievement is also essential. Successful learning has been noted from literacy-related workshops and other valuable professional development experiences offered by NNRPDP. The addition of a Reading Endorsement Cohort spanning the school year, involving several highly rigorous graduate-level literacy courses has proven a successful addition to our offerings. The seven of 24 cohort members persevering through the entire program illustrates the commitment required for this level of learning. Although the expertise gained by these teachers has already permeated into their respective districts and schools at various levels and reasons, the impact is minimal in comparison to need. To adequately fulfill the high stakes expectations set forth by RBG3 policy this type of rigorous and intense graduate-course learning must reach a larger audience of educators. Several comments from cohort members provide the much needed fuel to inspire more teachers to embrace the challenge in becoming an endorsed literacy specialist:

- “All of the sessions have been amazing in their own way.”
- “I have felt blessed to be a part of this unique learning experience.”
- “The endorsement sessions have been very beneficial providing a balance of theoretical and practical information. I appreciate the different viewpoints!”
- “This has opened my world to literacy and teaching.”
- “These classes have been a fantastic addition to my classroom this year, as well as to my own empowerment. My toolbox is loaded and ready to be used!”

The NNRPDP would like to continue offering the Reading Endorsement Cohort opportunity. As teachers cycle through this research-rich and practice-based literacy learning the quality of literacy instruction in the northeastern Nevada region will continue to improve.

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Increasing Awareness of the Nevada Academic Content Standards for Science

Nevada's vision is to have a scientifically literate society where ALL Nevadans are ready for success in the 21st Century. With this vision in mind, the Nevada State Board of Education adopted the Nevada Academic Content Standards for Science (NVACSS) based on the Next Generation Science Standards (NGSS) in June 2014. The NVACSS provide the catalyst for realizing Nevada's vision, and the accelerants of the vision included district-level implementation in the 2014-2015 school year and classroom-level implementation in the 2015-2016 school year.

Instructional Context

Leaders from various fields of education, business, government, parent groups, and science organizations developed *Nevada's NVACSS Implementation Guide* (2016) to guide and support efforts to implement STEM and science across the state. *Nevada's NVACSS Implementation Guide* provides a continuum for implementation leading Nevada to her vision, and the first step toward the vision involves increasing awareness of the NVACSS.

The Regional Professional Development Program's implementation initiative for the awareness phase includes designing and facilitating professional learning opportunities to increase awareness of the NVACSS and the instructional shifts the standards require. The initiative also includes supporting how to utilize the EQuIP rubric

(Appendix M) to evaluate the quality and alignment of instructional materials. Awareness of the NVACSS is a crucial step on the path leading to a scientifically literate Nevada, and this crucial step framed the professional development opportunities provided by the Northeastern Nevada Regional Professional Development Program (NNRPDP).

Initial Data and Planning

The *Exploring NVACSS based on the NGSS* courses developed for one district in particular for the 2016 – 2017 school year is an example of one such opportunity. Informal assessments conducted by the NNRPDP and district office administration determined that a need existed to increase educators' awareness and understandings of the NVACCS. To address the need, three online awareness level courses were designed and offered to the educators within the district. Full-day onsite sessions introducing the EQuIP rubric were developed for kindergarten through fifth grade science site facilitators and middle and high school science educators to address the need for awareness of the tools and processes to assess the quality and alignment of instructional materials.

Learning Design

The learning design of the professional development was informed by Guskey's Five Levels of Professional Development (2002) and Learning Forward's Standards for Professional Learning (2011). Theories derived from neuroscience in relation to learning also guided the design. Based on these theories, the professional development was structured to include opportunities to identify personal and professional relevancy through reflection, inquiry, practical engagement, collaboration, and the interconnection, integration, and application of concepts.

Online Delivery

Three *Exploring the NVACSS based on the NGSS* courses were designed, one specifically targeting the district's kindergarten through second grade elementary education teachers, one targeting third through fifth grade elementary education teachers, and one targeting middle and high school science educators. The course content was delivered in an online format in order to accommodate diverse schedules and the expansive travel distances across the district. The online courses were each comprised of five online modules overviewing key facets of the NVACSS (Appendix N).

Throughout the online modules, participants 1) delved into *A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas*, the basis of the NVACSS, 2) explored the structure and conceptual shifts of the NVACSS, 3) investigated the integration of the three dimensions in lesson design, i.e. disciplinary core ideas (DCIs), science and engineering practices (SEPs), and the crosscutting concepts (CCCs), 4) actively engaged in and evaluated learning episodes involving engineering components, 5) analyzed case studies, and 6) identified strategies for supporting science learning for all students. Throughout the modules, participants also self-assessed and reflected upon progress and growth in levels of awareness and understandings in regard to the NVACSS.

Onsite Sessions

In addition to the online courses, two separate full-day onsite sessions introducing the EQuIP rubric were offered, one to kindergarten through fifth grade science site facilitators and one to middle and high school science educators with the prerequisite of participation in awareness level NVACSS professional development. During the EQuIP session (Appendix O), participants actively engaged in a model three-dimensional science lesson. Participants analyzed the model lesson using the EQuIP rubric criteria including aspects of three-dimensional instruction. Participants then engaged in a structured protocol of evidenced-based argumentation in order to evaluate the rigor, quality, and alignment of the model lesson in respect to the NVACSS. Participants recommended revisions to achieve greater rigor, quality, and/or alignment in the model lesson. The process of the analysis was orchestrated to not only introduce how to utilize the EQuIP rubric as an evaluation tool, but to further deepen participants'

awareness of the elements of three-dimensional instruction inherent in the NVACSS. After analysis of the model lesson using the EQuIP rubric, participants applied the rubric to an upcoming instructional episode.

Measurement

Several measurements were employed to determine the participants' increase in awareness and understandings of the NVACSS and to identify the impacts of these increases in awareness and understandings on instruction and student learning. Measurements occurred in both online and EQuIP sessions. The evaluation of each of these facets was informed by Gusky's Five Levels of Professional Development (2002) and the Standards for Professional Learning (Learning Forward, 2011).

Awareness and Understandings

Methods used to ascertain increased awareness and understanding of the NVACSS in the online courses included analysis of 1) pre and post self-assessments, 2) pre and post questionnaires, and 3) learning reflections. The pre and post self-assessments involved using a 5-point Likert Scale to rate understandings of the structural components, conceptual shifts, and identification of the three dimensions. Awareness and understanding indicators were used to assess the participants' learning reflections.

Instructional Impact

Measurement of the instructional impact of the initiative included 1) pre and post self-assessments, 2) responses to questionnaires, and 3) learning reflections. The pre and post self-assessments involved using a 5-point Likert Scale to rate understandings of strategies to support learning for all students, how to integrate the three dimensions into instructional design, and how to orchestrate instruction where students participate in practices used by sciences and engineers in the real world. Rated responses to the following five statements were also evaluated:

> This training added to my knowledge of standards and/or my skills in teaching.
>
> The training will improve my teaching skills.
>
> This training will help me meet the needs of diverse student populations.
>
> My learning today has prompted me to change my practice.
>
> My learning today will affect students' learning.

Participants' reflections provided an additional data source to measure the instructional impacts. Participants' responses to the online reflection prompt *I used to think….Now I think…* were analyzed and coded in relation to correlation to the six instructional shifts associated with the NVACSS as identified by the Nevada Department of Education (Appendix P). Responses to the prompts *From today's learning, what will you transfer to practice?* and *How will implementation affect students' learning?* were also evaluated and coded for indicators of impact.

Results and Discussion

Data from the various measurements were analyzed in terms of both the impact on participants' awareness of understandings and the impact on participants' instructional design and practice.

Data collected from the pre and post self-assessments, questionnaires, and reflections indicated a substantial increase in the k-12 participants' awareness and understandings of the various facets of the NVACSS.

> *I used to think NGSS was really based on the DCI and I didn't know much about the SEP and CCC nor how to use them. I also used to think that teaching the standards was based mostly on content. Now I think the SEP and the CCC are key components in learning and teaching the standards. I also think that I am more equipped to teach the standards than before. This course has helped me understand more of the NGSS and how to apply and teach the standards. (6-12 Science Educator)*

On the pre self-assessment, 67% of the participants had no to slight understanding of the structural components of the standards, whereas 97% of the participants indicated fair to solid understanding on the post self-assessment. On the pre self-assessment, 73% of the participants had no to slight understanding of the conceptual shifts of the standards. On the post self-assessment, 93% of the participants indicated a fair to solid understanding of the conceptual shifts. In terms of the three dimensions, 80% had no to slight understanding on the pre self-assessment. On the post self-assessment, 94% of the participants had a fair to solid understanding of the three dimensions.

> *I used to think the structure of the standards were individualized, meaning I was unaware of how the three dimensions coincided with one another. I did not understand the importance of how all three must be present in order to make investigations more effective. Now I think it is extremely crucial for all components of the 3 dimensions to be taught at the same time. They all work together to support student learning. .. all the components should be utilized for students to comprehend the content and utilize the content for problem solving. (Elementary Educator)*

