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Teacher preparation strategies: Do best practices work in the field?

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Abstract

This research explored the relationship between effective practices studied and practical application within the classroom in order to identify best practices in preparing teachers for secondary school classrooms. The study examined effective teaching practices taught in a teacher preparation program and how the theory of using them aligns with practical application in the classroom. The participants involved are first year teachers who have recently completed a program of alternative licensure teacher education courses.

An initial survey was conducted on completion of their coursework. This survey determined which effective practices, learned in the program, they perceived would be the most effective in the classroom. A follow-up survey, classroom observation, and interviews were conducted mid-way through their first year of teaching to determine which practices had actually been the most effective. Additionally, administrators were interviewed to share how they are able to measure or assess teachers effectiveness of implementing these best practices.

Results are reported together with initial implications for organizations that prepare teachers for today's classrooms. Instruments employed in the study are included so that it may be easily replicated.

Key words: teacher preparation, teaching theories, first year teachers

Introduction

The Career Switcher (CS) program is an alternative route to teacher licensure in the United States, i.e. it is an alternative process by which a person is awarded a teaching license even though that person has not completed a traditional four-year teacher education program. The title CS is unique to Virginia where the program was established by the Virginia Department of Education (VDOE) in 2000; 48 other states now have an alternative licensure program. Approximately one-third of all new teachers now being hired in the United States are following alternative paths to teacher certification, and these teachers are being prepared in approximately 600 programs that offer alternatives to the traditional route of college-based teacher preparation. According to Feistritzer (2011), this trend continues to grow as increasing numbers of career-changers and other post baccalaureate adults seek to teach and school districts increasingly seek to hire them. It is for these reasons that it is important to examine how these candidates are prepared, as their teaching will affect the learning of growing numbers of children in America's classrooms.

This study reports research conducted with participants in a CS program provided by a university in south-eastern Virginia to investigate which theories learned during program coursework were found to be the most effective in the classroom.

Review of Literature

Our study examined the following research-based best practices taught within the curriculum courses of the CS program: student-centered learning (Rogowsky, Calhoun, & Tallal, 2015), teacher-directed learning (Rosenshine, 2012), building relationships (Baker, Grant, & Morlock, 2008), differentiation (Tomlinson & Moon, 2013), collaboration (Zambrano, Kirschner. F., Sweller, & Kirschner, P., 2019), student voice and choice (Sahin & Top, 2015), rubrics and proficiency scales (Marzano, 2017), technology (Niess, Rakes, & Ronau, 2012), assessments and feedback (Hattie & Zierer, 2019), and celebrating student success (Westerberg, 2009). Our operational objective was to identify how CS teacher candidates perceive the value of each best practice and the effectiveness of using each one in the classroom. Teaching strategies directly affect students and may not only impact student performance in the classroom but may also help to lessen dropouts among secondary school students (Balfanz, Bridgeland, Fox, DePaoli, Ingram, & Maushard, 2014).

Our nation's high school graduation rate is at an all-time high of 84% with high school students graduating on-time (Balingit, 2017). According to the US Department of Education, National Center for Education Statistics (2018), the growth between 2015 and 2016 is the highest graduation rate of students graduating on-time since they began recording in 2011. While this is great news and worthy of celebration, the question remains, to what can we attribute these gains? Even though graduation rates are increasing, the fact remains that some students are still struggling and are in fact still dropping out of school. According to Every Student Succeeds Act (ESSA, 2015) the nation's states have been given more responsibility for school improvement. CS teacher candidates offer a unique attribute to teaching in the classroom. They have had real-world applicable experiences in their field of study that they bring into the classroom. Research supports a positive relationship between teacher pedagogical content knowledge and student achievement (Darling-Hammond, 2000; Creasy, Whipp, & Jackson, 2012). This is important because when students are not interested in the content taught in class, they are more likely to drop-out of high school (Bridgeland, DiIulio, & Morison, 2006; Yazzie-Mintz, 2008). Cushman (2006) conducted a six-month study with 65 underprivileged high school students of color from across the United States in which she discovered that students wanted more interesting classes. Cushman's study reported that if students were engaged in their learning, their attendance and their achievement would rise.

