

Residency

Introduction

Nevada strives to be the fastest growing state in the nation where ALL students are served by effective educators, and it is the mission to increase student achievement by expanding access to excellent teaching and leading (*The New Nevada Plan*, 2017, p.36). Nevada's aggressive goal coupled with the highly effective research-based practices of sustained, job-embedded, personalized professional development informed the design of the innovative educator support and development program, the Residency. The implementation of the Residency in the 2017 – 2018 school year came to fruition as a result of a grant award from the Great Teaching and Leading Fund (GTLF) with the aim of impacting student achievement, assisting teachers, and impacting instructional practice.

Instructional Context

In the fall of 2017, K-12 educators from White Pine, Eureka, Humboldt, Elko, Lander, and Pershing school districts were invited to register for limited spaces in the Residency. Led by six NVACS/NEPF experts from the NNRPDP, 37 educators from the northeast region completed the Residency in an effort to expand contextual knowledge of the NVAC and NEPF standards and implement highly effective instructional practices. Thirty-one percent of participants were grades K-2 educators, 43% were grades 3-5 educators, and 26% were grades 6-12 educators. The Residency involved 1,450 students in the northeast region during the 2017-2018 school year.

Initial Data and Planning

The concept of the Residency evolved as a means to support the mission, vision, and goals of Nevada's State Education Plan. Nevada's State Education Plan acknowledges the need to modernize education in the state through a vision and mission that highlights the importance of improving educator effectiveness. One significant goal of *The New Nevada Plan* aims to improve student achievement by expanding access to excellent teaching and leading through preparing, recruiting, developing, supporting, and retaining effective teachers and leaders (2017, p.37). The Regional Professional Development Programs (RPDPs) are identified in *The New Nevada Plan* as an instrumental component in leading the charge for Nevada's goals for Educator Development and Support. In an effort to continue expanding efforts to meet the charge to address the need for educator development and support in northeastern Nevada, the NNRPDP designed and implemented the innovative educator support and development program, the Residency.

Learning Design

The learning design of the Residency was informed by *The New Nevada Plan*, Learning Forward's Standards for Professional Learning (2011), Guskey's Five Levels of Professional Development (2002), the US Department of Education's guidance document, *Non-Regulatory*

Guidance: Using Evidence to Strengthen Education Investments (2016), as well as research findings from a vast base of research on effective professional development, coaching, and andragogy. Indeed, as noted by Kraft, Blazer and Hogan, “there is a growing consensus that effective PD programs share several ‘critical features’ including job-embedded practice, intense and sustained durations, a focus on discrete skill sets, and active learning” (2016, p.3). The design of the Residency encompasses each of these critical features incorporating coaching, which is one of the most effective forms of professional development in terms of the high yield impacts on student achievement and instruction.

Residency Structure

The Residency involved an intense 5-weeks of job-embedded professional development encompassing the goals of increasing understandings and contextual knowledge of NEPF and NVAC standards and implementation of highly effective instructional practices. The 5-week Residency was comprised of three phases requiring a significant commitment of contract time as well as an expectation of a minimum of 30 hours of non-contract time. The dynamic phases of the Residency involved a cyclical process of research, co-planning, observing model lessons, co-teaching, observations of instructional practice, analyses of student thinking, instructional feedback, debriefing, reflecting, and refining practice. The phases and the cycles of the Residency structure were customized to meet the unique needs and contexts for each one of the 37 participants. Participants’ foci ranged from creating a conducive classroom culture (NEPF Standard 3, Indicator 4) to teaching elementary students coding (NVACS-CS). To maintain the intensity and to accommodate participants in the expansive northeast region, the structure was also comprised of a mixture of live and virtual formats. Virtual formats included Google Hangouts, Google Docs, and the coaching platform, Edthena. The structure also included implementation of learnings from attendance at the Association of Supervisors of Curriculum Development (ASCD) Empower 18 Education Conference.

Residency Phases

In Phase 1 of the Residency, participants collaborated with the NNRPDP specialist they were assigned to identify instructional and student learning goals and develop an individualized plan to meet the identified goals. In Phase 2, participants implemented the customized plan. In Phase 3, participants extended and applied new understandings and practices. Although the phases are delineated in a linear fashion, the execution of the phases was a dynamic process customized to fit the individual needs and goals of the participants.

Residency Cycles

The cycles of the Residency included research, co-planning, observing model lessons, co-teaching, observations of instructional practice, analyses of student thinking, instructional feedback, debriefing, reflecting, and refining practice. Discussions of resources, best practices, and a wide range of current research from educational neuroscience to pedagogy were based on

the needs of the individual participant. These research-based discussions informed and enhanced understandings and the implementation of highly effective instructional practices. Co-planning provided the context in which to embed the new learnings gained from discussions of the research. Implementation of the learnings were achieved through a combination of model lessons, co-teaching, and observations of instructional practice. Impacts on student learning and instructional practice were assessed through lesson debriefings, student thinking analyses, instructional feedback, reflection, and refinement of practice. As with the Residency phases, the cycles of the Residency were dynamic and responsive to the individual needs of the participants.

ASCD Empower 18 Education Conference

The structure of the Residency also included optional attendance at the ACSD Empower 18 Education Conference. Attending the conference served to further develop participants' pedagogical and contextual understandings. Participants debriefed learnings, potential impacts of new learnings on practice and student achievement, and reflections daily during the education conference with a debriefing partner. Participants also developed and submitted an instructional action plan for incorporating new understandings (acquired during the conference) into their practice.

Measurement

Several qualitative and quantitative measurements were used to assess how participation in the Residency impacted the achievement of participants' students, understanding of NEPF and NVAC standards, and instructional practice.

Impacts on Student Achievement

Methods used to measure impacts on student achievement include analyses of pre- and post-assessment data, student focus group reflections, educator evaluations, reflections, and ratings of questionnaire statements. Each participant individually identified and assessed student achievement using pre- and post-assessments. Disaggregation of pre- and post-assessment data for each standard targeted by individual participants is therefore cumbersome for the purpose of denoting global trends of the Residency. For this reason, pre- and post-assessment data were all translated into percentage formats. Student focus group reflections were analyzed and coded on a 5-point scale ranging from *minimal* (one) to *significant* (five) in relation to the evidence of growth toward the learning goals of the Residency identified by each focus group's teacher. Educators' reports of class *Growth toward Goals* based on a 5-point scale ranging from *minimal* (one) to *significant* (five) were assessed. Educator reflections were analyzed for trends and coded for indicators of how new learnings and understandings acquired during the Residency would impact student learning using a 5-point scale ranging from *minimal* (one) to *significant* (five). Likert scale ratings, ranging from *not at all* (one) to *a great extent* (five), of the following two questionnaire statements were also reported:

- In comparison to before participating in the Residency, I am confident in my ability to enhance student learning related to NEPF/NVAC standards.
- My learning from the Residency will affect students' learning.