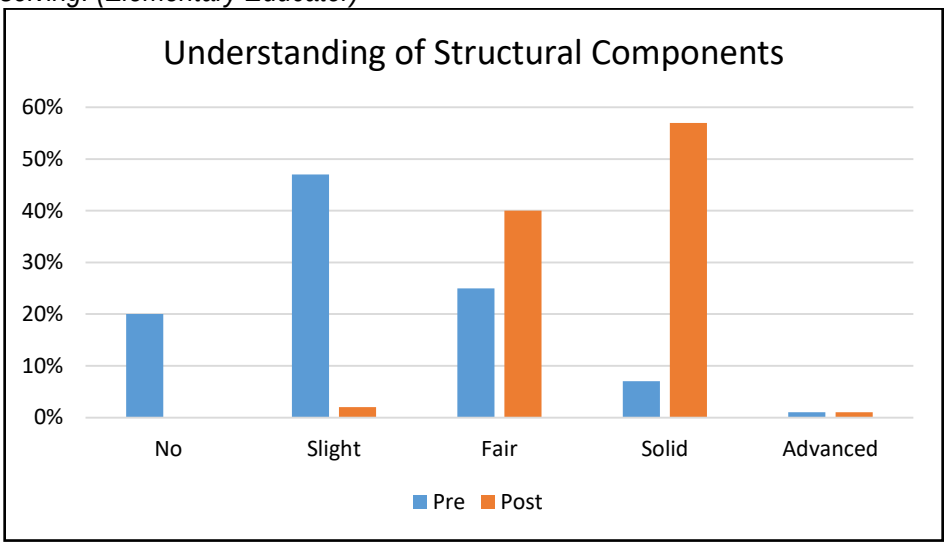

Figure 30: Understanding Structural Components

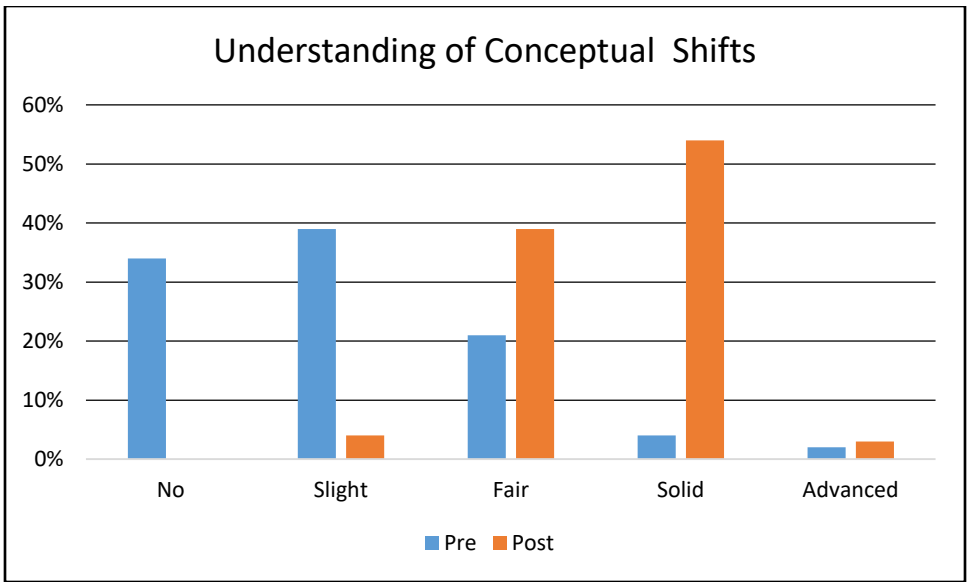

Figure 31: Understanding Conceptual Shifts

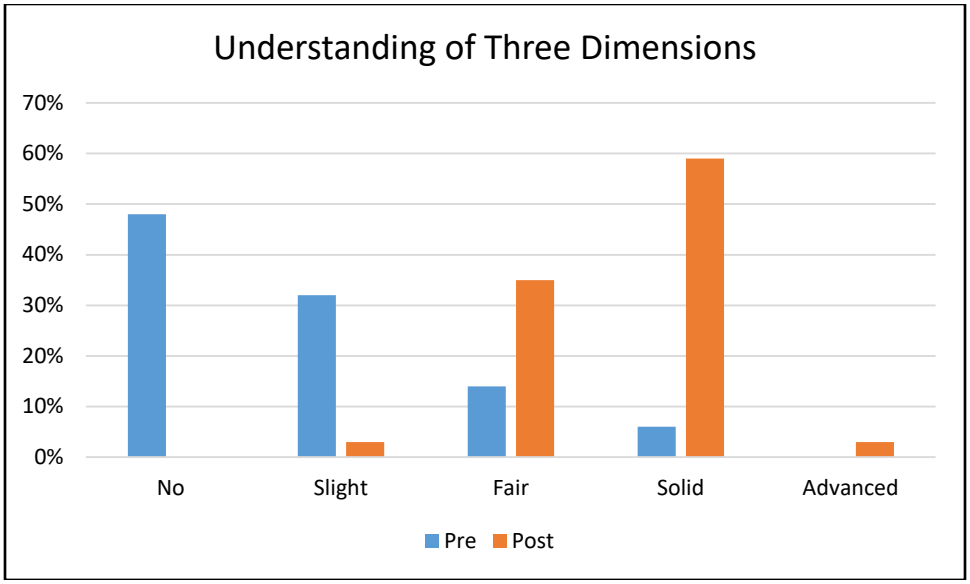

Figure 32: Understanding Three Dimensions

In the online courses, participants were asked to identify the elements of the three dimensions in pre and post survey questions. In the pre survey, 24% of the respondents accurately identified the science and engineering practices (SEP), the disciplinary core ideas (DCI), and the crosscutting concepts (CCC) as the three dimensions of the NVACSS. In the post survey, 99% of the respondents accurately identified the three dimensions.

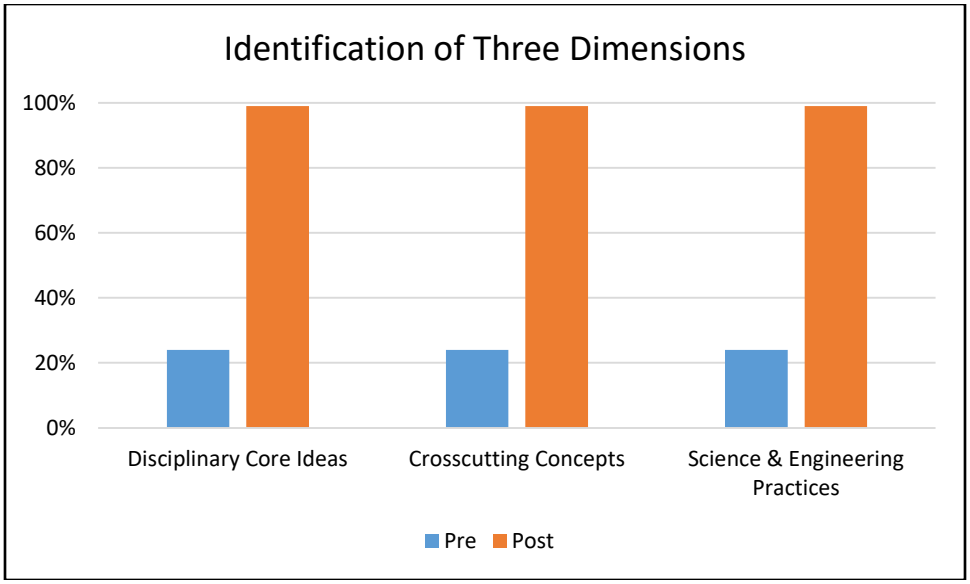

Figure 33: Identification of Three Dimensions

Participants' responses to the prompt *I used to think…Now I think….* were analyzed for indicators of increases in awareness and understandings. Ninety-nine percent of the responses included statements indicating the online courses increased awareness and understandings of the NVACSS.

> *I used to think I was teaching science the correct way. I did a ton of hands-on activities, students seemed to like my class, many of them earned good grades, and some even went on to seek careers in science. Now I think I will need to make a conceptual shift in order to deepen my students' understanding of the world around them. I want learning to be meaningful and I want my students to be able to solve problems and think critically inside and outside the classroom. (6-12 Educator)*

Impact on Instructional Design and Practice

Data collected from the pre and post self-assessments, questionnaires, and reflections indicated the increase of the K-12 participants' awareness and understandings of the various facets of the NVACSS will transfer to instructional design and practice.

> *I used to think that teaching science in elementary school was not very important. Students enjoyed the lessons when we had time for it, but it was not a priority. It was more of a "high school thing." Now I think that science is important through all grade levels. Students would benefit from science lessons beginning in kindergarten and building on prior knowledge through high school. Every student benefits from science, not just college-bound high school students. (Elementary Educator)*

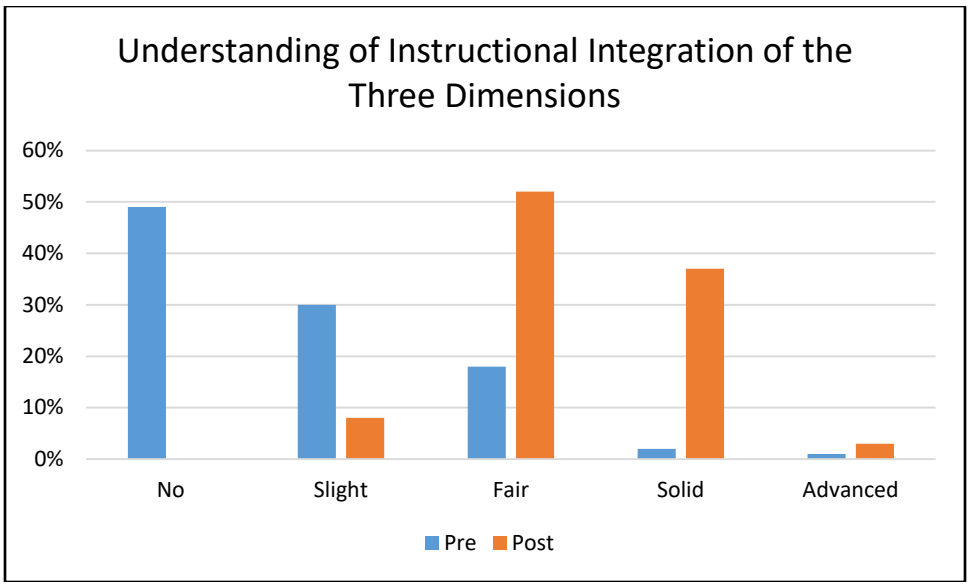

Figure 34: Understanding Integration of Three Dimensions

Participants' understanding of how to integrate the three dimensions into instruction increased from 79% of the participants having no to slight understanding on the online courses' pre self-assessment to 89% having fair to solid understanding on the post self-assessment. Participants' understanding of how to design instruction where students participate in practices used by scientists and engineers in the real world increased from 56% of the participants having no to slight understanding on the pre self-assessment to 83% having fair to solid understanding on the post self-assessment. A no to slight understanding of strategies to support science learning for all students was reported by 59% of the participants on the pre self-assessment. On the post self-assessment, 91% of the participants reported a fair to solid understanding of strategies.

