



## **Smarter Balanced Assessment**

The mission of the Nevada Department of Education is to improve student achievement and educator effectiveness by ensuring opportunities, facilitating learning, and promoting excellence (Nevada Department of Education, n.d.). Implementing standards, programs, and assessments that prepare all students for college and careers are some of Nevada's strategic priorities. Nevada's affiliation as a member of the Smarter Balanced Assessment Consortium (SBAC) is a key part of measuring student progress in grades 3-8 towards success in college and career readiness. The Smarter Balanced assessment, aligned with the Nevada Academic Content Standards (NVACS) in English Language Arts/Literacy (ELA/Literacy) and mathematics, is a valid, fair, and reliable approach to student assessment designed to support instruction and give teachers valuable information about student progress. Nevada's 2018-19 SBAC results suggest the need for professional learning around teaching and learning. The Northeastern Nevada Regional Professional Development Program (NNRPDP) provided this professional learning opportunity for teachers by offering three consecutive courses during the 2019-20 school year focused on understanding and utilizing SBAC. Three outcomes were identified for this learning opportunity. First, increase participants' knowledge of the ELA/Literacy and mathematical claims and targets as identified by SBAC; second, increase participant's ability to analyze sample items as they relate to the SBAC claims and targets; and, third, increase participant's ability to analyze examples from their own instructional practice with the intention of improving classroom instruction.

### **Initial Data and Planning**

All teachers K-12 must teach the Nevada Academic Content Standards (NVACS) in ELA/Literacy and mathematics. Nevada is one of thirteen states belonging to the SBAC, a high-quality assessment system aligned to the Common Core State Standards. Students in grades 3-8 are assessed at the end of each academic school year using the Smarter Balanced assessment. Three primary actions support teachers to effectively teach the standards and support students to demonstrate proficiency: 1) alignment of classroom instruction with the mathematics and ELA claims and targets of SBAC, 2) alignment of classroom instruction with the rigor level SBAC requires, and 3) understanding assessment specifications and design. These actions provide teachers with new insights for the required expectations of higher-order student thinking to be successful on the SBAC. Even though Nevada began using SBAC in 2015, many teachers still need support to learn about SBAC and effectively use this information in their instruction.

Nevada Report Card reports the percentage of students who passed the 2019 SBAC assessments in both ELA/Literacy and mathematics from the NNRPDP’s region (Elko, Eureka, Humboldt, Lander, Pershing, and White Pine counties) ranges from 16.6% to 81.2%. In fact, in the six districts served, with a total of twenty-four measured sections, only three sections regionwide reported more than a 50% passing score (see Table 28). These data suggest a need for K-8 teachers to gain a deeper understanding of Nevada’s required assessment and to better align instructional practices to the rigor level and expectations of SBAC.

**Table 1** *Percent of students who passed the 2018-19 SBAC*

	ELA Elem	ELA Middle	Math Elem	Math Middle
State of NV	50.3	48.9	43.8	33.2
Elko	46.1	41.2	37.2	29.1
Eureka	47.2	81.2	42.1	53.1
Humboldt	40.2	41.1	37.2	26.3
Lander	50.7	41.5	38.2	34.7
Pershing	46.7	31.3	26.8	16.6
White Pine	35.3	29.6	28.6	19.6

If SBAC items are aligned to the NVACS and teachers use the NVACS to guide instruction, why do the results of SBAC suggest a disconnect?

To address this question and the underlying need, NNRPDP designed and facilitated an SBAC course for teachers. The dissemination of SBAC information and support to all K-8 teachers in the vast northeastern region of Nevada makes face-to-face classes next to impossible. Therefore, the SBAC course content was designed to be easily accessible using Canvas, an online learning management system (LMS). Through this course, teachers explored both ELA/Literacy and mathematics SBAC content, providing a broad perspective of the assessment expectations and components of the assessment system. The course expected outcomes included a deeper understanding of the state assessment to support instruction aligned to the rigorous expectations of the assessment and to provide teachers valuable information about student progress.

NNRPDP’s assessment of teachers who participated in this course confirmed the need for general information regarding the Smarter Balanced assessment. Specifically, a deeper understanding of the SBAC claims and targets, and ways this information can be utilized to guide instruction and analyzed for trends regarding student progress.

## **Planning**

During the 2019-20 school year, three consecutive online SBAC courses were offered to the teachers in the northeastern region. All three SBAC courses were created and facilitated by an NNRPDP coordinator with over twenty years of experience in education, thirteen of which are exclusively in educational professional development. In addition, the NNRPDP coordinator has extensive experience serving on SBAC committees including performance assessment writing committees, achievement level setting committees, and the State Network Educators for the Digital Library.