Impacts on Assisting Teachers

Methods to assess impacts on assisting teachers include analyses of Residency and ASCD Conference reflections. These reflections were coded in relation to the degree of impact on assisting teachers via the expansion of understandings, strategies/skills, and dispositions using a 5-point scale ranging from *minimal* (one) to *significant* (five). Likert scale ratings, ranging from *not at all* (one) to *a great extent* (five), of the following statements were also reported:

- The Residency met my needs.
- The Residency added to my knowledge of standards and/or skills in teaching subject matter and content.
- I will use the knowledge and skills from the Residency in my classroom or professional duties.
- In comparison to before participating in the Residency, I am likely to look for opportunities to support teachers in the profession.
- In comparison to before participating in the Residency, I am likely to view my instructional mistakes as opportunities to learn.
- In comparison to before participating in the Residency, I am likely to be open-minded and flexible and able to embrace changes that I believe are positive.
- In comparison to before participating in the Residency, I am likely to seek out opportunities to collaborate with colleagues about ways to improve student learning and instructional practice.
- In comparison to before participating in the Residency, I am likely to be perceived by teachers as a change agent.
- In comparison to before participating in the Residency, I am likely to take on leadership roles.

Impacts on Instructional Practice

Participant reflections, conference action plans, and instructional practices were analyzed and coded in terms of evidence of impact using a 5-point scale ranging from *minimal* (one) to *significant* (five). Likert scale ratings, ranging from *not at all* (one) to *a great extent* (five), of the following questionnaire statements were also reported:

- The Residency will improve my teaching skills.
- I am likely to seek out opportunities to advance my knowledge base in the discipline(s) that I teach.
- I am likely to be open-minded and flexible and able to embrace change that I believe is positive.
- I am likely to seek out opportunities to collaborate with colleagues about ways to improve student learning and instructional practice.
- I am likely to view my instructional mistakes as opportunities to learn.
- I am confident in my ability to enhance student learning related to the targeted NEPF/NVAC standards.

Results and Discussion: Impacts on Student Achievement

Pre- and Post-Assessment Data Results

Each Residency participant selected a specific NEPF/NVAC standard to target during the 5-weeks of the Residency. A comparison of pre- and post-assessment data results indicates an overall increase of 45% in students' scores from the onset to the conclusion of the Residency. Additionally, more than half of the students' assessment scores moved from less than 80% on the pre-assessment to scores greater than 80% on the post-assessment. These results are compelling in demonstrating impacts on student achievement.

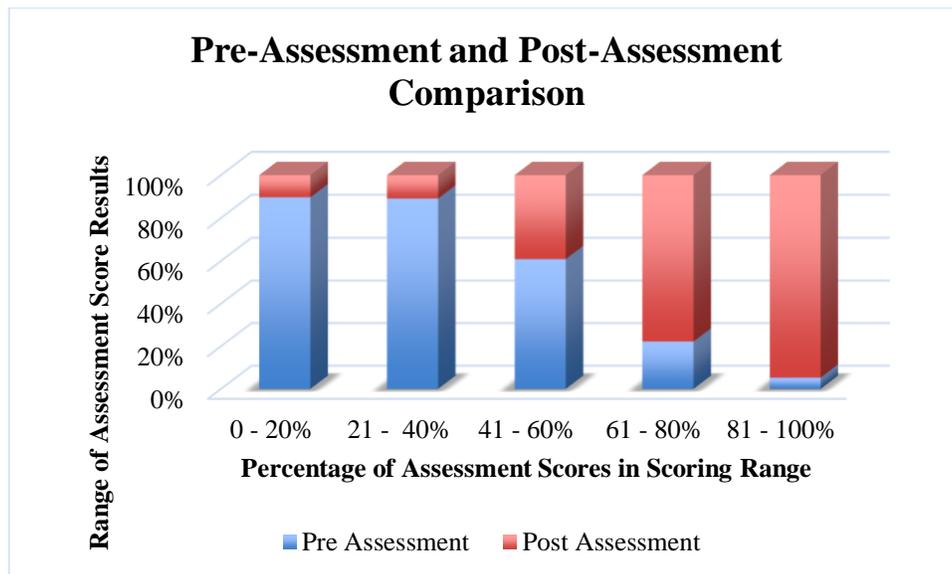


Figure 1: Pre- and Post-Assessment Comparison

Table 1: Impacts on Student Achievement-Excerpts from Educators' Assessment Analyses

Impacts on Student Achievement Excerpts from Educators' Pre – and Post- Assessment Analyses
<i>I am starting to see some impact on my students writing, yaaaaayyyyyy!!!! When comparing the two on-demand writes, pre and post, the first thing I noticed was students using a topic sentence to explain what they are summarizing. Students also have a writing stamina, use transition words, and the big one, not afraid to just write. Some students are now writing in paragraphs and acknowledging that they are retelling instead of picking out the important details. 6-12 Educator</i>
<i>I have seen and heard much growth in students' discourse skills. They have learned roles and how to elaborate and give supporting examples as well as to paraphrase what their partner has said and ask questions to clarify or gain more information (reflection on assessment analyses at the conclusion of the 5-week Residency.) I gave my students a "pop quiz" today to see if they remembered the 4 parts we talked about and what they meant... and they did excellent! I was very pleased! It stuck with them! Thank you for all your support. I wish more people could do this and that I could do this in more areas of focus. I loved it! (Feedback 2 months after the conclusion of the 5 week Residency) K-2 Educator</i>

Student Focus Group Data Results

Student Focus Group learning reflections were coded for indicators of impact on student achievement using a 5-point scale ranging from *minimal* (one) to *significant* (five). One-hundred percent of the learning reflections from the Student Focus Groups rated a three or higher on the 5-point scale with 72% of the scores in the four-to-five range. These results are particularly relevant in demonstrating impact on student achievement as growth toward learning goals was deemed greater than average/typical growth.