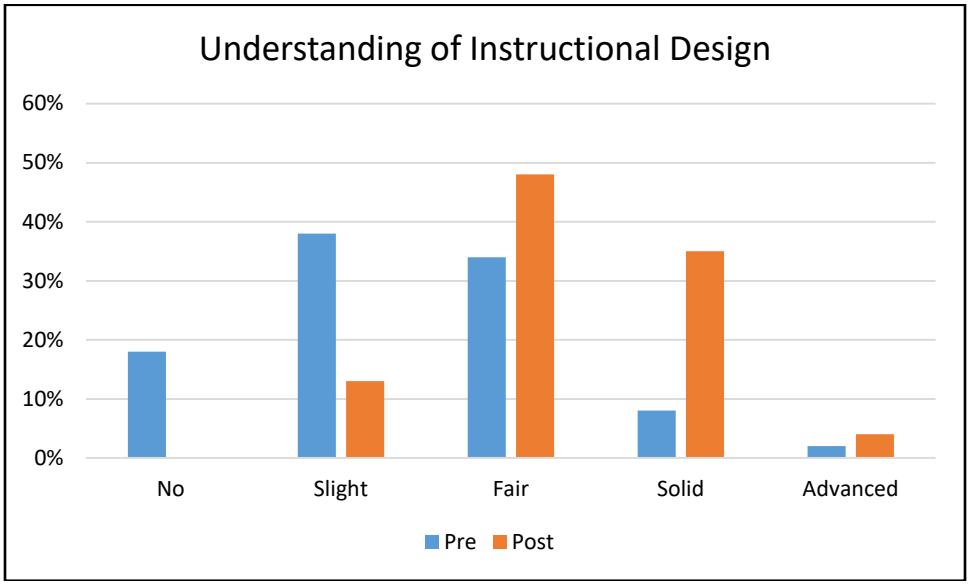

Figure 35: Understanding Instructional Design

I used to think that in order to engage students in science that the lesson should begin with a "hook" or a hands-on activity. Then students could read and answer questions from the text book. Having the activity before the text helped students understand the vocabulary as we read the text. (YIKES!!) Now I think science needs to be taught more thoroughly. The teacher needs to begin with an engaging, relevant topic and question. Students need to engage in all three dimensions of the NGSS to acquire and apply concepts in meaningful practices. We need to integrate science with math and language whenever possible. Then students will actually "do" science and not just regurgitate facts or content. (3-5 Educator)

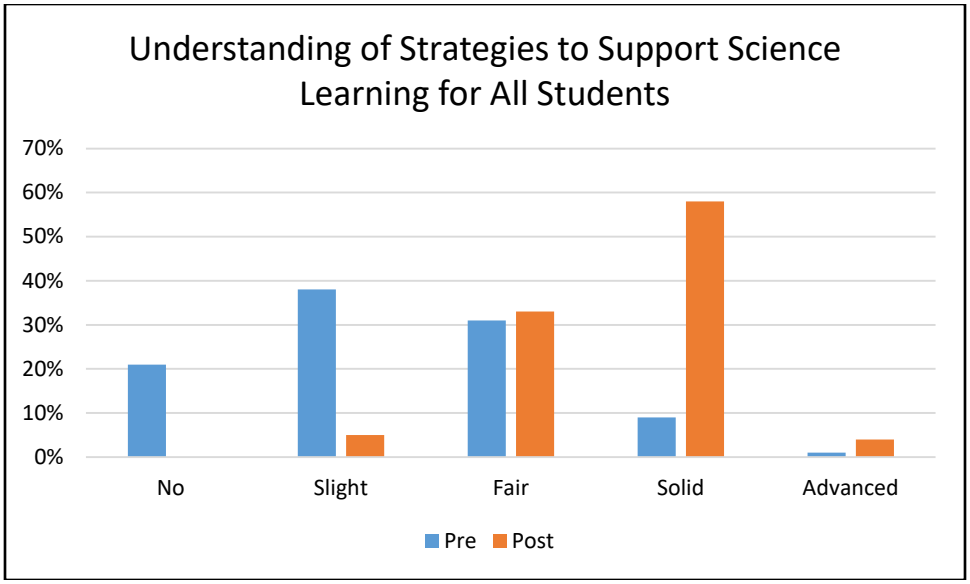

Figure 36: Understanding Strategies to Support Science Learning

The five statements used to assess the instructional impacts in both the online courses and EQuIP sessions yielded 100% ratings in the 4 to 5 range on a Likert Scale of 1 – 5, where a rating of 1 indicated not at all and a rating of a 5 indicated to a great extent.

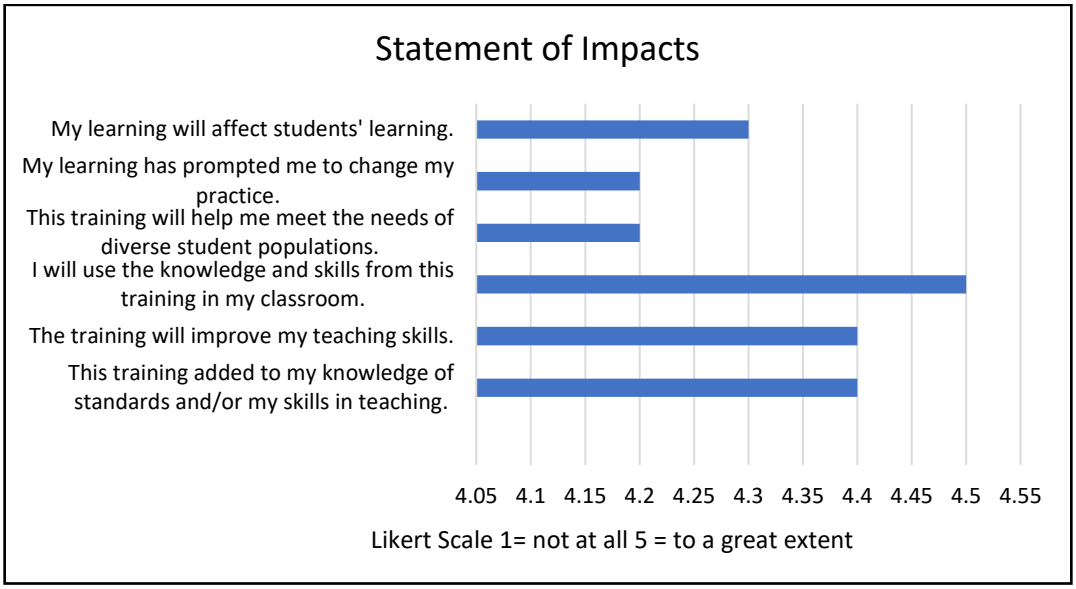

Figure 37: Statement of Impacts

> *I am more equipped to teach these standards than before. This course has helped me understand more about the NGSS and how to apply and teach the standards. (6-12 Science Educator)*

Responses to the prompt, *I used to think…Now I think…* were analyzed and coded in relation to the Nevada Shifts in Science Instruction (see Appendix P). Forty-two percent of the responses evidenced Instructional Shift 1, *Interconnected Nature of Science and the Real World,* 45% evidenced Instruction Shift 2, *Focus and Coherence,* 50% evidenced Instructional Shift 3, *Deeper Understanding of Concepts,* 13% evidenced Instructional Shift 4, *Integration of Engineering and Technology,* 23% evidenced Instructional Shift 5, *College Career and Citizenship Readiness*, and 30% evidenced Instructional Shift 6, *Alignment to the Nevada State Academic Content Standards for ELA and Mathematics.* These percentages are particularly noteworthy given that evidence of these shifts occurred spontaneously in participants' reflections and were not directly solicited in the context of or relationship to Nevada Shifts in Science Instruction.

Nevada's Instructional Shifts	Evidenced in Reflection	Sample Response
Shift 1: Interconnected Nature of Science and the Real World	42%	*I used to think that science was about knowing certain facts…Now I think that science needs to be taught in schools as it is used in the real world.*
Shift 2: Focus and Coherence	45%	*I used to think that the same ideas or details were covered each year. Now I think a progression of learning occurs that allows students the opportunity to learn more complex material.*
Shift 3: Deeper Understanding of Concepts	50%	*I used to think that science was just a "fun' subject to explore…Now I think that the NGSS have provided a framework for taking learning to a much higher standard.*
Shift 4: Integration of Engineering and Technology	13%	*Now I think science can be much more. Not only do we need to understand the concepts, but engineering, building, performing and utilizing technology are equally important to the whole process.*
Shift 5: College Career and Citizenship Readiness	23%	*The number of different careers out there that use scientific principles…the potential is limitless and we should be preparing our students to tap into this potential.*
Shift 6: Alignment to the Nevada State Academic Content Standards for ELA and Mathematics	30%	*Now I think science needs to be taught every day and can be integrated into to other disciplines of study.*

Table 20: Shifts in Science Instruction

An analyses of the responses to the prompts *From today's learning, what will you transfer to practice?* and *How will implementation affect students' learning?* illustrated impacts on instruction and student learning. One hundred percent of the responses referenced transfer of learning to practice and 100% of the responses included indictors that the participants' learning would affect students' learning.

> *I will begin to plan for science as a subject that is core...students must be doing not just reading and watching videos. Science is a hands-on active subject that requires both the students and the teacher to be fully engaged! (Elementary Educator)*

Conclusion

Based on these data, a correlation exists between increasing the participants' awareness and understandings of the NVACSS and impact on the participants' instruction and student learning. Increased awareness and understandings of the NVACSS translated into educators who were more apt to shift science instruction in a manner that embraces Nevada's vision. Indeed, the scale of the increase in awareness of the NVACCS in the district referenced in this particular study is quite an impressive first step, but a first step nonetheless. Further professional development is imperative to continue to advance educators on the path toward a scientifically literate society where ALL Nevadans are ready for success in the 21st Century.

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Appendices

Appendix A: Governance Board Agendas

Northeastern Nevada Regional
Professional Development Program

NNRPDP GOVERNANCE BOARD MEETING
November 3, 2016 3:30 – 5 pm
Agenda

1. **Member Roll Call – Jeff Zander**
2. **Public Comment – Jeff Zander**
   Comments from the public are invited at this time on topics not specifically addressed elsewhere in the agenda.
3. **Approval of Meeting Notes from April 14, 2016 (Action Item)**
4. **NNRPDP Proposed 16-17 Budget – Sarah Negrete (Action Item)**
5. **Administrative Fund Update – Jeff Zander**
6. **Great Basin College Update – Dr. Mark Curtis**
7. **New Business – Jeff Zander**
8. **Welcome/Ketra Gardner**
9. **Public Comment – Jeff Zander**
   Comments from the public are invited at this time on topics not specifically addressed elsewhere in the agenda.
10. **Adjournment – Jeff Zander (Action Item)**

Members of the public who are disabled and require special accommodations or assistance at the meeting are requested to notify Christine Back, in writing at the NNRPDP, 1290 Burns Rd., Elko, NV 89801 or by calling (775) 753-3879.
This agenda has been posted at the following locations – Eureka County School District, Humboldt County School District, Lander County School District, Pershing County School District, White Pine County School District, Great Basin College, Department of Education/Carson City and the NNRPDP Elko office.