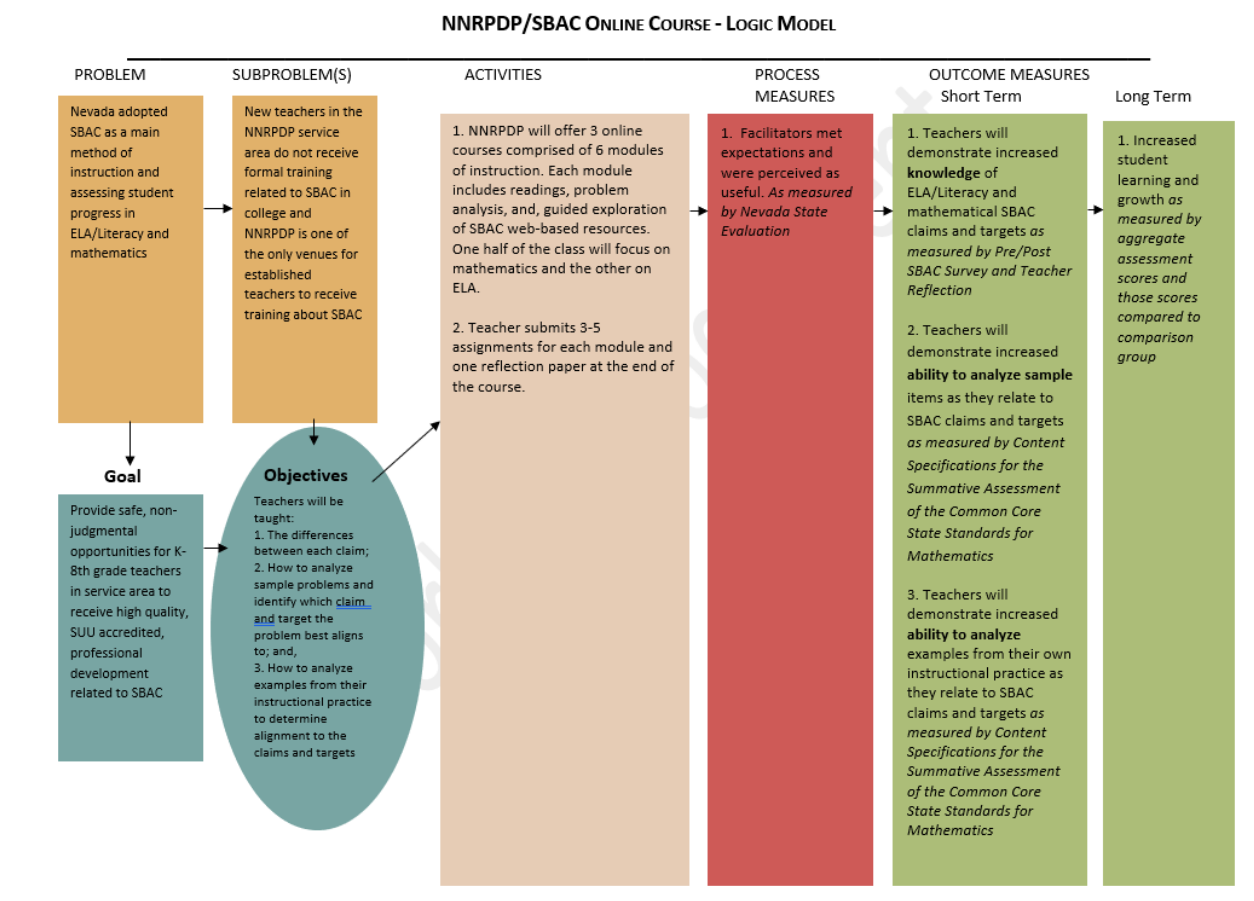
The primary goal of the three SBAC courses was to provide safe, non-judgmental opportunities for K-8 grade teachers in the NNRPDP service area to receive high quality, SUU accredited, professional development related to SBAC. Intended results included teachers gaining better information about student progress, and increased success for student learning measured by the SBAC. The SBAC course facilitator's expertise and experience served to design, plan, create and implement this professional learning opportunity, which included:

- defining measurable goals,
- applying for continuing education credit through Southern Utah University,
- marketing the course in the northeastern region (creating a flyer to send to every school),
- creating the registration form,
- communicating with all interested participants,
- creating the SBAC course modules in Canvas,
- researching content and resources,
- researching designs of online courses,
- examining, reflecting, revising, and adjusting the module content,
- responding to all discussion entries, and
- analyzing course-related data.

There were three outcomes of this learning opportunity. First, increase participants' knowledge of the ELA/Literacy and mathematical claims and targets as identified by SBAC; second, increase participant's ability to analyze sample items as they relate to the SBAC claims and targets; and third, increase participant's ability to analyze examples from their own instructional practice with the intention of improving classroom instruction.

To achieve these outcomes, identify the problem, goals, objectives, activities, and expected impacts of the SBAC course, a Logic Model was used as a guide. See Figure 50.

**Figure 1** NNRPDP/SBAC Online Course Logic Model



## Method

### Learning Design

The SBAC course learning design was informed by Nevada’s Standards for Professional Development (2018) and the Five Levels of Professional Development (Guskey, 2002). The content and foci of the SBAC courses were informed by the Nevada Academic Content Standards for ELA/Literacy and mathematics, the Smarter Balanced Assessment Consortium, and, Achieve the Core, a website that provides free, open-source resources to support Common Core implementation at all levels. Theories of adult learning (Knowles, 1984) informed

the design as did current research focused on effective online learning environments (Briggs, 2015) and tasks.