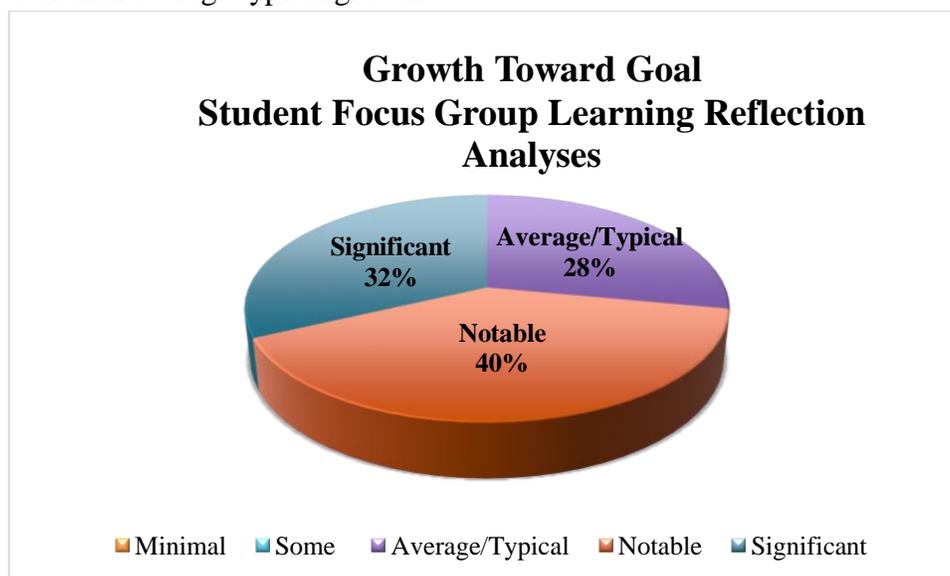


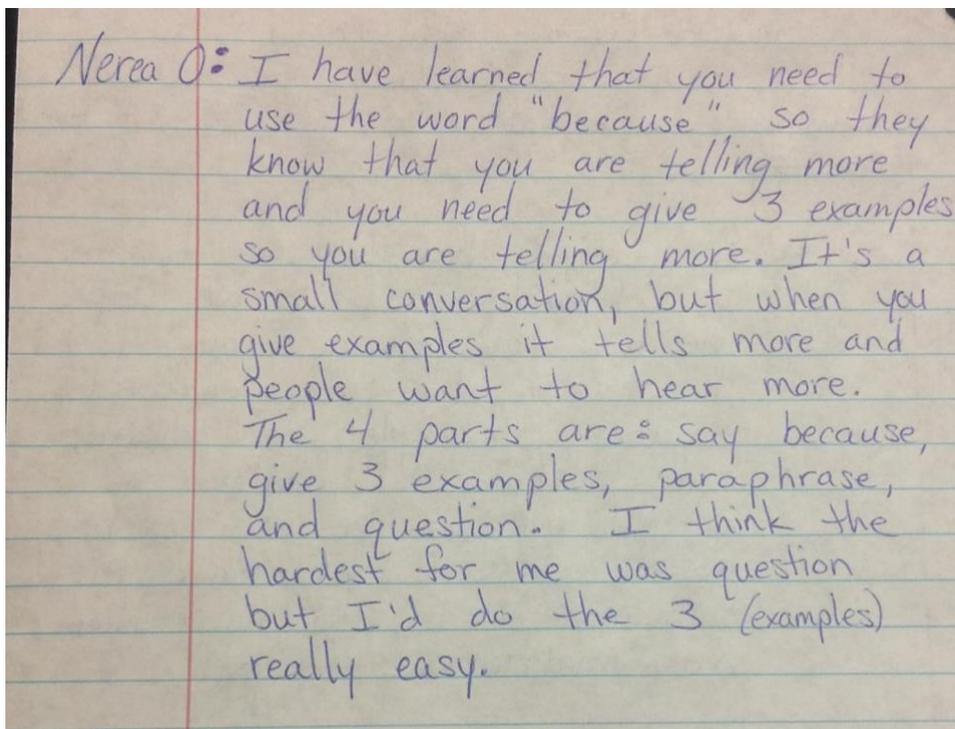
Figure 2: Growth Toward Goal Student Focus

Table 2: Impacts on Student Achievement-Excerpts from Student Focus Group Learning Reflections

Impacts on Student Achievement
Excerpts from Student Focus Group Learning Reflections

I used to think we were just coloring pictures in math, but now I know that we are adding groups together. Kindergarten Student

I used to think that persistence was like something important. In the classroom like math or reading. I now think that persistence is. Persistence is when you make a bug. and you think it is right and your wrog [sic]. And you keep trying and trying and you finally get it right. and you are so frustrated but that is ok because it is persistence. 3rd Grade Student



Participant Evaluation Data Results

Participant evaluations rated student *Growth Toward Goals* as three or greater using a 5-point scale ranging from *minimal* (one) to *significant* (five). Ninety-one percent of participant ratings were in the *notable* and *significant* range. There is a slight disparity between the Student Focus Group learning reflection analysis data and participant evaluations in the average/typical range. Nine percent of participant ratings are in the average/typical range. Student Focus Group reflections analyses placed 28% in the average/typical range. The difference may be attributed to participant ratings being based on whole-class whereas Student Focus Group reflections were a micro slice representation of the whole class. Nonetheless, the percentage of notable and significant growth from both data sources illustrate impact on student achievement.