Northeastern Nevada Regional
Professional Development Program

NNRPDP GOVERNANCE BOARD MEETING
May 18, 2017 3:30 – 5 pm
Agenda

1. **Member Roll Call – Jeff Zander**
2. **Public Comment – Jeff Zander**
   Comments from the public are invited at this time on topics not specifically addressed elsewhere in the agenda.
3. **Approval of Meeting Notes from November 3, 2016 – Jeff Zander (Possible Action Item)**
4. **Revised 16-17 NNRPDP Budget – Sarah Negrete (Possible Action Item)**
5. **Administrative Fund Update – Jeff Zander**
6. **Statewide Council Update – Jeff Zander**
7. **Parent Involvement – Cindy Santos Cooke**
8. **Educator Health – Dan Wold**
9. **GBC Update – Tom Reagan**
10. **New Business – Jeff Zander**
11. **Public Comment – Jeff Zander**
    Comments from the public are invited at this time on topics not specifically addressed elsewhere in the agenda.
12. **Adjournment – Jeff Zander (Action Item)**

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Appendix B: NNRPDP 5-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. Their collective charge is to support the state's teachers and administrators in implementing Nevada's academic standards through regionally determined professional development activities. Since that 1999 session, the four programs have been reduced to three. 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 charge is described in three broad categories: 1) Fulfilling legislated mandates (e.g., NVACS, NEPF, Parent Engagement) 2) Meeting district requests for services (e.g., NVACS, differentiation, student engagement), and 3) Supporting individual teachers (e.g., coaching, credit classes, modeling, instructional rounds)

Service Area

The NNRPDP serves 1112 teachers and 72 administrators in 68 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.

In addition, the staff of the NNRPDP is widely dispersed within the region requiring significant travel within the area for an expertise-request match for districts.

Mission

The NNRPDP provides high-quality professional learning opportunities to enhance student learning within the context of Nevada State 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. 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 Canvas 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, as currently required, the common evaluation form will continue to be used 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 may change the structure of evaluation of the RPDPs in the state and our measurement system will parallel those expectations (*per NRS.391.540 (d) the governing body shall incorporate into the 5-year plan any revisions recommended by the Statewide Council.)*

A Two-Year Focus (2015-2017)
NRS 391.540
(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 (NNRPDP) 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 NNRPDP 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 NNRPDP has developed the training programs listed below for teachers and administrators.

Proposed Biennial Budget 2015-2017
$2,598,001

NNRPDP Sponsored Training Programs
Teaching and Leading Academy
This Academy will be focused on helping a small number of selected schools establish foundations needed to build a culture of continuous improvement. The NNRPDP will partner with schools that have administrative and teacher leaders with exceptional potential for leading significant change. We will help provide a comprehensive evaluation of the current conditions, specific training, resources, and consultative services. NNRPDP coordinators will work for at least one year as partners with school leadership teams comprised of the principal, teacher leaders, and any other influential stakeholders. This leadership team will identify school-wide needs, related to the foundations, and pick a specific instructional focus in which they want to make dramatic improvement. The leadership team will receive training from national level experts in the field and be guided to help their school continue to stay focused on those things that matter most.

Courses for Credit
NNRPDP creates and provides courses for teachers interested in particular topics. Because the current needs assessment of our teachers indicates a particular desire to increase technology skills and improve in areas related to the Nevada Educator Performance Framework, a number of courses will target those areas. In addition, the NNRPDP receives several requests for facilitation of courses related to a particular school's desire for content.
Teacher Academy Cohort Two

Building on the previous year's success, Cohort Two of the Teacher Academy focuses on improving instructional pedagogy through Nevada Educator Performance Framework standards. The NNRPDP accepts applications from teachers who are nominated to attend by their administrators 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.

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*

- It is expected that the Statewide Council will change the structure of evaluation of the RPDPs in the state and our measurement system will parallel those expectations. Working with an outside evaluator, a measurement system will be put in place, and the NNRPDP will shift as required to fully focus on this goal.

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*

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. Relationships are established through a common understanding of outcomes and relevance to teachers' practice in addition to frequent communication and support.

NNRPDP Trainings 2016-17

Date	Training #	Training Title	District	Outcomes	Primary Focus
8/2/16	1	Eureka Math	Elko	Implementation	Content Area
8/17/16	8	Eureka Math Module Study		Knowledge	
9/15/16	36	Grade 2			
9/27/16	39	Grade 4			
9/29/16	41	Grade 2			
10/6/16	51	Grade 4			
10/12/16	101	Grade 6			
10/13/16	65	Grade 4			
10/24/17	207	Kindergarten			
11/2/16	87	Grade 2			
11/16/16	208	Kindergarten			
11/30/16	105	Grade 6			
1/17/17	159	Grade 4			
1/25/17	214	Kindergarten			
1/26/17	166	Grade 2			
2/1/17	172	Grade 3			
2/21/17	190	Grade 2			
4/17/17	238	Grade 2			
4/19/17	240	Kindergarten			
5/15/17	246	Grade 2			
5/17/17	247	Grade 4			
8/4/16	2	Battle Mtn. Literacy Retreat	Lander	Implementation	Content Area
10/24/16	77	Whole Group Literacy			
8/8/16	3	RTI	Elko, Lander	Knowledge	Assessment
8/22/16	7		Elko, Humboldt, Lander		
9/7/16	21		**Charter, White Pine		
9/14/16	26		*Charter, Elko		
10/17/16	66		Elko, Humboldt		
10/24/16	75		*Charter, Elko, Lander		
11/29/16	110		**Charter, White Pine		
12/12/16	121		Elko, Humboldt		
1/19/17	161		*Charter, Elko, Lander		
2/7/17	184		White Pine		

Date	Training #	Training Title	District	Outcomes	Primary Focus
8/10/16	4	TALA (Teaching & Leading Academy)	Humboldt, Lander	Implementation	Pedagogy
8/11/16	5	Teacher Academy	*Charter, Elko, Humboldt, Lander	Awareness	Pedagogy
9/20/16	33			Implementation	
10/18/16	68				
11/15/16	93				
12/13/16	124				
2/6/17	180			Knowledge	
8/19/16	6	RISE (New Teacher Training)	Elko	Knowledge	Pedagogy
8/22/16	9	New Teacher Training	Lander	Awareness	Pedagogy
9/30/16	48			Knowledge	
8/23/16	10	Eureka Math Fluency (Battle Mtn. Elementary)	Lander	Awareness	Content Area
8/24/16	12	Eureka Math Customization			
9/23/16	47	Eureka Math Module Study			
10/29/16	83				
11/16/16	96				
1/20/17	163			Implementation	
2/3/17	179			Knowledge	
3/3/17	201				
4/28/17	243				
8/24/16	11	End of Course (EOC) Training (Jackpot HS)	Elko	Knowledge	Assessment
9/13/16	108				
9/14/16	27	(Owyhee Combined)		Awareness	
8/25/16	13	Eureka Math Module Studies K-4	Humboldt	Awareness	Content Area
9/29/16	59			Knowledge	
8/25/16	14	Lucy Calkins Training (Jackpot Combined)	Elko	Awareness	Content Area
9/21/16	35	Writing Workshop		Implementation	
10/12/16	64	Reading Workshop			
11/30/16	113	Writing Workshop			
4/5/17	235	Writing Workshop			
4/5/17	236	Reading Workshop			
8/25/16	15	Block Scheduling PD (EHS)	Elko	Implementation	Pedagogy
2/28/17	194	EOC Whole Group		Knowledge	Assessment
2/28/17	195	EOC Math			Content Area
2/28/17	196	EOC ELA			
9/6/16	16	Running Records (Battle Mtn. Elementary)	Lander	Implementation	Assessment
10/27/16	80	Literacy Coaching			Content Area
11/28/16	102	Reading & Writing Workshop			

Date	Training #	Training Title	District	Outcomes	Primary Focus
12/6/16	117	Coaching			
12/12/16	122	Coaching			
12/12/16	123	Reading & Writing Workshop			
1/9/17	127	Whole School PD			
1/30/17	170	Coaching			
2/6/17	181	Whole School PD			
3/6/17	202	Whole School PD			
4/3/17	234	Reading & Writing Workshop			
5/8/17	244	Spelling Inventory			
9/7/16	17	Tech Tools 2.0	Elko	Knowledge	Content Area
9/14/16	25				
9/21/16	34				
9/28/16	40				
10/5/16	46				
10/12/16	63				
10/19/16	73				
10/24/16	78				
11/16/16	95				
9/7/16	18	RISE Mentor CFG	Elko	Implementation	Pedagogy
11/9/16	92				
1/11/17	212				
3/1/17	200				
9/9/16	23	Eureka Math (West Wendover Elementary)	Elko	Awareness	Content Area
10/6/16	50				
9/15/16	19	NEPF (NV Educator Performance Framework) (Lowry HS)	Humboldt	Implementation	Pedagogy
10/27/16	84	NEPF Rigor			
8/29/16	20	Reading & Writing Workshop	Lander	Implementation	Content Area
9/27-29/16	42				
9/7/16	22	TPACK & SAMR (White Pine Middle School)	White Pine	Knowledge	Content Area
9/12/16	24	NEPF (White Pine HS)	White Pine	Implementation	Pedagogy
9/26/16	69				
11/28/16	109				
12/1/16	114				
12/5/16	115				
12/12/16	120				
1/30/17	215				
2/13/17	218				
3/13/17	223				
9/15/16	28	EOC Training (McDermitt Combined)	Humboldt	Awareness	Assessment
9/12/16	29	TALA (David E. Norman)	White Pine	Implementation	Assessment