The six-week, six-module online course was created to accommodate teacher schedules allowing them to complete the course in a relatively short time frame. Participants who completed the course received one Southern Utah University (SUU) continuing education credit associated with the required fifteen hours of coursework.

Module one allowed for community and curiosity building. After completion of the required pre-survey assessing knowledge of SBAC, participants introduced themselves virtually, explored the Smarter Balanced website through a scavenger hunt, and posted questions to an online forum. Modules two and three focused on mathematics. Modules four and five focused on ELA/Literacy. Assignments included analyzing item alignment to the ELA/Literacy and mathematics claims and targets using the content specifications. In addition, participants submitted examples from their own classrooms that aligned to the claims and targets and were able to self-assess their examples as they learned more about the content specifications. Module six gave participants the opportunity to analyze an authentic student SBAC report, provided them with additional resources, and required them to complete a post survey identical to the pre-survey as a way to measure increased knowledge of SBAC. See Figure 51.

**Figure 2** *Course Outline - SBAC*

Module	Objectives
Module One Introduction	Build community Pre-assess learner’s knowledge of SBAC
Module Two Mathematics	Understand the differences between the four mathematical claims Analyze the practice test items, identifying the claim and target Provide classroom examples of each of the four mathematical claims
Module Three Mathematics	Self-assess the practice test claim and target analysis Develop an understanding of modeling mathematics Complete the performance task
Module Four ELA/Literacy	Understand the differences between the four ELA/Literacy claims Analyze the practice test items, identifying the claim and target Complete the performance tasks
Module Five ELA/Literacy	Self-assess the practice test claim and target analysis Explore ELA/Literacy resources Provide classroom examples of each of the four ELA/Literacy claims
Module Six	Explore SBAC resources Analyze a sample student SBAC report Post Survey

Throughout the online modules, discussion boards asked learners to reflect on new knowledge and to compare new knowledge to previous thinking. The analysis of claims and targets, as well as a self-assessment of the analysis, increased understanding of types of items, as well as the expected rigor level. To add variety, learners were exposed to different online tools such as Padlet, Google forms, and Google docs. Participants were also provided with online resources, websites, videos, blogs, and research articles.

Communication between course facilitator and learners was frequent. Topics discussed included feedback on item analysis and classroom examples. The facilitator also provided affirmation of reflections, answers to specific questions, and posing questions for further consideration related to implementation and next steps.

The *SBAC Course Professional Learning Plan 2020* (Appendix P) describes the course learning outcomes and evidence of participant learning. This plan also includes the strategic design and structure of the learning opportunities. The roles and responsibilities of stakeholders in the learning in alignment with Standards for Professional Development is also addressed (Learning Forward, 2011; NDE, 2017). Table 29 describes both the roles and responsibilities related to the learning, including the strategic design and structure of the course learning opportunities in order to align the professional learning with Standards for Professional Learning (NDE, 2017).

**Table 2** *NNRPDP SBAC Courses Aligned with Nevada’s Standards for Professional Learning*

Standard	Alignment
<p><b>LEARNING COMMUNITIES:</b> Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment</p>	<ul style="list-style-type: none"> <li>Course participants participated in a collaborative learning community throughout the course by engaging in group discussion prompts during weekly assignments. Participants reflected on their learning and were transparent as they revealed their own misconceptions and shared future plans to change instructional practice to better align with the claims, targets and rigor level of SBAC.</li> </ul>
<p><b>LEADERSHIP:</b> Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning</p>	<ul style="list-style-type: none"> <li>Course participants developed their knowledge of SBAC through the module assignments, discussions, readings, and videos. This knowledge empowered them to share with other teachers at their school sites, whether that be in a grade level meeting or in a more formal capacity during school-wide professional development.</li> </ul>
<p><b>RESOURCES:</b> Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning</p>	<ul style="list-style-type: none"> <li>Course facilitator curated additional research, resources, and course materials in response to course participants' progress as well as participant requests.</li> <li>Course participants shared feedback about which resources were most beneficial to their unique educational context, how they planned to use the resources, and what questions or concerns remained.</li> </ul>