While we know that CS teachers bring content knowledge to the classroom, studies also reveal that when a teacher uses effective teaching strategies and builds relationships with students it has a positive effect on student performance (Marzano, Pickering, & Pollock, 2001). There are many effective teaching methods so how do we know which strategies teachers are using most often and which strategies are the most effective to help students master their learning goals? This study examined ten effective strategies (described below) that may not only impact learners' performances in the classroom but may also help retain them in school.

Definition of Strategies

Teacher-Directed Learning: Instruction that is led by teachers and is structured or sequenced; usually the presentation of content in a lecture or demonstration.

Building Relationships: A mutual connection between individuals or groups of people; a relationship where students feel valued, welcome, and accepted.

Differentiation: Teaching techniques tailored to meet the needs of individual students.
Group Work/Collaboration: Working jointly with a partner or small group in order to produce or create something.

Student Voice and Choice: Providing students with opportunities to voice their opinions and also providing them with opportunities to learn about their own interests, ambitions, and passions.

Rubrics and Proficiency Scales: Proficiency scales shows students the pathway to mastering the learning goals. Rubrics are a tool to assess students on how well they are mastering the learning goals.

Technology: Utilizing technology in the classroom to enhance instruction in content areas.

Assessment and Feedback: Assessments are opportunities for students to demonstrate mastery of learning goals. Feedback helps inform teacher instruction and provides students with opportunities to reflect on their learning; shows them where improvements can be made; and allows them to self-assess their capabilities and skills.

Celebrating Student Success: Celebrations to recognize student successes and mastery of learning.

Student-Centered Learning: Students are active participants in the learning process including the planning, implementation, and assessments.

Significance of Study

This study examines whether best practices learned during the coursework of a teacher preparation program perceived to be effective by the teacher candidates both before and after they have been hired for their first year of teaching. The study would be very helpful to teacher educators in normal times; it is postulated that in a time of extreme disruption in schools due to the effects of the Corona virus it will hold greater significance. In pre-Covid 19 times every first-year teacher had good access to seasoned teachers within the school building, whose advice on instructional strategies could be readily obtained. The current uncertainty that shrouds our school systems means that some teachers will be working in school buildings, others may be teaching full time from a remote location, while others may operate using a combination of instructional delivery. Consequently, it may be more important than ever that new teachers adopt strategies that are going to be the most helpful in the instruction from the outset; they may not have the opportunity to discuss teaching methods with their colleagues or to seek advice.

Research Question

In reviewing several research-based instructional strategies, how does coursework theory align with practical classroom application?

Methodology

In order to collect and analyze the data, a mixed-methods, grounded theory approach was utilized. The researchers began by collecting data to determine which teaching strategies a randomly selected sample of 37 CSs perceived would be the most effective for children's learning. The participants were surveyed again towards the end of their first semester of teaching in schools to determine whether their perceptions had changed as a result of their classroom experience. Purposeful sampling was conducted based on subject and grades taught, together with a geographic spread of schools across the state in which CSs are employed. Each participant in the sample was visited in the workplace and interviewed to obtain qualitative data. Where possible, the employing school administrator was also interviewed to comment on each teacher's classroom performance, and input from additional administrators employing CSs who were not available for interview was obtained via electronic means. The research question explored how the theory of what the CSs were learning in their Level I coursework applied to practical application when they were hired by a school and were teaching children in Level II of the program.

Once the data were collected from the first survey which asked Level I CSs to rank the teaching strategies based upon what they perceived would have the most impact on student learning, the researchers developed the second survey. This survey was conducted at the end of the first semester of teaching and asked the now Level II CSs how often they employed each teaching method: did they use it once a month, once a week, or daily? The data collected were then analyzed using SPSS and used to determine the direction of the study as described in the following paragraphs.