Date	Training #	Training Title	District	Outcomes	Primary Focus
9/15/16	30	Guiding Coalition	Humboldt	Implementation	Assessment
1/23/17	230				
9/16/16	31	NEPF (District Wide)	White Pine	Awareness	Pedagogy
10/3/16	71				
10/24/16	76				
2/27/17	219				
3/13/17	261				
9/19/16	32	Twitter Basics	Elko	Knowledge	Content Area
8/31/16	107	ELA & Math PD (David E. Norman)	White Pine	Implementation	Pedagogy
9/21/16	37	Math PD			Content Area
9/28/16	70	ELA PD			
10/12/16	174	ELA & Math PD		Knowledge	
10/14/16	72	Math PD			Assessment
10/21/16	74	Quarterly Planning Day			
12/7/16	119	ELA & Math PD			
1/25/17	178	ELA & Math PD			
9/26/16	38	NEPF	Elko	Awareness	Pedagogy
10/3/16	43	CFG (Critical Friends Group)	*Charter, Elko, Humboldt, Lander	Implementation	Pedagogy
11/1/16	86				
11/29/16	104				
2/1/17	173				
9/29/16	44	EOC (Battle Mtn. HS)	Lander	Awareness	Assessment
11/18/16	97				
10/5/16	45	Alumni CFG	Elko	Implementation	Pedagogy
11/3/16	89				
12/1/16	106				
10/5/16	49	Understanding Poverty (Wells Jr.Sr. HS)	Elko	Knowledge	Pedagogy
1/11/17	157				
1/26/17	167				
3/22/17	233				
4/26/17	241				
5/24/17	260				
8/12/16	52	MANTA	Elko, Humboldt, White Pine	Awareness	Content Area
10/8/16	62				
11/3/16	88	5th Gr. Facilitator Rubric Trg.	Elko		
11/19/16	98	MANTA	Elko, Humboldt		
1/12/17	158	K-5 Science Facilitator Trg.	Elko	Implementation	
3/11/17	221		Elko, Humboldt, White Pine	Knowledge	

Date	Training #	Training Title	District	Outcomes	Primary Focus
8/18/16	53	CILR 601/Foundations of Literacy Learning	Elko, Humboldt, **Learning Bridge, White Pine	Knowledge	Content Area
8/30/16	54				
9/6/16	55				
9/13/16	56				
9/20/16	57				
9/27/16	58				
10/4/16	60	CILR 607/Comprehensive Reading Instruction			
10/11/16	61				
10/18/16	67				
10/25/16	79				
11/1/16	85				
11/8/16	91				
11/15/16	94				
11/29/16	103				
12/6/16	118				
1/3/17	126			Implementation	
1/10/17	128	CILR 610/Content Area Literacy			
1/17/17	160				
1/24/17	165				
1/31/17	171				
2/7/17	182				
2/14/17	188				
2/28/17	197				
3/7/17	204				
3/21/17	227	CILR 621/Assessment in Literacy		Implementation	
4/11/17	248				
4/18/17	249				
4/25/17	250				
5/2/17	251				
5/8/17	252				
5/16/17	253				
5/23/17	254				
6/12-22/17	274	CILR 622/Tutoring		Implementation	Pedagogy
10/27/16	81	Eureka Math (McDermitt)	Humboldt	Knowledge	Content Area
10/24/16	82	PLC/Team Collaboration	Lander	Implementation	Content Area
11/7/16	90				
11/10/16	99	Reading PD/Coaching (Jackpot Combined)	Elko	Implementation	Content Area
11/30/16	112				
2/15/17	189	Text Complexity		Knowledge	

Date	Training #	Training Title	District	Outcomes	Primary Focus
3/8/17	216	Reading PD		Implementation	
11/21/16	100	Exploring NVACSS K-5	*Charter, Elko	Awareness	Content Area
1/24/17	169	Exploring NVACSS 6-12		Implementation	
11/30/16	111	NEPF (WPMS)	White Pine	Awareness	Content Area
12/6/16	116	Math Intervention (McGill)	White Pine	Awareness	Content Area
12/14/16	125	Eureka Math (Northside)	Elko	Awareness	Content Area
9/6/16	129	Mathematical Mindsets	Elko	Knowledge	Content Area
10/4/16	130				
11/1/16	131				
11/29/16	132				
9/7/16	133	Mathematical Mindsets	Humboldt	Knowledge	Content Area
10/5/16	134				
11/2/16	135				
11/30/16	136				
9/7/16	137	Mathematical Mindsets	Pershing	Knowledge	Content Area
10/5/16	138				
11/2/16	139				
11/30/16	140				
9/8/16	141	Mathematical Mindsets	White Pine	Knowledge	Content Area
10/6/16	142				
11/3/16	143				
12/1/16	144				
9/1/16	145	Number Talks	Elko	Implementation	Content Area
10/1/16	146				
11/1/16	147				
12/1/16	148				
9/1/16	149	Number Talks	Pershing	Implementation	Content Area
10/1/16	150				
11/1/16	151				
12/1/16	152				
9/1/16	153	Number Talks	White Pine	Implementation	Content Area
11/1/16	154				
12/1/16	155				
1/10/17	156	NEPF (Winnemucca Jr.HS)	Humboldt	Implementation	Pedagogy
1/23/17	231				
2/7/17	183				
1/19/17	162	Eureka Math (Winnemucca Grammar)	Humboldt	Knowledge	Content Area
1/23/17	164			Implementation	
1/24/17	168	Differentiation (West Wendover Jr. Sr. HS)	Elko	Implementation	Pedagogy
2/10/17	186				
3/10/17	205				
11/21/16	175	Technology PD (White Pine MS)	White Pine	Knowledge	Content Area

Date	Training #	Training Title	District	Outcomes	Primary Focus
12/7/16	176				
1/4/17	177				
3/1/17	199			Awareness	Assessment
2/9/17	185	Words Their Way (Wells Elementary)	Elko	Implementation	Content Area
2/13/17	187	Partnering with Parents Book Study	Elko	Awareness	Content Area
2/27/17	193				
3/13/17	222				
2/23/17	191	EOC/ELA Group (Lowry HS)	Humboldt	Knowledge	Content Area
2/23/17	192	EOC/Whole Group			
2/28/17	198	Parent Workshop Planning (WWE)	Elko	Implementation	Content Area
3/7/17	203	Eureka Math Parent Support		Awareness	
9/21/16	206	Eureka Math (Flag View)	Elko	Implementation	Content Area
11/16/16	209				
1/11/17	211				
1/14/17	213				
3/8/17	220				
4/12/17	237				
4/19/17	239				
1/3/17	210	NVACSS Planning Session *(EIAA)	Elko	Implementation	Content Area
2/13/17	217	EOC/Math	Humboldt	Awareness	Content Area
3/15/17	224	Eureka Math (Sonoma)	Humboldt	Implementation	Content Area
3/16/17	225				
3/20/17	226	Math Pedagogy	Pershing	Implementation	Content Area
1/14/17	228	Board Retreat	White Pine	Awareness	Pedagogy
1/20/17	229	Teacher Literacy Communities PD	White Pine	Implementation	Assessment
2/8/17	232	RTI Support (Sonoma)	Humboldt	Implementation	Assessment
4/28/17	242	Google Drive PD	White Pine	Knowledge	Content Area
5/12/17	245	Introducing NVACSS **(Learning Bridge)	White Pine	Awareness	Content Area
5/16/17	255	Teach High School Math through Problem Solving	Elko	Implementation	Content Area
5/17/17	256				
5/23/17	257				
5/24/17	258				
5/24/17	259	Eureka Math FQA (Grammar #2)	Elko	Implementation	Content Area
9/29/16	262	Teacher Inquiry	White Pine	Implementation	Pedagogy
10/13/16	263				
10/27/16	264				
11/17/16	265				

Date	Training #	Training Title	District	Outcomes	Primary Focus
12/7/16	266				
1/7/17	267				
1/19/17	268				
2/2/17	269				
3/2/17	270				
4/6/17	271				
5/5-7/17	272	Writing Retreat	White Pine	Implementation	Pedagogy
5/30-6/1/17	273	STEM Institute	White Pine	Knowledge	Pedagogy
10/26/16	275	EOC Training	Eureka	Knowledge	Assessment
		*Charter=Elko Institute for Academic Achievement (EIAA)			
		** Learning Bridge=Ely charter school			

Scope of Work 2016-17

NEPF

- Teacher Academy (monthly full-day professional learning for 22 teacher leaders intensely focused on NEPF instructional standards) (region-wide)
- Critical Friends Groups (monthly half-day small group learning communities as follow-up to the Teacher Academy full days) (region-wide)
- Critical Friends Groups Alumni (four half-day small group learning communities meeting four times per year) (region-wide)
- Teaching and Leading Academy (five school leadership teams comprised of teacher leaders and principals receiving three full days of professional learning; multiple on-site trainings and support) (region-wide)
- WPHS ongoing bimonthly NEPF training and observations for teaching staff and administrators.
- Protocols Training (one-day workshop) (region-wide)
- SLG training (one-day workshop) (region-wide)
- SLG training and consultation (Humboldt and White Pine)
- Monthly training (Lowry High School) (Humboldt)

NVACS and Pedagogy

- New teacher induction program (RISE) summer (Elko)
- Mentor CFG to support RISE teachers (Elko)
- New teacher orientation (Lander)
- Math content training for parapros at White Pine Middle School (White Pine)
- Math pedagogy training and observations (monthly) (White Pine)
- Twitter Basics workshop (White Pine and Elko)

Courses for Credit

- Eureka Math Classes: Fluency and Customization (Elko and Lander)
- Eureka Math Module Studies (Elko and Lander)
- Exploring NVACS-Science (Elko)
- Mentor CFG (Elko)
- Alumni CFG (region-wide)
- Number Talks Class (Elko, White Pine, Pershing)
- Mathematical Mindsets Class (Elko, Humboldt, Pershing, White Pine)
- White Pine Teacher Inquiry Communities (White Pine)
- White Pine Writing Retreat (White Pine)
    - Nevada Ready 21 Tech Tools 2.0 (Elko)
    - Nevada Ready Professional Learning Plan (PLP) (Elko)
    - Battle Mt. Literacy Retreat (Lander)
    - RTI (region-wide)

UNLV Graduate Level Reading Endorsement

- CILR 601: Foundations of Literacy Learning (region-wide)
- CILR 607: Comprehensive Literacy Instruction (region-wide)
- CILR 610: Content Area Literacy(region-wide)
- CILR 622: Practicum in Diagnosis and Instruction of Literacy Difficulties (region-wide)
- CILR 621: Assessment in Literacy (region-wide)

Mentoring/Coaching

- High school math teachers (region-wide)
- EIAA math (Elko)