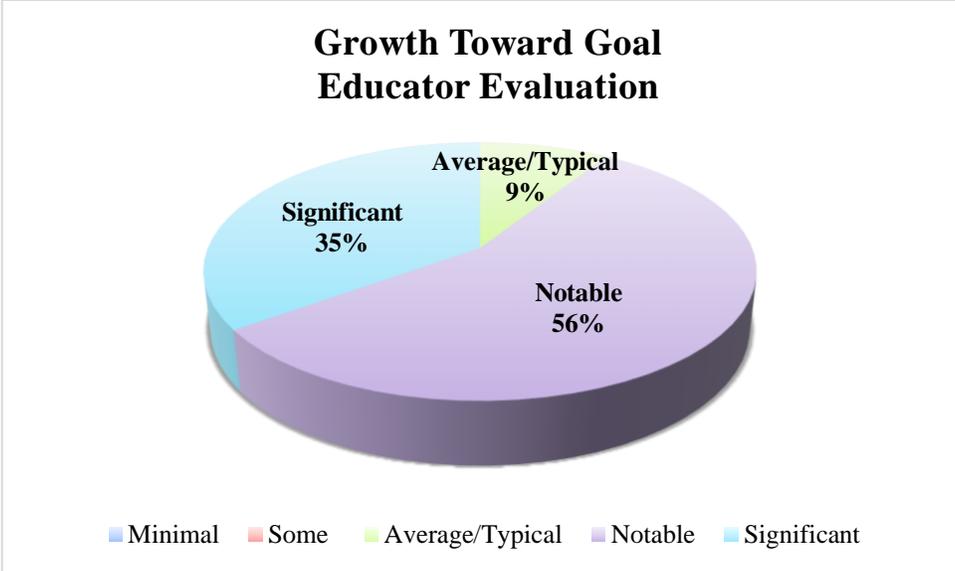


Figure 3: Growth Toward Goal Educator Evaluation

Participant Reflection Data Results

One hundred percent of participant reflections referenced that participation in the Residency would affect student learning. The reflections were further analyzed for trends in terms of how participation in the Residency would affect student learning. Seventy-five percent of the reflections indicated an impact on specific NVAC standards, 95% referenced NEPF standards/indicators, and 68% noted an impact on student dispositions toward learning. These results indicate the breadth of the impacts on student achievement.

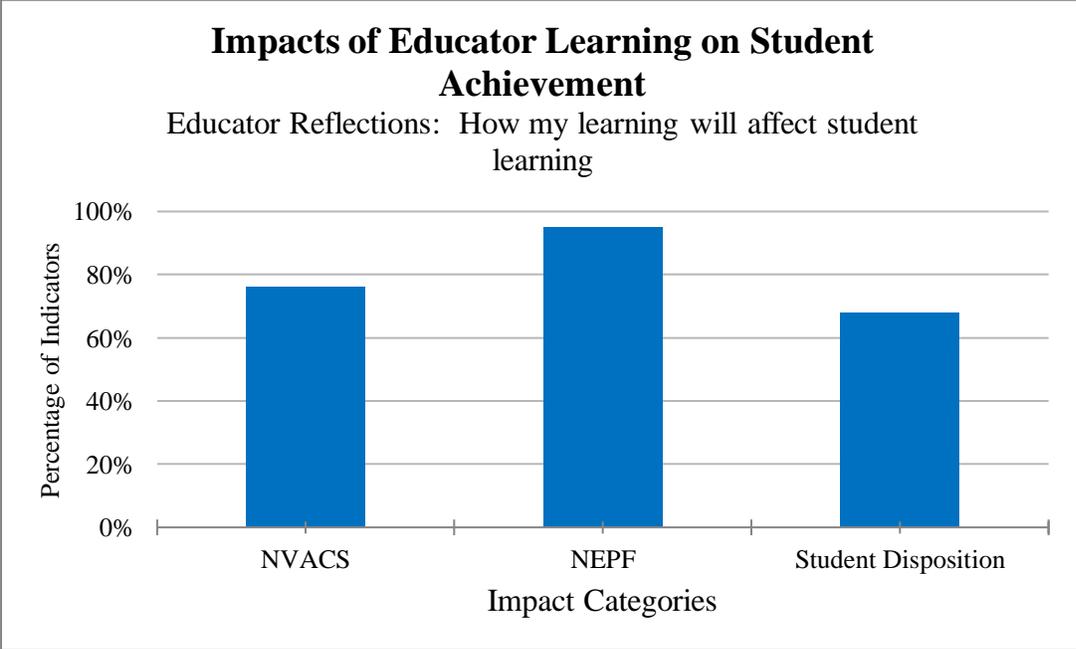


Figure 4: Impacts of Educator Learning on Student Achievement

Table 3: Impacts on Student Achievement-Excerpts from Participant Reflections

Impacts on Student Achievement Excerpts from Participant Reflections	
<i>Amelya's entire attitude towards math changed. She beams when she is explaining her work rather than cowering down and becoming shy. She is so much more confident in her work. She understands many strategies and is capable of applying them.</i>	K-2 Educator
<i>Because of the shift and the experience with Socratic seminar, my students now have a sense of empowerment and seem to have found their voice in my classroom. I see students beginning to take ownership of their learning and students who were withdrawn are now fully engaged...</i>	6-12 Educator

Participant Questionnaire Statement Data Results

Using Likert scale ratings, ranging from *not at all* (one) to *a great extent* (five), 48% of the participants rated their confidence in their ability to enhance student learning of the targeted NEPF/NVAC standard as a five. Sixty-nine percent of participants indicated their learning from the Residency would affect students' learning to a great extent. In line with data obtained from reflections, data from ratings of the questionnaire statements show participation in the Residency did and will have a profound effect on student achievement.