Two strategies demonstrated a statistically significant relationship between perceived impact and frequency of use: Building Relationships and Differentiating Instruction. In the case of Building Relationships, this was ranked the second most significant teaching strategy for impacting student learning, while the second survey showed it was the most frequently utilized strategy. Similarly, for Differentiation, the level of correlation between the surveys showed the greater the perceived impact of Differentiation as an instructional strategy the more frequently it is utilized in the classroom. Technology was ranked low in terms of perceived impact, yet it is the second most frequently used strategy in the classroom. In analyzing the data, interview questions were created and participants purposefully selected. The researchers categorized participants based on the subject they taught. Once grouped according to subjects, we examined where each participant taught in the state of Virginia. Level II CSs teach in schools throughout the state so it was decided to choose one participant from each subject area per middle school or high school and to select them based on their proximity to one another.

We chose participants located close to the eastern parts of Virginia geographically so that we could schedule multiple observations in a two-day time period, thereby allowing enough time at each school to conduct a 30-minute observation as well to interview each participant, plus additional time if the school principal was available for interview. None of the participants was from the same school, although some participants did teach in the same county. Table 1 shows the list of participants selected and their geographic location within the state.

Table 1: Participants' school, location and subject taught

Grade Level	Subject Area	Geographic Location	Gender
Middle School	Music	Fairfax	Female
High School	Computer Education	Falls Church	Male
High School	Social Studies	Fairfax	Male
Middle School	English	Prince William County	Male
Middle School	Family and Consumer Science	Prince William County	Female
High School	Business Education	Stafford	Male
High School	Family and Consumer Science	Richmond	Male
Middle School	Math	Richmond	Female
High School	English as a Second Language	Chesapeake	Female
High School	Spanish	Chesapeake	Female
Middle School	Social Studies	Chesapeake	Female
Middle School	Science	Portsmouth	Female

Table 1 shows that from the original sample of 37, 12 participants were purposefully selected for observations and interviews. Six participants taught in a middle school and six taught at the high school level. The participants selected from middle schools taught one the following subjects: Music, English, Family and Consumer Science, Math, Social Studies, or Science. The participants selected at the high school level taught one of the following subjects: Computer Education, Social Studies, Business Education, Family and Consumer Science, English as a Second Language, or Spanish. Seven of the participants were female and five were male.

During the observations, the researchers collected data on whether or not one of the 10 teaching strategies was used during the 30-minute observation as well as collected anecdotal notes. Once the observation was complete, the participant was interviewed. Implementing a grounded theory approach, the researchers listened to the participants describe and reflect upon their teaching methods. During the interviews, questions were asked that were generated during the data collection. The participants were asked to describe their experiences in detail with the goal to answer questions that arose from the surveys in the quantitative data collection.