- High school science teachers (region-wide)
- High school and middle school math teachers (Pershing)
- High school NBCT teacher (White Pine)
- K-5 Math teacher (White Pine)
- K-5 ELA teacher (White Pine)
- Middle school technology (White Pine)
- K-5 Literacy (Lander)
- High School Literacy (Elko, Jackpot)

State/National Level Contributions

- NDE High School End of Course work
- NVACS-Science Implementation
- Action Research Network of the Americas (ARNA) executive committee representation
- Michigan State EPET New Literacies/Social Media Research team
- Northwestern Nevada Math and Science Conference presentation
- Mid-School Math National Conference presentation
- International Literacy Association presentation

District or School Support/Committees

- Literacy Across the Curriculum, Jackpot (Elko)
- Eureka Math, Sonoma (Humboldt)
- Eureka Math, EIAA (Charter)
- Eureka Math, Flagview (Elko)
- Differentiation, West Wendover Combined (Elko)
- Facilitate K-5 Math and ELA scope and sequence, unit planning, assessment, and pedagogy (White Pine)
- High school science PLC (White Pine)
- End of Course trainings (region-wide)
- Middle school technology integration support (White Pine)
- K-5 early literacy support (White Pine)
- Turnaround school support (Humboldt)
- High school leadership team (White Pine)

Grant Partnerships

- Exploring NVACS-Science [GTLF with Elko]
- MANTA [statewide]
- Nevada Ready 21 Tech Tools 2.0 [Elko]
- Nevada Math Project MSP year 3 partnership [region-wide]
- Code.org Computer Science [region-wide]

Appendix E: Steps of an Ideal Team

Steps for an Ideal Team

**Ensure all critical team members are part of the discussion.

1) Identify Essential Standards

2) Unwrap the standards and identify the Learning Targets associated with Essential Standards

3) Build a common assessment. -or- Determine what proficiency looks like. Create rubrics/Gather other forms such as student samples/Develop success criteria

4) Determine what proficiency looks like. Create rubrics/Gather other forms such as student samples/Develop success criteria –or- Build a common assessment.

(#3/#4 This may vary depending on the subject. For example: Writing may need a rubric and student work samples prior to building the common assessment. Math may need to build the assessment and determine possible proficiency after the assessment.

5) Review Curricular Resources

6) Create a data tracker

7) Assess students' prior learning utilizing multiple methods. (Common Pre Assessment or Other common formative measures)

8) Set a SMART Goal based on student assessment of current performance and document on SMART Goal worksheet

Steps of an Ideal Team

Yearly Planning

1) Determine year-long Essential Standards by Unit/Quarter
2) Build a Map that includes Essential Standards and Pacing Guide

Unit Planning

Version 1.0- This is the ideal narrative of a team cycle. This cycle will continue to evolve.

Prior to the start of a unit…..

**Ensure all critical team members are part of the discussion.

1) Identify Essential Standards
2) Unwrap the standards and identify the Learning Targets associated with Essential Standards
3) Build a common assessment. -or- Determine what proficiency looks like. Create rubrics/Gather other forms such as student samples/Develop success criteria
4) Determine what proficiency looks like. Create rubrics/Gather other forms such as student samples/Develop success criteria –or- Build a common assessment.
(#3/#4 This may vary depending on the subject. For example: Writing may need a rubric and student work samples prior to building the common assessment. Math may need to build the assessment and determine possible proficiency after the assessment.
5) Review Curricular Resources
6) Create a data tracker
7) Assess students' prior learning utilizing multiple methods. (Common Pre Assessment or Other common formative measures)
8) Set a SMART Goal based on student assessment of current performance and document on SMART Goal worksheet

SMART Goal Worksheet- Team SMART Goal, Strategies and Action Steps, Who is Responsible, Target Date or Timeline, Evidence of Effectiveness

Clarifying Vocabulary for PLC Teams

Target Vocabulary	Definition	Resource	Audience
Guaranteed and viable curriculum	A guaranteed and viable curriculum gives students access to the same essential learning outcomes regardless of who is teaching the class, and it can be taught in the time allotted.	Learning by Doing- Frequently Asked Questions Chapter 3 Page 81-82	District and School officials
Essential Standard	"Essential standards identify the knowledge, skills, and dispositions all students must acquire as a result of a class, course, or grade level. Essential standards go beyond what is nice to know and identify what students must know to be proficient."	Learning by Doing- Frequently Asked Questions Chapter 3	Administrator/Teacher "Essential standards are intended for teachers, not students. Teacher teams should unwrap or unpack the essential standards to identify the learning targets and then translate them into "I can" statements that they share with students."
Learning Target	"The learning target defines, for students, what learning is intended. Learning targets are subsets of a standard, and typically, there are multiple learning targets within a single essential standard. They represent the individual concepts and skills embedded within each standard."	Learning by Doing- Frequently Asked Questions Chapter 3	Teacher/Student Students should be able to answer Where am I going?, Where am I now?, How can I close the gap?, How will I know I'm getting there?, and How can I keep it going?
I can statement	A well-constructed "I can" statement clearly states in student-friendly terms what students will learn, and teachers and students understand it. Students cannot track their own progress, assess their own learning, or set specific goals around their own learning without understanding what teachers expect of them.	Learning by Doing- Frequently Asked Questions Chapter 3	Student A tool to support students in taking responsibility for their learning.
Success Criteria	"Success Criteria are derived from Learning Goals/Learning Targets, but they are more specific. They explicitly describe student performances of understanding or skills, what students will say, do, or write to demonstrate that they have met the Learning Goals." "Success criteria are the guide to learning while the student is engaged in the learning tasks. The success criteria provide the framework within which formative assessment takes place and make possible the interpretation of evidence."	Building Blocks, Learning Goals, and Success Criteria: Planning Instruction and Formative Assessment for K-8 Math Standards Formative Assessment: What do Teachers Need to Know and Do? Margaret Heritage	Teacher/Student Evidence of learning- "*what students will say, do, or write to demonstrate they have met the Learning Goal*"

Sample of a Typical Agenda for ELA, Science

Day 1 Training- FFMS Multipurpose Room

Outcome

(1) PLC Process- Ensure each grade level has essential standards, learning targets, align curriculum map, realistic pacing guides, common formative assessments aligned to essential standards and learning targets

8:00-11:30 Training

Differentiate based on the needs for each of the groups.
ELA- As they attended the last training with Brad they can continue the work in a different unit.
Everyone else- Get a brief background and begin facilitated work with Brad on the unit level creation.

11:30-12:15 Lunch (On your own)

12:15-3:30 Training

Differentiate based on the needs for each of the groups.
Each grade level will have facilitated time working with Brad to ensure they have support and feedback on the development of a unit specific to essential standards, learning targets, align curriculum map, realistic pacing guides, common formative assessments aligned to essential standards and learning targets.

Materials needed:

-Anything the grade level/department has already created in terms of curriculum map, essential standards, learning targets, common formative assessments, etc.

Guaranteed and Viable Curriculum

Name: _____
Date: _____

5th Grade Common Formative Assessment 4

Learning Target 1: I can quote accurately from a text when explaining what the text says.
Learning Target 2: I can make accurate inferences using the text.

1. When I'm supporting my answer, I know a quote is:
a. A summary
b. A word or words from the text
c. A prediction
d. A photograph

2. What is needed to make an inference?
a. Prior knowledge and a summary
b. A caption and the title
c. Dialogue and a summary
d. Prior knowledge and text evidence

3. What is the difference between a quote and an inference?
a. An inference goes in quotation marks.
b. There is no difference.
c. A quote is word for word and an inference is what the reader concludes.
d. A quote is what the reader thinks.

4. According to the text "The Declaration of Independence," why does the author most likely say, "the time for negotiating with Britain was over?"

1. The British had run out of time and lost control.
2. The war for independence was coming to an end.
3. The sides would have to fight rather than talk.
4. The Americans no longer wanted to gain independence.

a.) 1 and 3
b.) 1 and 4
c.) 2 and 3
d.) 3 and 4

5. In "Paul Revere's Ride and the Shot Heard Round the World," the author states, "the whole world was watching." Select the quote below that best supports this statement.
a. "That first shot would be nicknamed "The shot heard round the world."
b. "Minutemen came from farms all over the countryside and gathered together in Lexington."
c. "The Redcoats came and the men stood facing each other for a few moments."
d. "They wanted to see what would happen to the colonies as they tried to battle one of the greatest countries in the world."

6. Check the boxes to match each source with the idea or ideas that it supports. Some ideas may have more than one source selected.

	Source #1: Introduction to the Revolutionary War	**Source #2: Paul Revere's Ride and the Shot Heard Around the World**	**Source #3: The Declaration of Independence**
Certain individuals had a strong influence in getting the colonists to stand up to the British.		x	x
The colonists wanted independence from Britain because they felt that they were being treated unfairly.	x	x	x

7. In the text, "Introduction to the Revolutionary War" the author informs the reader of how angry the colonists were with Britain. Provide two quotes from the text that support this.

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

8. After reading, "The Declaration of Independence" and "Paul Revere's Ride and the Shot Heard Round the World," what do you infer about the kind of people Paul Revere, Patrick Henry, Samuel Adams, and John Hancock were and what they were fighting for?

_____
_____
_____
_____
_____
_____
_____
_____

9. The three sources "Introduction to the Revolutionary War," "Paul Revere's Ride and the Shot Heard Round the World," and "The Declaration of Independence" describe the events that took place during the American Revolution. Explain what you have learned about the American Revolution. Use at least one direct quote from **each source** to explain your answer.

_____
_____

Class CFA Data Tracker

		Reading Anchor CFA Data Tracker						
Grade	Student Names	CFA 1	CFA 2	CFA 2#	CFA 3	CFA 3#		
5		55	55	3	39	2	5	Meets
5		18	67	4	44	3	4	Approaching
5		27	78	4	100	5	3	Developing
5		64	94	5	89	5	2	Emergent
5		27	44	3			1	Beginning
5		36	50	3	67	4		
5		64	44	3	89	5		
5		36	44	3	17	1		
5		73	89	5	94	5		
5		82	94	5	78	4		
5		36	39	2	50	3		
5		55	78	4	100	5		
5		73	61	4	67	4		
5		55	72	4	72	4		
5		82	83	5	100	5		
5		27	44	3	44	3		
5		45	56	3	33	2		
5		45	33	2	22	2		
5		64	50	3	100	5		
5		55	22	2				
5		55	56	3	72	4		
5		27	33	2	61	4		
5		18	22	2				
5		64	28	2	72	4		
5		73	56	3	94	5		
5		64	78	4	89	5		
5					100			
		CFA 1	CFA 2		CFA 3			
	Average Score	50.76923077	56.53846154		70.5416			
	Growth		5.769230769		14.003205			

Elko County School District
RISE New Teacher Mentor

The principal of an Elko County School District school shall designate a licensed teacher employed by the school to be a New Teacher Mentor for the 2016-2017 school year.