Standard	Alignment
<p><b>DATA:</b> Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.</p>	<ul style="list-style-type: none"> <li>• Course facilitator integrated opportunities in both ELA/Literacy and mathematics for self- assessment using SBAC Scoring Guides.</li> <li>• Course participants reflected on their own learning, including misconceptions, after self-assessing. They also compared their own instructional classroom examples to the Scoring Guides.</li> </ul>
<p><b>LEARNING DESIGN:</b> Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes</p>	<ul style="list-style-type: none"> <li>• Course facilitator integrated participants’ current educational contexts with ELA/Literacy and mathematics learning tasks in order to make the learning relevant and action-oriented.</li> </ul>
<p><b>IMPLEMENTATION:</b> Professional learning that increases educator effectiveness and results for all students; applies research on change and sustains support for implementation of professional learning for long-term change</p>	<ul style="list-style-type: none"> <li>• Course facilitator provided strategic, and ongoing, opportunities for participants to critically reflect on their new knowledge of ELA/Literacy and mathematics claims, targets, rigor level, assessment types, and available resources for planning and implementation.</li> </ul>
<p><b>OUTCOMES:</b> Professional learning that increases educator effectiveness and results for all students focuses on equitable access, opportunities and outcomes with an emphasis on achievement and opportunity disparities between student groups.</p>	<ul style="list-style-type: none"> <li>• Course facilitator empowered all participants with learning opportunities and resources that enabled them to plan and implement equitable instruction for all students. Knowledge of the math and ELA/Literacy blueprints, as well as application of the claims and targets, can have a positive impact on all students</li> </ul>
<p><b>EQUITY:</b> Professional learning that increases educator effectiveness and results for all students focuses on equitable access, opportunities and outcomes with an emphasis on achievement and opportunity disparities between student groups.</p>	<ul style="list-style-type: none"> <li>• Course facilitator posed critical reflective questions designed to support participants’ effectiveness in planning and delivering high-quality lessons for all students, regardless of any disparities between student groups.</li> <li>• Emphasis was placed on how each and every participant could support other teachers’ instruction in ELA/Literacy and mathematics which are the two discipline areas assessed by SBAC.</li> <li>• Course facilitator shared the bias attributes that guide the SBAC item writing.</li> </ul>
<p><b>CULTURAL COMPETENCY:</b> Professional learning that increases educator effectiveness and results for all students facilitates educator’s self-examination of their awareness, knowledge, skills, and actions that pertain to culture and how they can develop culturally-responsive strategies to enrich educational experiences for all students.</p>	<ul style="list-style-type: none"> <li>• Course facilitator implemented and facilitated course learning tasks that allowed participants to name and notice explicit and implicit bias of students in the SBAC assessment.</li> <li>• Course participants’ task of self-assessing their own classroom examples of each claim supports participants’ awareness of cultural competency.</li> </ul>

## Participants and Procedure

The NNRPDP offered three consecutive SBAC courses to the region’s educators in the 2019-20 school year. Forty-nine educators participated: 34 elementary teachers, seven middle school teachers, one adult education teacher, and seven administrators. The thirty-four

elementary teachers consisted of twenty-eight K-5 classroom teachers, three Special Education teachers, one Physical Education teacher, and two Literacy Specialists. Administrators represented K-5 elementary schools, a 7-8 Middle School, K-12 Combined schools, as well as a charter school. Participants’ contexts included a variety of unique campuses, from a rural one-room schoolhouse, to rural K-12 schools, to more traditional K-5 schools in small Nevada towns. See Table 30.

**Table 3 SBAC Course Participants**

Course 1 October 7, 2019- November 22, 2019	14 registered 13 graded = avg. 96.35% 1 audit	Admin = 3 K-5 = 8 Middle = 2 Adult Ed = 1
Course 2 January 8, 2020 - February 21, 2020	20 registered 2 dropped – family emergencies 16 graded = avg 97.19% 2 audits	Admin = 1 K-5 = 13 Middle = 2 SPED = 1 Literacy Specialist = 1
Course 3 February 26, 2020 - April 10, 2020	19 registered 2 didn’t finish - COVID 15 graded = avg 98.77% 2 audits	Admin = 3 K-5 = 7 Middle = 3 SPED = 2 PE = 1 Literacy Specialist = 1

The six-week long SBAC courses consisted of six modules, one per week. Each module opened on a Wednesday and closed on the following Tuesday at midnight. This timeline gave participants time both during school hours and on the weekends to complete the 2-3 hours of expected course work. Assignments were graded by the facilitator daily, and written feedback was provided on participant’s reflections. Email communication was encouraged for participants who encountered challenges that prevented them from completing the assignments in a timely fashion. Assignment deadlines were extended to participants facing challenges; no penalty for late assignments was applied. Instead, the primary focus of the course was learning more about the SBAC assessment rather than grades.

**Measurement**

There were three outcomes of this learning opportunity. First, increase participants’ knowledge of the ELA/Literacy and mathematical claims and targets as identified by SBAC. Second, increase participant's ability to analyze sample items as they relate to the SBAC claims



and targets. Third, increase participants' ability to analyze examples from their own instructional practice with the intention of improving classroom instruction. The long-term outcome measures of the SBAC courses were to increase student learning and growth as measured by aggregate assessment scores compared to a comparison group. The short-term outcome measures of the SBAC courses were:

1. Teachers will demonstrate increased knowledge of SBAC claims as measured by pre/post SBAC assessment and teacher reflection.
2. Teachers will demonstrate increased ability to analyze ELA/Literacy and mathematics items as they relate to SBAC claims as measured by SBAC scoring guides.
3. Teachers will demonstrate increased ability to analyze examples from their own classrooms as they relate to SBAC claims and targets as measured by SBAC scoring guides.

Data measures included a participant pre/post survey, participant grades, the NNRDPDP Evaluation, and participant reflections. These data were collected electronically during the course as tasks inside the modules. It was the intent to collect data from student SBAC scores from the 2019-20 school year. These data would help determine how effectively the teachers in the course implemented what they learned; however, due to the global COVID pandemic, SBAC assessments were not administered in the spring of 2020. Thus, those data were unavailable.