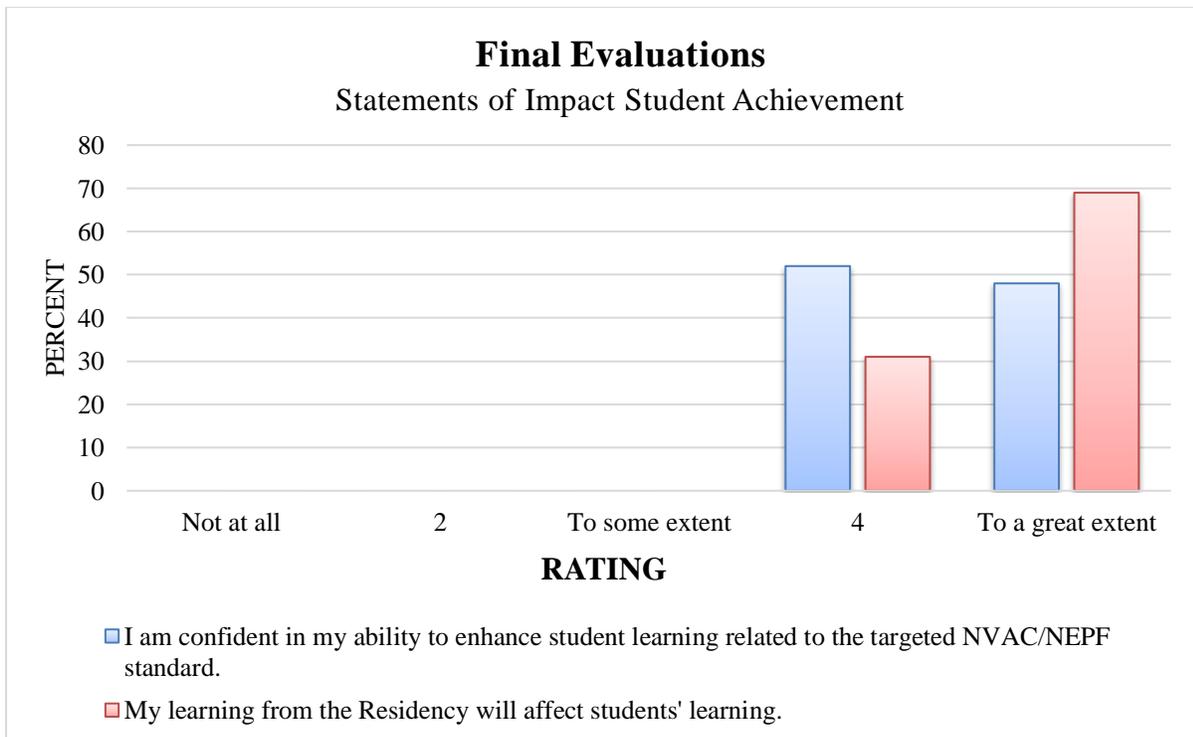


Figure 5: Statements of Impact Student Achievement

Impact on Assisting Teachers

Participant Reflection Prompt Data Results

Using a 5-point scale ranging from *minimal* (one) to *significant* (five), responses to the following reflections prompts were analyzed and coded:

- *Prior to the Residency, I used to think....Now I think...*
- *I would give my pre-residency self the following advice...*

Reflections were analyzed and coded for impacts on expanding understandings of NEPF/NVAC standards and implementation of strategies and skills, as well as references to impacts on dispositions. Assistance through the expansion of knowledge of best practices, NEPF, and NVAC standards was noted in 68% of reflections. Assistance through exposure to and implementation support of skills and practices was referenced in 73% of the reflections, and 54% of the reflections described how the Residency affected dispositions. These results reflect the breadth of the Residency’s impact on assisting teachers.

Table 4: Impact on Assisting Teachers

Assisting Teachers	Evidenced in Reflections	Excerpts
Expanding Understandings	68%	<p><i>I would give my pre-residency self the following advice: never stop doing research...if something isn't working, then change it. Don't feel obligated to do something just because everyone else is doing it. Listen to the students and keep their best interest in mind at all times. 3rd Grade Educator</i></p> <p><i>I used to think formative assessment was difficult...I have since learned to clue into what ...the students need to know, more sharply...I am using more formative assessments with students that are planned out... 6-12 Educator</i></p>
Strategies and Skills	73%	<p><i>This is not another professional development where you are given lots of great ideas that lack relevance for implementation...The Residency will actually improve your teaching...by strategically focusing on specific tools while following up on the implementation of those tools. 5th Grade Educator</i></p> <p><i>I LOVED the modeling...I think that is how I learn the best, by watching a master teacher. These [modeled strategies] were all so powerful in helping me. I cannot tell you enough how beneficial this was! 1st Grade Educator</i></p>
Dispositions	54%	<p><i>Prior to the Residency, I was a very traditional teacher...If the class was noisy that was a sign... I was not very good with my classroom control. Now I</i></p>

Assisting Teachers	Evidenced in Reflections	Excerpts
		<p><i>think a noisy classroom is a learning classroom...there is a difference between a noisy classroom and an out of control classroom. 6-12th Grade Educator</i></p> <p><i>Prior to the Residency, I used to think that it was almost impossible for a vertical team to work as an effective PLC. Now I think it can happen with the right structures in place. This was the most effective experience I have had as part of a team. 3rd Grade Educator</i></p>

Participant Questionnaire Statement Data Results

Using Likert scale ratings, ranging from *not at all* (one) to *a great extent* (five), participants rated questionnaire statements highlighting the categories of understandings and strategies/skills. Ratings resulted in an overall mean of 4.8. These data indicate participation in the Residency assisted teachers to a great extent.

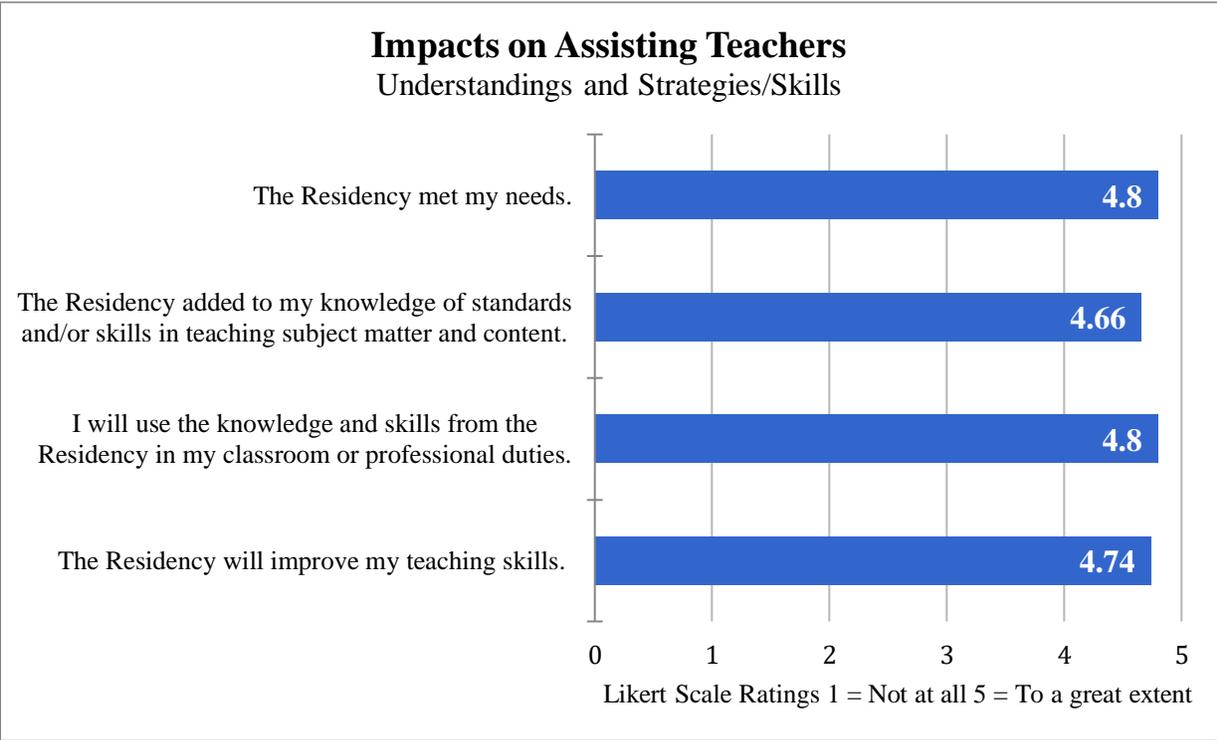


Figure 6: Impacts on Assisting Teachers

Using Likert scale ratings, ranging from *not at all* (one) to *a great extent* (five), participants rated questionnaire statements highlighting the category of dispositions. With the exception of being perceived as a change agent, ratings were greater than four. The overall mean rating of the