This agreement, made and entered into on _____, by and between the Elko County School District (ECSD) and

_____
New Teacher Mentor Name/School

Hereinafter referred to as the "New Teacher Mentor." The ECSD does hereby contract with the "NewTeacher Mentor" to:

- Attend a mentor orientation and planning meeting on Tuesday, August 16th from 3:30 - 5:30 pm.
- Provide orientation and support to the new teachers at your school site on Wednesday, August 17th from 8:00 - 3:00 pm.
- Participate in a Mentor CFG (Critical Friends Group) 4 times over the course of the year with other mentors to collaborate, plan, and experience protocols to use to assist new teachers. Each of the 4 two-hour CFG meetings will be held after school with dates TBD.
- Schedule, plan, and facilitate 5 New Teacher CFGs over the course of the school year with the new teachers at your school site(s).
- Submit 5 written reflections.
- Identify and share at least 5 vetted resources with new teachers over the course of the school year.
- Provide ongoing support as needed to new teachers.

The New Teacher Mentor shall receive compensation in the amount of $750. Payment will be made in June 2017.

_____
New Teacher Mentor

_____
Principal

_____
Director

RISE MENTOR SCHEDULE OF RESPONSIBILITIES 2016 - 2017

Before School Starts

8-16 @ 3:30	Orientation & Planning Mtg.	Onsite - HTC
8-17 8-3:00	New Teacher Support	School Site

Round 1

9-7 4:00 to 6:00	Attend mentor CFG	Onsite – HTC
By 9-15	Find and share vetted resource	Canvas
Between 9-15 & 9-30	Facilitate new teacher CFG	School site
By 9-30	Reflect on round I; share and respond	Canvas

Round 2

11-9 4:00 to 6:00	Attend mentor CFG	Onsite – HTC
By 11-15	Find and share vetted resource	Canvas
Between 11-15 & 11-30	Facilitate new teacher CFG	School site
By 11-30	Reflect on round 2; share and respond	Canvas

Round 3

1-11 4:00 to 6:00	Attend mentor CFG	Onsite – HTC
By 1-15	Find and share vetted resource	Canvas
Between 1-15 & 1-30	Facilitate new teacher CFG	School Site
By 1-30	Reflect on round 3; share and respond	Canvas

Round 4

3-1 4:00 to 6:00	Attend mentor CFG	Onsite HTC
By 3-15	Find and share vetted resource	Canvas
Between 3-15 & 3-30	Facilitate new teacher CFG	School Site
By 3-30	Reflect on round 4; share and respond	Canvas

Round 5

By 4-15	Find and share vetted resource	Canvas
Between 4-15 & 5-30	Facilitate new teacher CFG	School Site
By May 30th	Reflect on experience as a whole - share and respond	Canvas

Appendix I: Rise School Site Check List for Mentors

RISE School Site Checklist

- Tour
- Daily Schedule of the School
- Teacher's Schedule
- Safety Information
- Crisis Management (drills, escape route maps)
- Library Hours, Issues, and what's available
- Keys, getting into school on weekends and nights
- Alarm System
- Mail & Mailboxes
- Attendance Procedures
- Introduce Secretaries and Custodians
- Copy Machines, faxing, phone system
- Video policies
- Lunch Accounts & Deposits
- Extra Duty Assignments
- Bus, Lunch, and Recess duty calendars (where the different playground areas are)
- Committee assignments (explain existing committees)
- Lesson Plans (School site expectations)
- Cumulative files and records
- Forms (special ed, sick leave, reimbursement, travel)
- Requesting Substitutes (how to secure a sub)
- Lesson plans for subs
- Parking
- Faculty room and treats
- Team structure, such as grade-level teams, instructional support teams, special education teams, and 504 teams
- Grading
- Discipline referrals and follow up
- Homework policy
- Materials and supplies
- Textbooks
- Faculty meetings
- Teacher evaluation
- School handbook and calendar
- Assembly procedures
- Open house
- Parent conferences

Appendix J: Sample Agenda

RISE Mentor
Agenda
November 9, 2016
4:00 - 6:00 pm

4:00 Sign In
Review Purpose and Goals of CFG
- Create Collaborative Group for Professional Growth
- Create Collaborative Group to Support New Teachers
- Serve as a Model for New Teacher CFG

4:05 Connections
- Review Purpose of
- Engage in protocol

4:08 Review and Recommit to Agreements

4:09 Debrief Highlights of New Teacher Mentor Experience (Triads - 1 minute Whip Around - challenges and 1 minute Whip Around - highlights)

4:15 *Creating Cultures of Thinking*: Language Appreciating Its Subtle Yet Profound Power pp. 63 -86
NNRPDP Modified Text Rendering Experience

5:05 Introduce Speed Consultancy Protocol
Engage in one Speed Consultancy
Discuss adaptations for various group sizes

5:50 Next Steps /Evaluation
- Articles
- Canvas Course

TEACHER INSTRUCTIONAL PRACTICE STANDARDS AND INDICATORS

STANDARD 1 New Learning is Connected to Prior Learning and Experience	STANDARD 2 Learning Tasks have High Cognitive 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
Indicator 1 Teacher activates **all** students' initial understandings of new concepts and skills	**Indicator 1** Tasks purposefully employ **all** students' cognitive abilities and skills	**Indicator 1** Teacher provides opportunities for extended, productive discourse between the teacher and student(s) and among students	**Indicator 1** Teacher and **all** students understand what students are learning, why they are learning it, and how they will know if they have learned it	**Indicator 1** Teacher plans on-going learning opportunities based on evidence of **all** students' current learning status
Indicator 2 Teacher makes connections explicit between previous learning and new concepts and skills for **all** students	**Indicator 2** Tasks place appropriate demands on each student	**Indicator 2** Teacher provides opportunities for **all** students to create and interpret multiple representations	**Indicator 2** Teacher structures opportunities for self-monitored learning for **all** students	**Indicator 2** Teacher aligns assessment opportunities with learning goals and performance criteria
Indicator 3 Teacher makes clear the purpose and relevance of new learning for **all** students	**Indicator 3** Tasks progressively develop **all** students' cognitive abilities and skills	**Indicator 3** Teacher assists **all** students to use existing knowledge and prior experience to make connections and recognize relationships	**Indicator 3** Teacher supports **all** students to take actions based on the students' own self-monitoring processes	**Indicator 3** Teacher structures opportunities to generate evidence of learning during the lesson of **all** students
Indicator 4 Teacher provides **all** students opportunities to build on or challenge initial understandings	**Indicator 4** Teacher operates with a deep belief that all children can achieve regardless of race, perceived ability and socio-economic status	**Indicator 4** Teacher structures the classroom environment to enable collaboration, participation, and a positive affective experience for **all** students		**Indicator 4** Teacher adapts actions based on evidence generated in the lesson for **all** students

Appendix L: Teacher Academy Syllabi
2015-16 Syllabi

August 19, 2014 9:00 a.m. to 3:00 5 hours of contact time excluding lunch hour

- Orientation
- Pre-Assessments
- "Need for Change" presentation by Aaron Hansen
- Critical Friends Group

September 8, 2014, 4:00 to 6:00 pm, 2 hours

- Critical Friends Collaborative Group meeting

September 15, 2014 8:00 a.m. to 4:00 7 hours of contact time

- "Formative Assessment" presentation by Tim Kanold 8:00 – 2:00,
- Critical Friends Group 2:00 to 4:00

October 6, 2014, 4:00 to 6:00 pm, 2 hours

- Critical Friends Collaborative Group meeting

October 20, 2014 8:00 a.m. to 4:00 7 hours of contact time excluding lunch hour

- Formative Assessment –
- Critical Friends Group 1:00 to 4:00

November 3, 2014, 4:00 to 6:00 pm, 2 hours

- Critical Friends Collaborative Group meeting

November 17, 2014, 8:00 a.m. to 4:00 7 hours of contact time excluding lunch hour

- Metacognition
- Critical Friends Group 1:00 to 4:00

December 1, 2014, 4:00 to 6:00 pm, 2 hours

- Critical Friends Collaborative Group meeting

December 15, 2014, 8:00 a.m. to 4:00 7 hours of contact time excluding lunch hour

- Prior Knowledge
- Critical Friends Group 1:00 to 4:00

January 26, 2015, 4:00 to 6:00 pm, 2 hours

- Critical Friends Collaborative Group meeting

February 9, 2015 8:00 a.m. to 4:00 7 hours of contact time excluding lunch hour

- Cognitive Demand
- Critical Friends Group 2:00 to 4:00

March 2, 2015, 4:00 to 6:00 pm, 2 hours

- Critical Friends Collaborative Group meeting

March 16, 2015 8:00 a.m. to 4:00 7 hours of contact time excluding lunch hour

- Cognitive Demand -
- Critical Friends Group 1:00 to 4:00

April 13, 2015, 4:00 to 6:00 pm, 2 hours

April 20, 2015 8:00 a.m. to 4:00 7 hours of contact time excluding lunch hour

- Meaning Making through Discourse
- Critical Friends Group 2:00 to 4:00

May 4, 2015, 4:00 to 6:00 pm, 2 hours

- Critical Friends Collaborative Group meeting

May 18, 2015, 8:00 a.m. to 4:00 7 hours of contact time excluding lunch hour

- Meaning Making through Discourse
- Critical Friends Group 1:00 to 4:00
- Post Assessment
- Final reflection
- 2016-17 Syllabi

August 11, 2016_ 8:00 a.m. to 3:00 6 hours of contact time excluding lunch hour

- Orientation
- Pre-Assessments
- "Need for Change" presentation by Aaron Hansen
- Critical Friends Group

September 20, 2016 8:00 a.m. to 3:00 6 hours of contact time

- NEPF standard 4 "Metacognition" presentation by Holly Marich and Treena Whaley 8:00 – 2:00
- Critical Friends Group 2:00 to 3:00