Qualitative and quantitative measurements were used to assess the following variables:

- Increased Knowledge of SBAC Claims: Teachers who have completed the SBAC course will demonstrate an increased level of knowledge of differences between SBAC Claims.
- Increased Ability to Analyze Sample Problems as they relate to SBAC: Teachers who have completed the SBAC course will demonstrate an increased ability to analyze assessment items.
- Increased Ability to Analyze Examples from Classroom as they relate to SBAC: Teachers who have completed the SBAC course will demonstrate an increased ability to analyze examples from their own classrooms.

The above variables informed the evaluation plan based on the Five Levels of Professional Development (Guskey, 2002). See Table 31.

**Table 4** *Evaluation Plan Based on the Five Levels of Professional Development (Guskey, 2002)*

<b>Evaluation Level</b>	<b>What Questions Are Addressed?</b>	<b>How Will Information Be Gathered?</b>	<b>What Is Measured or Assessed?</b>	<b>How Will Information Be Used?</b>
<b>1. Participants' Reactions</b>	Training expectations, presenter skills, increased knowledge, motivation to improve	<i>State evaluation form</i>  <i>Course surveys</i>	Initial satisfaction with the experience	To improve program design and delivery
<b>2. Participants' Learning</b>	Did participants acquire the intended knowledge and skills?	<i>Pre/Post survey</i>  <i>Teacher response to discussions</i>  <i>Claim and target analysis</i>  <i>Teacher self-assessment reflection</i>	<i>Participants' increased understanding of SBAC claims and targets</i>	To improve program content, format, and organization

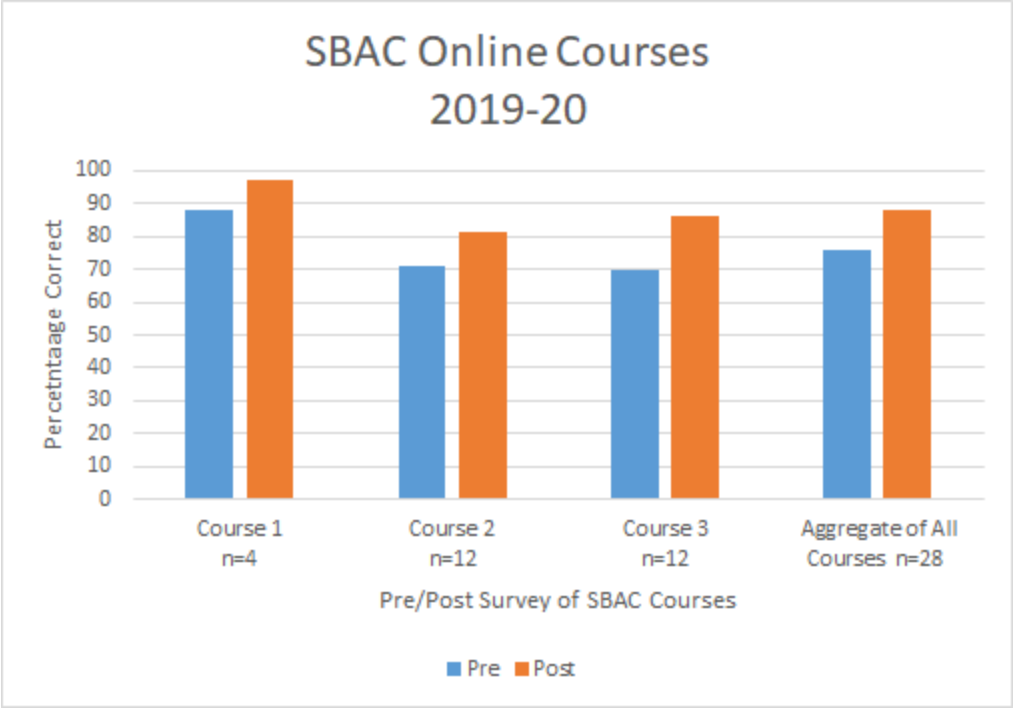
<b>Evaluation Level</b>	<b>What Questions Are Addressed?</b>	<b>How Will Information Be Gathered?</b>	<b>What Is Measured or Assessed?</b>	<b>How Will Information Be Used?</b>
<b>3. Organization Support &amp; Change</b>	<p>Was implementation advocated, facilitated, and supported?</p> <p>Was the support public and overt?</p> <p>Were problems addressed quickly and efficiently?</p> <p>Were sufficient resources made available?</p> <p>Were successes recognized and shared?</p> <p>What was the impact on the organization?</p> <p>Did it affect the organization's climate and procedures?</p>	<p><i>Teacher reflection</i></p> <p><i>Post survey</i></p> <p><i>State evaluation</i></p>	<p>The organization's advocacy, support, accommodation, facilitation, and recognition</p>	<p>To document and improve organization support</p> <p>To inform future change efforts</p>
<b>4. Participants' Use of New Knowledge and Skills</b>	<p>Did participants effectively apply the new knowledge and skills?</p>	<p><i>Teacher reflections</i></p> <p><i>Teacher analysis of classroom instruction aligned to the SBAC claims</i></p>	<p><i>Teacher's increased awareness of claims and targets in the SBAC assessment</i></p> <p><i>Teacher analysis of examples from their own classroom instruction</i></p>	<p>To document and improve the implementation of program content</p>