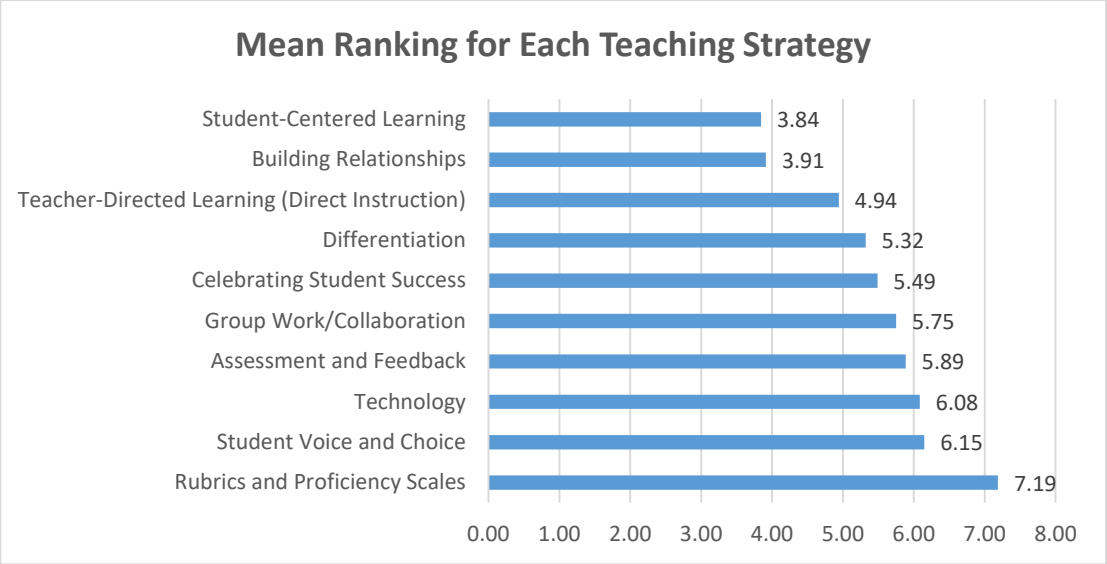
From the beginning of this study, we collected data to help generate new understandings of how theory aligns with practical application. We surveyed, observed, and interviewed participants with the intention to understand how the Career Switchers use these 10 teaching strategies and to understand whether or not they impact children learning. This data collection occurred over the course of 2 semesters. Collecting, analyzing, and coding the data occurred simultaneously. The constant-comparison method was used to establish distinctions and make comparisons at each level of data analysis. The researchers compared one survey to another, one observation to another, and one interview to another in order to find the similarities and differences. Comparing the data helped with coding and analyzing by identifying similarities and differences across multiple data sources. The codes and categories were developed from the data and the relationships were then determined. The researchers did not make assumptions about what the participants thought or felt about a topic nor were the data forced into preconceived categories.

Results

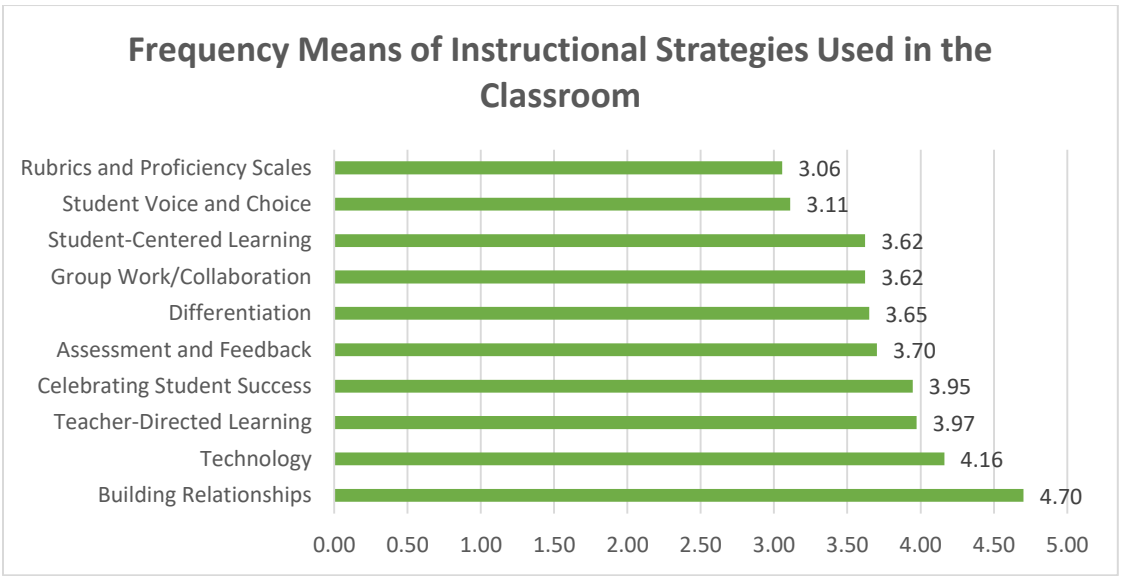
The results from the surveys indicate that in this study relationships with children and differentiation of instruction are the two strategies that most impact children's learning. The results of Surveys 1 and 2 are shown in Table 2.