statements related to disposition was 4.5. These results coupled with the ratings of understandings and skills/strategies are indicative of the breadth of the Residency’s impact on assisting teachers.

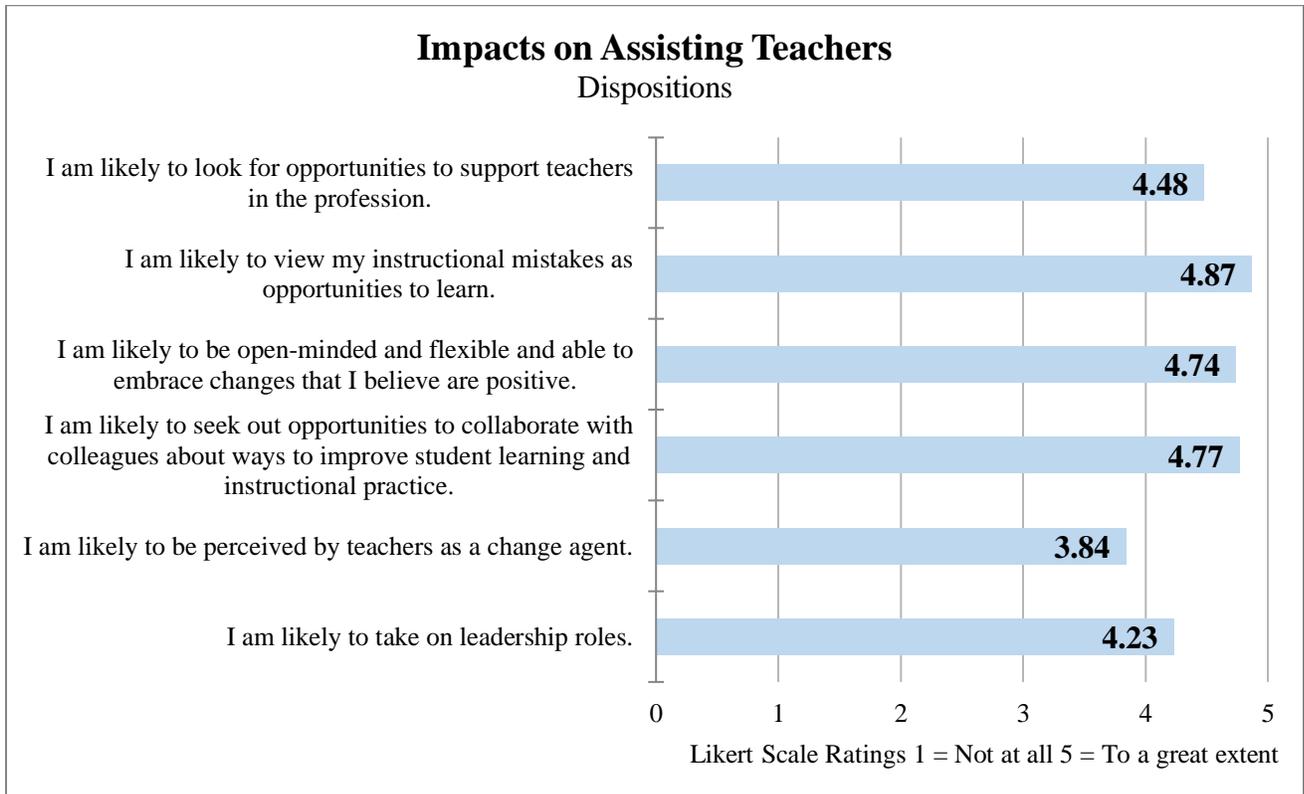


Figure 7: Impacts on Assisting Teachers

Educational Conference Reflection and Action Plan Data Results

One hundred percent of the participants who attended the educational conference articulated at least three major learnings that would assist them in the conference reflections and implementation action plans. Using a 5-point scale ranging from *minimal* (one) to *significant* (five) reflections were analyzed and coded in terms of impact on assisting teachers. The results of the data analysis show conference attendance had a significant impact on 65% of the participants and a notable impact on 27% of the participants.

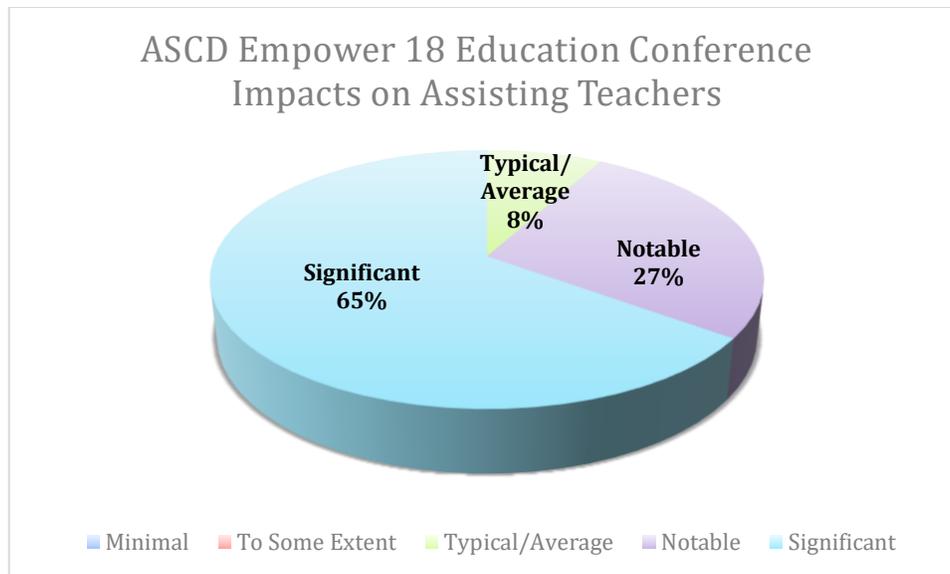


Figure 8: ASCD Conference Impacts on Assisting Teachers

Table 5: Impact on Assisting Educators-Excerpts from Conference Reflections and Action Plans