<b>Evaluation Level</b>	<b>What Questions Are Addressed?</b>	<b>How Will Information Be Gathered?</b>	<b>What Is Measured or Assessed?</b>	<b>How Will Information Be Used?</b>
<b>5. Student Learning Outcomes</b>	<p>What was the impact on students?</p> <p>Did it affect student performance or achievement?</p>	<p><i>SBAC (mathematics and ELA/Literacy) aggregated by teachers who take part in the online course, measured against service area totals and/or comparison group annually, per grade</i></p>	<p><i>Student mathematics and ELA/Literacy growth and achievement</i></p>	<p>To document improvements in mathematics and ELA/Literacy instruction and subsequent student growth and achievement</p>

**Results**

To assess the increase in participants’ knowledge of claims for the ELA/Literacy and mathematics Smarter Balanced summative assessment, a comparison of the percentage of the participants' accurate responses to the SBAC course Pre/Post survey were evaluated. See Figure 52.

**Figure 3** *SBAC Course Pre/Post Survey*



Questions one through eight (see Appendix K) were evaluated. The results were derived from a multiple choice quiz given as a pre-survey in Module One and as a post-survey in Module Six. All questions assessed basic knowledge regarding SBAC, such as how the scores are reported, what the claims are, and whether the assessments are timed or not. Table 32 provides the eight survey questions with pre/post percentage correct.

**Table 5** *Pre/Post Survey Percentage Correct*

			Course 1	Course 2	Course 3
Q1	How is mathematical modeling defined by the Smarter Balanced Assessment Consortium?	Pre	38	33	53
		Post	80	92	75
Q2	Which is true of Smarter Balanced assessments?	Pre	88	61	88
		Post	80	83	92
Q3	Are each of the four ELA/Literacy claims (Reading, Writing, Speaking/Listening, Research) assessed with an equal number of test items?	Pre	88	94	88
		Post	70	92	92
Q4	Identify the four mathematical claims that are assessed with the Smarter Balanced assessments.	Pre	75	67	71
		Post	90	100	92
Q5	All four Depth of Knowledge (DOK) levels are assessed on the ELA/Literacy and mathematics Smarter Balanced assessments.	Pre	75	83	82
		Post	90	92	83
Q6	Smarter Balanced Performance Tasks (PT) focus on one important content standard of the specific grade level.	Pre	63	44	47
		Post	70	17	50
Q7	Some colleges accept Smarter Balanced scores to determine if students are "college-ready".	Pre	50	44	47
		Post	80	75	100
Q8	The Smarter Balanced assessments are reported in two ways: Scaled Scores and Achievement Levels. How many achievement levels are there?	Pre	88	67	53
		Post	80	92	100

## **NNRPDP Evaluation**

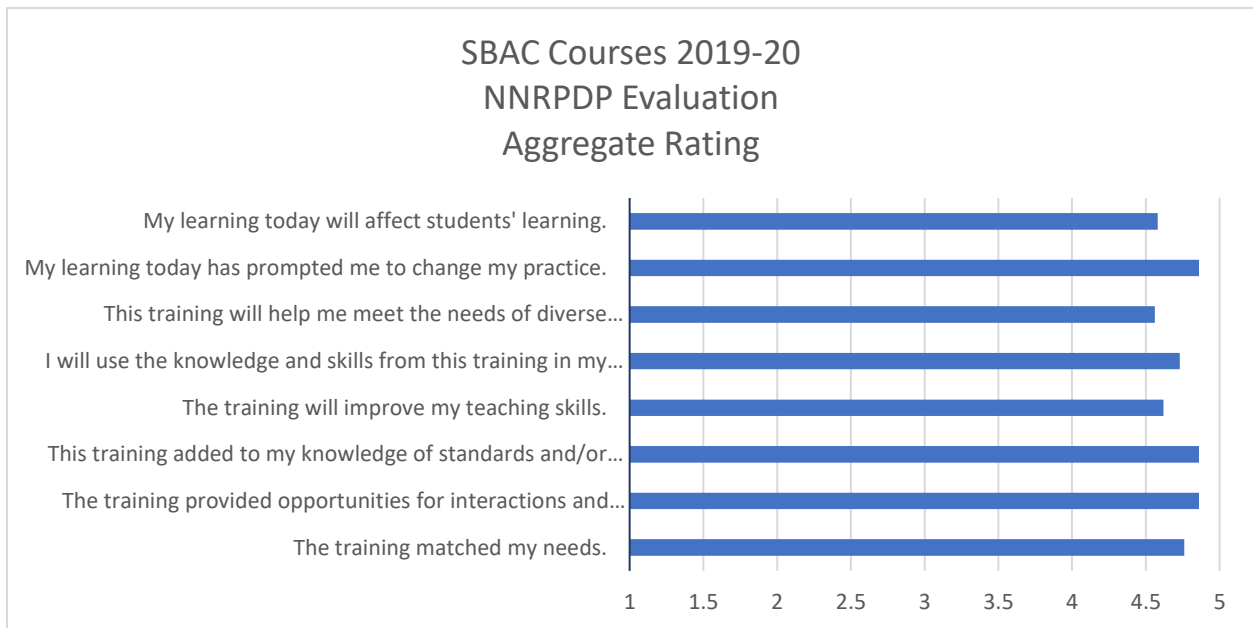
Methods to assess participants' reactions included data from NNRPDP Evaluation (see Appendix B). At the conclusion of each course, participants completed the NNRPDP Evaluation. The NNRPDP used information from the NNRPDP Evaluation surveys to monitor participants' reactions and make necessary adjustments to future courses. Evidence of impact on student learning and the incorporation of SBAC awareness, understanding, and implementation into instructional practice were documented using the participants' mean Likert scale ratings, ranging from not at all (one) to a great extent (five). The following statements were used:

- My learning today will affect students' learning.
- My learning today has prompted me to change my practice.
- The SBAC course will help me meet the needs of diverse student populations (e.g., gifted and talented, ELL, special ed., at-risk students).

- I will use the knowledge and skills from this training in my classroom or professional duties.
- The training will improve my teaching skills.
- The training added to my knowledge of standards and/or skills in teaching subject matter and content.
- The training provided opportunities for interactions and reflections.
- The training matched my needs.

Results from the NNRPDP Evaluation, Figure 53, indicate overall positive responses ranging from 4.6 to 4.9.

**Figure 4** *NNRPDP Evaluation Results*



### Course Grades

Every module in the SBAC courses included graded learning tasks. These tasks included discussions, reflections, claim analysis, claim examples from participant’s instructional resources, practice assessment, and performance assessments. There were three to five graded learning tasks in each module with varying assigned points. Course one, two, and three averaged a composite grade of 96%, 97%, and 99% respectively. The composite average for all three courses was 97%. Further, teacher reflections, (See Table 33) as response to critical questions posed in each module, included evidence of learning and use of new knowledge and skills regarding SBAC.

**Table 6** *Teacher Reflections*

Variables	Increased Knowledge of SBAC Claims
Reflection Prompt	Regarding the claims for the Mathematics Summative Assessment, respond to the prompt “I used to think . . .But now I think . . .”
Response	<p><i>I used to think, or rather I knew what the four claims were, and I knew that SBAC used these claims as a foundation for the questions that made up the assessment.</i></p> <p><i>But now I think I know more about why and exactly how they are used.</i></p> <p><i>I used to think that SBAC would break down the types of questions based on a particular unit of study such as the 4 basic operations, fractions, geometry, etc. I also used to think that these units of study each carried the same importance and if we didn't equal time on them, students wouldn't do well.</i></p> <p><i>Now I think I have a better understanding of how the test is broken up percentage wise in each claim: Claim 1 is 50%, Claim 2 and 4 is 25% and Claim 3 is 25%.</i></p> <p><i>I used to think ... that the test was evenly distributed across the curriculum in a particular grade band with an emphasis on essential concepts.</i></p> <p><i>But now I think...</i></p> <p><i>SBAC wants to make sure students are college and career ready. It breaks apart the questions into different claims. The claims are Concepts and procedures, problem solving, communicating reason, and modeling and data analysis.</i></p> <p><i>I used to think the Math portion of the SBAC was simply a pool of math questions separated by theme or unit.</i></p> <p><i>But now I know the questions come from years of data and research, split up by 4 mathematical claims (summary / student) that each provide assessment targets all to ensure our students are career and college ready.</i></p>
Reflection Prompt	Regarding the claims for the ELA/Literacy Summative Assessment, respond to the prompt “What surprised you regarding the ELA claims?”
Response	<p><i>I did not realize that it had a listening part to the test.</i></p> <p><i>I was surprised that there are questions about grammar and conventions. It makes absolute sense since they are ELA standards; I guess I figured it was a straight reading response. I was also surprised that the course facilitator suggested having the students do the practices on paper first, then put them into the computer to learn how to use the tools.</i></p> <p><i>I found claim 3 to be surprising in that it only has one target that is tested.</i></p>



Variables	Increased Knowledge of SBAC Claims
	<i>I have never seen this test before this class. It surprised me the different tools the students had access to help them throughout the test.</i>
Variables	Increased Ability to Analyze Sample Problems as they relate to SBAC
Reflection Prompt	How does/could the learning you experienced by analyzing the ELA/math SBAC items and self-assessing, impact instructional practice and student learning?
Responses	<p><i>I can see that self-assessing does make the learner see right away their errors and how to correct them. They may even straighten out their thinking before it gets stuck in their mind the wrong way.</i></p> <p><i>As a teacher, this level of understanding helps to see to what depth the math instruction must go in order to ensure our students are prepared and ready. Having this very important information allows a teacher to go deeper beyond the simple one-step problems to higher DOK levels.</i></p> <p><i>By analyzing the math SBAC items, and self-assessing, my instructional practice and my students' learning is impacted by how I will teach each lesson. I should take notice of the weight of different tasks presented to students which will help determine how I plan and how I teach the lesson.</i></p> <p><i>I think being aware will make me look at what I'm teaching with a more mindful perspective. I think that I will have to do some self-training and have some discipline to really make note of what I'm teaching and why.</i></p>
Variable	Increased Ability to Analyze Examples from Classroom as they relate to SBAC
Reflection Prompt	Take a second look at the example lessons you submitted that aligns to each claim. Now that you have studied the claims more in-depth, discuss how you feel your examples align to the claims.
Responses	<p><i>I went back to look at my classroom example and I still think it is a pretty good model for claim 4. I do think that I could change it a bit to maybe ask if they can explain how their answer is reasonable or not.</i></p> <p><i>My claim 4 was not a 4 at all, it was a group of questions that lead students down a direct path to correct answers.</i></p>