Table 2. Results of Surveys 1 and 2

Survey 1



Survey 2



In Survey 1, building relationships was ranked the second most significant teaching strategy for impacting children's learning, while Survey 2 indicated that it was the most frequently utilized strategy. Similarly, for differentiation, the level of correlation between the two surveys showed the greater the perceived impact of differentiation as an instructional strategy, the more frequently it was utilized in the classroom. Technology was ranked low in terms of perceived impact, yet it is the second most frequently used strategy in the classroom; whereas student-centered learning was ranked as the most impactful, yet rarely used. Once the surveys were analyzed, interviews and observations were conducted, and results are reported below.

This first interview question asked about alignment between learning and teaching.

- Question 1: How do you feel theory (what you learned about the above strategies in your Level I courses) aligns with practical application (Level II, teaching in the classroom)?

Interviews and observations indicated a direct correlation between the theory of what students learned about these instructional strategies in Level 1 of the CS program and the practical application of using them while teaching in the classroom during Level II. As participant CS11 shared, "all strategies are important and have their need. For example, I have a garage full of tools. Most of the tools collect dust but at times I need that tool. It makes the project more fun, effective, and professional when I can grab that tool and use it when I need it. I like having tools to use" (CS11 personal interview, February 19, 2020). During the 40-minute window of observation during this lesson, this CS employed 7 of the 10 strategies. Observed were building relationships, differentiation according to modalities, student voice and choice, technology, assessment and feedback, celebrating student success, and student-centered learning.

The following three interview questions asked more specific questions about building relationships and differentiating instruction.

- Question 2: Based upon the results from the survey, the strategies that demonstrate a statistical significant relationship between significance and frequency of use are Building Relationships and Differentiation, why do you think these are the most impactful to student learning?
- Question 3: What are some specific examples of how you Differentiate Instruction and Build Relationships with students?
- Question 4: How often do you think you focus on Differentiating Instruction and Building Relationships?

When interviewed, Level II participants agreed with the outcomes from the surveys that showed with statistical significance that differentiation and building relationships are most impactful to children's learning. Data from interviews show that building relationships has created a positive classroom environment with fewer disruptions. CS15 believes, "that by showing students that we not only want to teach them our knowledge, but also care about them as human beings will help build a trusting relationship that motivates students to be in our classroom and do their work" (CS15 personal interview, March 9, 2020). In order to build relationships, teachers reported, and the researchers' observations supported, that they made connections with children. CS27 took a lot of time early in the year to get to know students and build relationships. "I still spend time everyday asking them what is going on in other classes and I attend different after-school activities when I know students that are participating" (CS27 personal interview, March 4, 2020). Teachers also shared that they talked with students individually about their interests; attended after-school activities to show their support; and celebrated significant events such as each child's birthday.