Impacts on Assisting Educators Excerpts from Participant Conference Reflections and Action Plans
<p><i>Going to Boston and attending the Empower 18 Conference was like winning the lottery for me. I am so grateful and thankful for this experience. I have attended many trainings and conferences the past 12 years that I have been in education. This conference was, by far, the most amazing experience for me. I learned so much and I believe I will be able to implement things I learned from every session in my classroom this year and beyond. The absolute most amazing experience I had at this conference was meeting Lucy Calkins! K-2 Educator</i></p>
<p><i>Wow, this was an exciting and enlightening conference. I came back with many ideas about things I wanted to pursue in my classroom and future teaching. I had a difficult time choosing</i></p>

Impacts on Instructional Practice

Reflection Data Results

Using a 5-point scale ranging from *minimal* (one) to *significant* (five), participant reflections were analyzed and coded based on impacts on instruction. Analysis of reflections indicated 76% of the participants' instruction was either notably or significantly impacted by participation in the Residency. NNRDPD anecdotal notes and commentary demonstrate impacts on practice with the caveat that 5 weeks was an insufficient amount of time to procure instructional shifts to the levels of excellence imagined. While there is room for refinement, the results of the analyses of the participant reflections suggest that the structure of the Residency may provide greater impacts on instruction than what participants have typically come to expect from other professional development structures.

Impacts on Instruction ASCD Empower 18 Education Conference Reflections

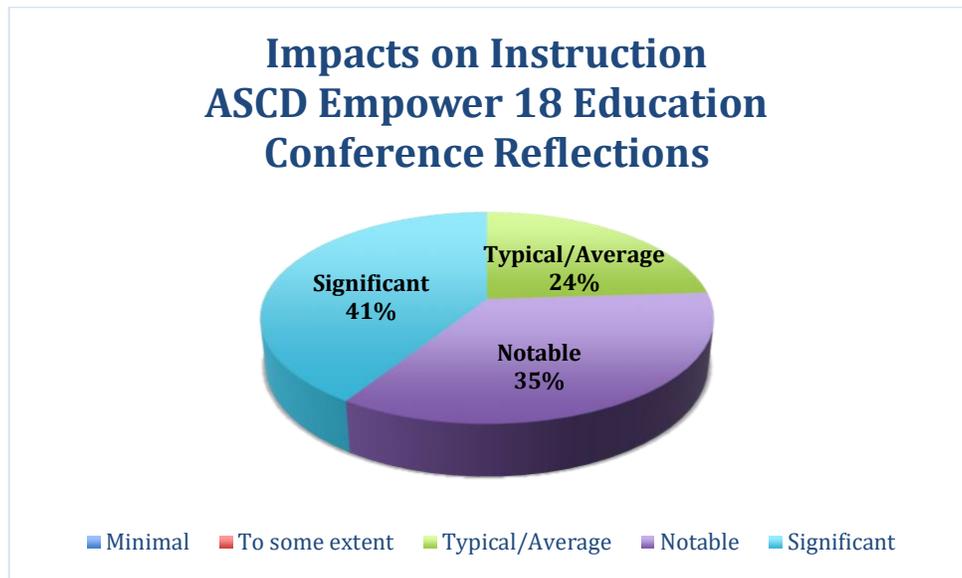


Figure 9: *Impacts on Instruction ASCD Reflections*

Table 6: *Impacts on Instruction-Excerpts from Participant Reflections*

Impacts on Instruction Excerpts from Participant Reflections
<p><i>I am so grateful for the opportunity to participate. I have learned so much and so have my students. I am so grateful that there are such wonderful mentors and great resources that I am able to learn from and bounce ideas off of. I think that we both learned from each other and from the students. I am eager to continue working on student discourse in my classroom and sharing what I have learned with other teachers. Doing this residency program has helped me to realize that I am not afraid to ask for help or admit that I am stuck in a rut in my instruction and need to bounce ideas off of someone. This was such a great opportunity. Thank you so much! K-2 Educator</i></p>
<p><i>I cannot say enough about how great it was. This was the best professional learning experience. I wish all professional learning could be structured this way. It was meaningful and something that I needed as a teacher. I hope you can do this again so that other teachers can participate in the experience. 3-5 Educator</i></p>

Educational Conference Reflection and Action Plan Data Results

Using a 5-point scale ranging from *minimal* (one) to *significant* (five), participant conference reflections and action plans were analyzed and coded based on evidence of impact on instruction. Sixty-five percent of participants indicated conference attendance as having a significant impact on instruction. Conference sessions, interactions with other Residency participants, exchanges

with colleagues from across the nation, and the experience itself contributed to the impacts on instruction.

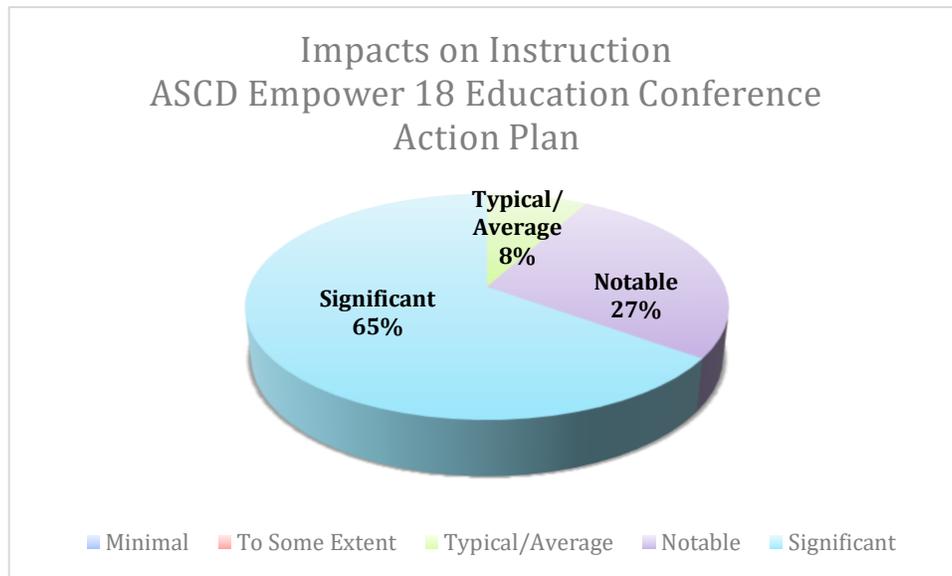


Figure 10: Impacts on Instruction ASCD Action Plan

Table 7: Impactions on Instruction-Excerpts from Education Conference Reflections and Action Plans