Variables	Increased Knowledge of SBAC Claims
	<p><i>The example I gave for Claim #4 is not as great as it could be. I honestly think that these questions can be posed to have them think more critically.</i></p> <p><i>In looking back at my claim for modeling, I feel that I could possibly amp it up a little. I did give them a real life problem and told them to solve it and did not say how, but I feel it was pretty basic.</i></p>

**Discussion**

The NNRPDP’s overarching goal to provide opportunities for K-8 teachers to receive high quality professional development through participation in a SBAC course was achieved. Participants 4.7 mean rating from the NNRPDP State Evaluation data indicates the SBAC course added to the participants’ knowledge of SBAC to a great extent. The mean increase from a 76% to 88% on the Pre/Post Survey indicates a substantial increase in participants’ knowledge of the ELA/Literacy and mathematical claims and targets as identified by SBAC. Furthermore, the composite average grade of all course assignments was 97%, evidence that participants were 1) able to analyze sample items as they relate to SBAC claims and targets and 2) able to analyze examples from their own instructional practice for alignment to SBAC expectations. Teacher reflections, as response to critical questions posed in each module, included evidence of learning and use of new knowledge and skills regarding SBAC.

The long term measures of the NNRPDP to increase student learning and growth as measured by aggregate assessment scores and those scores contrasted with a comparison group was not accessible for the 2019-2020 academic year due to the Covid-19 pandemic resulting in the suspension of SBAC assessments.

The mean Likert scale ratings from the NNRPDP State Evaluation ranged from 4.6 to 4.9 indicating the SBAC course met participants’ expectations and were perceived as useful. The feedback and comments on the evaluations, survey data, and discussion prompts provide further validation that the process measures were achieved and participants’ were satisfied with the courses.

**Conclusion**

Data evidence suggests participants met all three course outcomes: 1) increasing their knowledge of the SBAC ELA/Literacy and mathematical claims and targets, 2) analyzing assessment items for the SBAC claims and targets, and 3) gaining an understanding of the design of the test with the intention of improving classroom instruction. Although paired sample t-tests

did not reveal statistically significant changes in the pre/post survey other evidence suggests that the professional development opportunity facilitated by NNRPDP was both effective and beneficial to teaching and learning.

Based on teacher final reflections, a future goal is to support teachers in applying the knowledge they learned from the SBAC course. A deeper understanding of the SBAC claims and targets, as well as a deeper understanding of the content specifications of both ELA/Literacy and mathematics would empower teachers to improve instructional practices leading to increased student learning. This alignment of instructional practices to SBAC would likely provide students an equitable opportunity to demonstrate high levels of achievement.

### References

Achieve the Core. (n.d.). Retrieved from  
<https://achievethecore.org/>

Briggs, A. "Ten Ways to Overcome Barriers to Student Engagement Online." "Academic Technology. February 11, 2015. [https://onlinelearningconsortium.org/news\\_item/ten-ways-overcome-barriers-student-engagement-online/](https://onlinelearningconsortium.org/news_item/ten-ways-overcome-barriers-student-engagement-online/)

Content Specification for the Summative Assessment of the Common Core State Standards for Mathematics (July 2015). Retrieved October 20, 2019, from  
<https://www.smarterbalanced.org/wp-content/uploads/2015/08/Mathematics-Content-Specifications.pdf>

Content Specifications for the Summative Assessment of the Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects (July, 2015). Retrieved October 25, 2019, from  
[https://www.smarterbalanced.org/wp-content/uploads/2015/08/ELA\\_Content\\_Specs.pdf](https://www.smarterbalanced.org/wp-content/uploads/2015/08/ELA_Content_Specs.pdf)

Guskey, T. R. (2002). Does it make a difference? Evaluating professional development. *Educational Leadership*, 89, 45-51.

Knowles, M. S. (1984). *The modern practice of adult education: From pedagogy to andragogy*. Wilton, CT: Association Press.

Nevada Department of Education. (n.d.) Retrieved from  
[http://www.doe.nv.gov/About/Inside\\_NDE/](http://www.doe.nv.gov/About/Inside_NDE/)

Nevada's Standards for Professional Development (February 1, 2018). Retrieved March 20, 2018, from

[http://www.doe.nv.gov/uploadedFiles/ndedoenvgov/content/Educator\\_Licensure/NVStandardsforPD.pdf](http://www.doe.nv.gov/uploadedFiles/ndedoenvgov/content/Educator_Licensure/NVStandardsforPD.pdf)

Smarter Balanced: More than Just a Test. (n.d.). Retrieved from  
<http://www.smarterbalanced.org/assessments/development/>