Building relationships not only creates a positive environment, it can also help teachers differentiate instruction. Differentiation helps more students learn and creates a stronger teacher-student bond. Teachers who differentiate their instruction understand that each student is unique. In an interview with CS20, this CS stated: "through using differentiation methods to address each student based on their abilities and personal needs allows the teacher to implement this method to create a stronger bond with the students. By meeting their needs, you find that instruction can proceed without as many interruptions" (CS20 personal interview, February 11, 2020). Through our interviews and observations, it was evident that differentiating instruction to meet children's needs also helps with classroom management. Participants provided evidence of differentiation in several ways: by allowing students a choice in how and what they were learning; teaching using different modalities to appeal to the different learning styles of children; and differentiating instruction based on varied abilities in order to help children who are struggling or those that need a challenge. The most important area of differentiation in CS13's class is providing their ELLs a translation of the work to help them understand the lessons more deeply. "Also, by pairing my ELL students up and grouping them with a higher-level ELL, I am able to achieve a higher level of understanding of their needs, accomplishments, and understanding of" (CS13 personal interview, February 19, 2020). Most participants self-reported the need to spend time daily on differentiating instruction and building relationships. One participant reported the challenges of making this happen: as CS27 shared, "I have not spent as much time as I should with differentiation this year. Being a new teacher, most of my time is spent lesson planning" (CS27 personal interview, March 4, 2020). This Career Switcher plans to differentiate instruction more frequently in the next school year.

In order to understand the use of technology in each CS's classroom, the following question was asked:

- Question 5: Technology was ranked third from the bottom in terms of impacting students' mastery of learning, however, it was one of the most frequently used strategies. Can you share ways you utilize technology in the classroom? Do you feel these have an impact on whether or not students master the learning goals? Why or why not?

Regarding the use of technology, results indicated that there are two spectrums – teachers that have and use technology daily, especially in schools that are 1:1; and those that do not have efficient access to technology in the classroom. Here are some examples of both sides of the spectrum: CS12 thought technology was ranked low because many schools do not have the proper tools for implementing it. "For example, I have a SMART board in my room, but no way to connect to it. I have 5 computers but many times they are not working" (CS12 personal interview, March 5, 2020). And the reverse: CS27 shares that their school is 1:1 so every student has a laptop. "I use technology everyday with Kahoot, Quizlet Live, Edpuzzle, Google Classroom. I feel that it helps students master their learning goals and provides all students access whereas some may not have it at home" (CS27 personal interview March 4, 2020). It was determined that in this study technology was not a significant variable in children mastering learning goals because participants either used it as part of their daily lessons and no longer deemed it significant, while others did not have access to technology for daily use in their classrooms.

Next, the researchers asked about student-centered learning in the classroom.

- Question 6: Student-Centered Learning was ranked the most impacting strategy for student learning, and yet in frequency of use, it was ranked at the bottom. Why do you think this is? Is it more challenging to employ?

Student-centered learning was ranked as the most impactful strategy for learning, and yet infrequently used. Sometimes new teachers have a hard time "giving up the reins to students. It requires a level of motivation and independence from students that teachers, and new teachers especially, can be reluctant to allow" (CS6 personal interview, March 4, 2020). Even though they believe student-centered learning has the ability to impact student learning the most, participants reported the reasons they do not implement it is because it takes more time to plan; it is sometimes difficult to implement; and it is not easy to give up control and step out of the spotlight by allowing children to be a part of the teaching and learning process.

Finally, the researchers invited the participants to reflect on their first year of teaching.

- Question 7: Reflecting on your first semester of teaching, how have your choices of teaching strategies impacted student learning outcomes?

When asked to reflect on their first semester of teaching regarding the choices they made in teaching strategies and their impact on learning outcomes, participants reported that some choices have been successful while others have not. Some CSs felt that this year they are developing their own vision and learning how to tweak, adjust, or restructure certain lessons and activities. As one CS shared, "I believe my outcomes will improve over time" (CS11 personal interview, February 19, 2020). Anticipated improvements over time was a theme shared by the majority of the participants.

After surveying, observing, and interviewing the CS teachers, the researchers interviewed employing principals when possible. The results from the interviews with administrators demonstrated that the school divisions across the state employ the Virginia Department of Education's performance standards for teachers in order to collect data and to document teachers' performance. There are seven teacher performance standards that the state of Virginia uses to evaluate the professional practice of teachers. According to the Virginia Department of Education, these standards are: professional knowledge; instructional planning; instructional delivery; assessment of and for student learning; learning environment; professionalism; and student academic progress. When asked how, as an administrator, they would assess or measure whether their teachers are building relationships and differentiating instruction, most administrators reported using three of the performance standards above: instructional planning, instructional delivery, and learning environment.