Impacts on Instruction Excerpts from Participant Education Conference Reflections and Action Plans
<p><i>The ASCD Empower 18 was a great learning experience as I was able to brush up on some skills I already use in the classroom, gain new knowledge for best practices, and connect with other educators. I was able to attend a variety of sessions that spanned the whole child to transformational leadership. 3-5 Educator</i></p>
<p><i>Knowing that the NEPF was inspired by the National Board Certification for Teachers makes it a little less intimidating and more relevant to my profession. I am now able to embrace this new rubric as a tool to perfect my craft, rather than a stick to beat Nevada teachers with, (how I thought of it before this class). My intent is to study the rubric thoroughly, and perhaps even take the weekend classes on it next year given through my district. 3-5 Educator</i></p>

Participant Questionnaire Statement Data

Participants rated six questionnaire statements related to impacts on instructional practice using Likert scale ratings, ranging from *not at all* (one) to *a great extent* (five). The Residency impacted instruction to a great extent with all statements receiving ratings greater than 4.5. These results align with the findings from the other measures of impact on instruction emphasizing the Residency’s impacts on instructional practice.

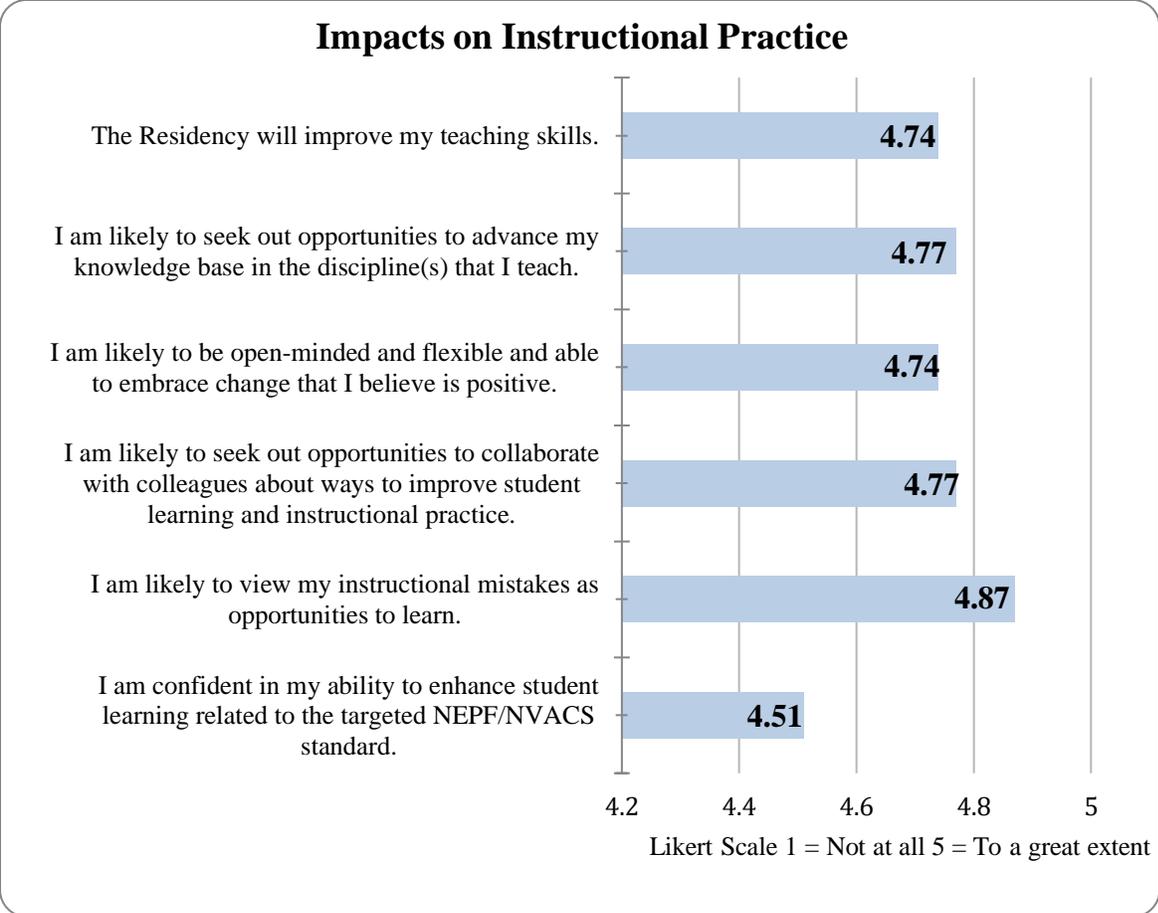


Figure 11: *Impacts on Instructional Practice*

Conclusion

Data from the pre- and post-assessments, Student Focus Group reflections, educator reflections, and evaluations were carefully analyzed. Results suggest the outcomes of the Residency were met. Participation in the Residency significantly impacted student achievement and assisted teachers. The Residency also had a notable impact on instructional practice. The data was derived from a professional development design grounded in Learning Forward’s Standards for Professional Learning, which have been adopted by Nevada, as well as the effective facets of professional development identified in research conducted by Guskey, Ingvarson, Darling-Hammond, Yoon and others. The abundance of significant results obtained from these suggests a correlation exists between participation in the Residency and impacts on student achievement, assisting teachers, and impact on instruction. Given the outcomes of the Residency, it is worthwhile to continue to refine its structure, such as extending it beyond 5 weeks, and pursuing avenues to make the program scalable. In the words of a participant, *“I felt that the Residency was such a worthwhile experience. Having an experienced teacher inside the classroom assisting in helping me grow as an educator through modeling, collaborating, and planning together was so helpful. I hope that this kind of program is offered again in the future!”*

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