October 3, 2016_ , 4:00 to 7:00 pm, 3 hours

- Critical Friends Collaborative Group meeting

October 18, 2016 8:00 a.m. to 3:00 6 hours of contact time excluding lunch hour

- NEPF standard 5, Assessment presented by Aaron Hansen 8:00-2:00
- Critical Friends Group 2:00 to 3:00

November 1, 2016_, 4:00 to 7:00 pm, 3 hours

- Critical Friends Collaborative Group meeting

November 15, 2016, 8:00 a.m. to 3:00 6 hours of contact time excluding lunch hour

- NEPF standard 1, Activating Prior Knowledge, presentation by Tina Westwood and Ketra Gardner, 8:00-2:00 p.m.
- Critical Friends Group 2:00 to 3:00

November 29, 2016_, 4:00 to 7:00 pm, 3 hours

- Critical Friends Collaborative Group meeting

December 13, 2016, 8:00 a.m. to 3:00 6 hours of contact time excluding lunch hour

- NEPF standard 3, Meaning Making, presentation by Connie Thomson & Val Byrnes 8:00-2:00 p.m.
- Critical Friends Group 2:00 to 3:00

January 10, 2017, 8:00 a.m. to 3:00 p.m. 6 hours of contact time excluding lunch hour

- Cognitive Demand, presentation by John Almarode, 8:00-2:00 p.m.
- Critical Friends Group 2:00 to 3:00

February 1, 2017 , 4:00 to 7:00 pm, 3 hours

- Critical Friends Collaborative
- Group meeting
- Final reflection

2016-17 Syllabi

August 11, 2016 8:00 a.m. to 3:00 6 hours of contact time excluding lunch hour

- Orientation
- Pre-Assessments
- "Need for Change" presentation by Aaron Hansen
- Critical Friends Group

September 20, 2016 8:00 a.m. to 3:00 6 hours of contact time

- NEPF standard 4 "Metacognition" presentation by Holly Marich and Treena Whaley 8:00 – 2:00 Critical Friends Group 2:00 to 3:00

October 3, 2016 4:00 to 7:00 pm, 3 hours

- Critical Friends Collaborative Group meeting

October 18, 2016 8:00 a.m. to 3:00 6 hours of contact time excluding lunch hour

- NEPF standard 5, Assessment presented by Aaron Hansen 8:00-2:00
- Critical Friends Group 2:00 to 3:00

November 1, 2016, 4:00 to 7:00 pm, 3 hours

- Critical Friends Collaborative Group meeting

November 15, 2016 8:00 a.m. to 3:00 6 hours of contact time excluding lunch hour

- NEPF standard 1, Activating Prior Knowledge, 8:00-2:00 p.m.
- Critical Friends Group 2:00 to 3:00

November 29, 2016, 4:00 to 7:00 pm, 3 hours

- Critical Friends Collaborative Group meeting

December 13, 2016, 8:00 a.m. to 3:00 6 hours of contact time excluding lunch hour

- NEPF standard 3, Meaning Making, presentation by Connie Thomson & Val Byrnes 8:00-2:00 p.m.
- Critical Friends Group 2:00 to 3:00

January 10, 2017, 8:00 a.m. to 3:00 p.m. 6 hours of contact time excluding lunch hour

- Cognitive Demand, presentation by John Almarode, 8:00-2:00 p.m.
- Critical Friends Group 2:00 to 3:00

February 1, 2017, 4:00 to 7:00 pm, 3 hours

- Critical Friends Collaborative Group meeting
- Final reflection

EQuIP Rubric for Lessons & Units: Science

Version 3.0

Introduction:

The Educators Evaluating the Quality of Instructional Products (EQuIP) Rubric for science provides criteria by which to measure the alignment and overall quality of lessons and units with respect to the Next Generation Science Standards (NGSS). The purposes of the rubric and review process are to: (1) review existing lessons and units to determine what revisions are needed; (2) provide constructive criterion-based feedback and suggestions for improvement to developers; (3) identify exemplars/models for teachers' use within and across states; and (4) to inform the development of new lessons and units.

To effectively apply this rubric, an understanding of the National Research Council's *A Framework for K–12 Science Education* and the *Next Generation Science Standards*, including the NGSS shifts (Appendix A of the NGSS), is needed. Unlike in the EQuIP Rubrics for mathematics and ELA, there is not a category in the science rubric for shifts. Over the course of the rubric development, writers and reviewers noted that the shifts fit naturally into the other three categories. For example, the blending of the three-dimensions, or three-dimensional learning, is addressed in each of the three categories; coherence is addressed in the first two categories; connections to the Common Core State Standards is addressed in the first category; etc.. Each category includes criteria by which to evaluate the integration of engineering, when included in a lesson or unit, through practices or disciplinary core ideas. Another difference between the EQuIP Rubrics from mathematics and ELA is in the name of the categories; the rubric for science refers to them simply as *categories*, whereas the math and ELA rubrics refer to the categories as dimensions. This distinction was made because the Next Generation Science Standards already uses the term *dimensions* to refer to practices, disciplinary core ideas, and crosscutting concepts.

The architecture of the NGSS is significantly different from other sets of standards. The three dimensions, crafted into performance expectations, describe what is to be assessed following instruction and therefore are the measure of proficiency. A lesson or unit may provide opportunities for students to demonstrate performance of practices connected with their understanding of core ideas and crosscutting concepts as foundational pieces. This three-dimensional learning leads toward eventual mastery of performance expectations. In this scenario, quality materials should clearly describe or show how the lesson or unit works coherently with previous and following lessons or units to help build toward eventual mastery of performance expectations. The term *element* is used in the rubric to represent the relevant, bulleted practices, disciplinary core ideas, and crosscutting concepts that are articulated in the foundation boxes of the standards and in K–12 grade-banded progressions and the NGSS Appendices. Given the understanding that lessons and units should integrate the practices, disciplinary core ideas, and crosscutting concepts in ways that make sense instructionally and not replicate the exact integration in the performance expectations, the new term *elements* is needed to describe these smaller units of the three dimensions. Although it is unlikely that a single lesson would provide adequate opportunities for a student to demonstrate proficiency on an entire performance expectation, high-quality units are more likely to provide these opportunities to demonstrate proficiency on one or more performances expectations.

There is a recognition among educators that curriculum and instruction will need to shift with the adoption of the NGSS, but it is currently difficult to find instructional materials designed for the NGSS. The power of the rubric is in the feedback and suggestions for improvement it provides curriculum developers and the productive conversations in which educators engage while evaluating materials using the quality review process. For curriculum developers, the rubric and review process provide evidence of the quality and the degree to which the lesson or unit is designed for the NGSS. Additionally, the rubric and review process generate suggestions for improvement on how materials can be further improved and better designed to match up with the vison of the *Framework* and the NGSS.

Version 3.0 — published September 2016

EQuIP Agenda
K – 5 Science Site Facilitators
November, 3 2016

8:00 – 8:15	Introduction, Overview, and Goals
8:15 – 9:15	Model Lesson
9:15 – 9:25	Break
9:25 – 10:25	Define Phenomena in context of the Model Lesson and Analysis of Model Lesson using EQuIP 3.0 rubric
10:25 – 10:30	Break
10:40 – 12:00	EQuIP Analysis of Model Lesson
12:00 – 1:15	Lunch
1:15 – 2:15	EQuIP Analysis of Lessons
2:15 – 2:45	Presentation Planning

EQuIP Agenda
6 – 12
Tuesday, January 24, 2017
8:30 am – 3:00 pm

8:30 – 8:45	Intro, Overview, and Goals
8:45 – 10:15	Model Lesson
10:15 – 10:30	Break
10:30 – 11:45	Model Lesson Analysis: EQuIP 3.0 Rubric
11:45 – 12:00	Lesson Analysis Comparison
12:05 – 1:00	Lunch
1:00 – 2:00	Individual Lesson Analysis
2:00 – 2:30	Debrief – Review NSTA NGSS Lesson Screener – Next Steps
2:30	Evaluations

Exploring NVACSS Module Outline

Module 1

Introduction

- Course Format
- Self-assessment of understanding of NVACSS based on the NGSS
- Establish learning community

A Framework for K – 12 Science Education

- Investigate the relationship between the *A Framework for K – 12 Science Education* and the NGSS
- Post description of the relationship in learning log

NGSS Conceptual Shifts

- Read an overview of the conceptual shifts in the NGSS
- Identify relevance of shifts to instructional practice
- Post response in learning log

Module 2

Structure of the NGSS

- Identify and explore structure of the NGSS
- Explore various format views of NGSS
- Investigate resources related to the structural components of the NGSS
- Post insights of structure of NGSS
- Respond to at least 2 other posts

Module 3

3 Dimensions

Science and Engineering Practices (SEP)

- Investigate the SEP and consider connections to the NEPF
- Select a SEP and describe the goal and progression and their relevance to instructional practice and post in learning log

Cross Cutting Concepts

- Investigate the CCC and consider connections to the NEPF
- Select a CCC and describe the goal and progression and their relevance to instructional practice and post in learning log

Disciplinary Core Idea

- Investigate core ideas and components and consider connections to the NEPF
- Select a DCI and describe the story line and relevance to instructional practice and post in learning log

Module 4

Integrating the 3 Dimensions

- Explore examples of integration of 3 Dimensions
- Conduct a model activity
- Identify disciplinary core ideas, science and engineering practices, and crosscutting concepts evidenced in the model activity
- Revise model activity to focus explicitly on a specific DCI, SEP, and CCC and note connections to the NEPF standards.
- Describe and post model activity revisions and rationale

- Respond to at least 2 posts

Module 5

Supporting Science Learning for All Students

- Explore key features of effective strategies on science learning
- Note integration of 3 Dimensions and evidence of the NEPF standards in vignettes
- Identify examples of effective instructional strategies from vignettes
- Identify and post classroom implementation plan of a strategy in learning log

Learning Synthesis

- Reflect on conceptual shifts, structure, the 3 Dimensions, and supporting science learning for ALL students and their relationship to the Framework and NEPF standards
- Read analogies of 3 dimensions and consider strength and weaknesses of analogies
- Construct an analogy synthesizing understanding of 3 Dimensions
- Post analogy and respond to at least 2 posts
- Self-assessment of understanding of the NVACSS based on the NGSS

SHIFTS IN SCIENCE INSTRUCTION

SCIENCE FOR ALL STUDENTS…ALL STUDENTS DOING SCIENCE

Shifts in Science Instruction

		substantive ways and offer an opportunity to give all students equitable access to learning standards.