In order to assess whether their teachers are building relationships with children, administrators observed the learning environment. During observations, administrators looked for the ways in which teachers connect with students, engage students in a lesson, and listen to the discussions teachers have with students.

In addition, CSA15 reported that, "we do gather some relationship data via surveys and conversations with students and parents" (CSA15 personal interview, January 10, 2020). Another indicator reported by several administrators was the link between relationship building and discipline referrals. One principal said that, "the number of discipline referrals to the office is a good indicator of student/teacher relationships" (CSA14 personal interview June 25, 2020).

In regard to differentiating instruction, administrators shared that teachers need to look for paths they are willing to take in order to help each individual child. Administrators look for differentiation in observations as well as in lesson plans. During professional learning communities, one administrator reported that they "look at data from the assessments and form groups of students in the classroom" (CSA4 personal interview June 5, 2020). CSA13 shared that in student groups they look for differentiated options for children, and student voice. They also put a high emphasis on student empowerment; the ability for students to choose how they will demonstrate mastery of a concept" (CSA13 personal interview, June 10, 2020). Other administrators conduct walk-throughs where they use a checklist to mark off if they observed differentiation of instruction. Most administrators shared that differentiation is not easy for new teachers and they often use experienced teachers to "help explain how to use the tools, resources (both through individuals and Title funds) and technology available to help differentiate instruction" (CSA12 personal interview, June 8, 2020). It can be concluded that differentiating instruction is a skill that even some of the most experienced teachers are still striving to perfect.

Conclusions

The results of this study have the potential to be useful for state agency administrators, program administrators, researchers, faculty, and newly hired teachers. Educators can use the findings of this study in making policy decisions about curriculum content that prepares teacher candidates for the classroom. It is anticipated that expanded opportunities to experience a curriculum that focuses on student mastery of learning goals can assist children, especially those at-risk of dropping out. Students are more apt to master learning goals in an engaging environment which can also attribute to higher graduation rates.

This study has shown that among a sample of alternative licensure participants in their first year of teaching, relationships with children and differentiation of instruction are the two strategies that most impact children's learning. Interviews and observations indicated a direct correlation between the theory of what students learned about these instructional strategies in Level 1 of the CS program and the practical application of using them during their first year of teaching. Participants and their administrators reported that building relationships can create a positive classroom environment resulting in fewer discipline disruptions. Building relationships can help teachers differentiate instruction and differentiation can help more children learn and can create stronger bonds with them. Most administrators shared that differentiation is not easy for new teachers and stated that differentiating instruction is a skill that even some of the most experienced teachers are still striving to perfect over time.

This study shows that providing teacher candidates with a toolkit of strategies is important in order for them to choose one that will work when needed. Another implication of this study is that teachers should strive to build relationships with the children they teach from the outset. This does not have to be complicated – a few minutes spent at the beginning of the school year to get to know each child, followed by the occasional question about family life or favorite sport can often be sufficient. New teachers should also strive to differentiate their instruction. This can start by grouping children, pairing them, or offering them instructional choices for their personal learning.

The implications for building administrators are that they might wish to focus on relationship building between their teachers and the children they instruct, to stress the importance of this concept during the hiring process and in faculty meetings, and look for evidence of it when conducting classroom observations. Administrators might also wish to stress the importance of differentiating instruction so that the needs of individual children are met.

Implications for teacher educators, and especially those who prepare alternative licensure candidates for the classroom, are that building relationships with children in schools is just as important as building relationships to be successful in business, in commerce, or in the military. Alternative licensure teachers have already developed and employed relationship skills in their first career, and they should be encouraged to carry those skills with them as they transition to teaching.

Limitations

This small-scale study was limited in scope and by time, and particularly by the time allotted for observations. Additional data collected on specific examples of how participants used each of the strategies in the classroom and the direct impact it may or may not have had on children's learning would have strengthened the results. The researchers tried to overcome this limitation through the interviews, asking for examples of how they used specific strategies in the classroom, and following up with building administrators.

The participants in this study were all candidates in an alternative licensure teacher preparation program, i.e. mid-career professionals for whom teaching is a second career. This is a limitation, as these participants are generally older than conventionally prepared teacher candidates and have previous life experiences that they bring to the school classroom.

Recommendations for Future Research

It is recommended that this study be replicated with a larger sample of participants using the same instruments that are shown in Appendix A, and preferably in states additional to Virginia where this study was conducted. A further study in which there is a mix of teacher candidate participants (alternative licensure and conventionally prepared) would be particularly valuable.

It is further recommended that research be conducted to determine whether there might be a correlation between relationship-building in the classroom and classroom discipline as measured by referrals to building administrators.

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Appendix A

Survey 1: Effective Strategies for Preparing Teacher Candidates

Survey 1: This survey was completed by teacher candidates at the end (August 2019) of Level I in the Career Switcher Program.

On a scale of 1-10, 10 (most significant) and 1 (not as significant) please rate which of these strategies will have the most impact on student learning. By Significant, we mean the strategy you will use most often to assist students with mastery of their learning goals.

- Student-Centered Learning
- Building Relationships
- Teacher-Directed Learning
- Differentiation
- Celebrating Student Success
- Group Work/Collaboration
- Assessment and Feedback
- Technology
- Student Voice and Choice
- Rubrics and Proficiency Scales

Survey 2: Alternative licensure teacher preparation strategies: Does theory align with practice?

Survey 2: This survey was completed by teachers at the end first semester (January 2020) of Level II in the Career Switcher Program.

Based on your first semester of teaching, please rate the frequency you use the following strategies on a scale of 1-5. A score of 1 means you do not use it often (maybe monthly); a 3 means you use it often (maybe weekly); and a score of 5 means you use it very often (maybe daily or almost daily).

- Student-Centered Learning
- Building Relationships
- Teacher-Directed Learning
- Differentiation
- Celebrating Student Success
- Group Work/Collaboration
- Assessment and Feedback
- Technology
- Student Voice and Choice
- Rubrics and Proficiency Scales

Observations of 12 Level II Career Switchers:

Researchers observed 12 purposefully selected Level II Career Switchers. The following chart was used to document observations (February 2020) within a 30-minute time-frame.

Strategy	Observed during Observation (√)	Anecdotal Notes
Teacher Directed Learning		
Building Relationships		
Differentiation		
Group Work/Collaboration		
Student Voice and Choice		
Rubrics and Proficiency Scales		
Technology		
Assessment and Feedback		
Celebrating Student Success		
Student-Centered Learning		

Interview Questions for Level II Career Switchers

Interview: Level II Career Switchers were asked the following questions (February, 2020):The Instructional Strategies: Student-Centered Learning; Building Relationships; Teacher- Directed Learning; Differentiation; Celebrating Student Success; Group Work/Collaboration; Assessment and Feedback; Technology; Student Voice and Choice; and Rubrics and Proficiency Scales

- How do you feel theory (what you learned about the above strategies in your Level I courses) aligns with practical application (Level II, teaching in the classroom)?
- Based upon the results from the survey, the strategies that demonstrate a statistical significant relationship between significance and frequency of use are Building Relationships and Differentiation, why do you think these are the most impactful to student learning?
- What are some specific examples of how you Differentiate Instruction and Build Relationships with students?
- How often do you think you focus on Differentiating Instruction and Building Relationships?
- Technology was ranked third from the bottom in terms of impacting students' mastery of learning, however, it was one of the most frequently used strategies. Can you share ways you utilize technology in the classroom? Do you feel these have an impact on whether or not students master the learning goals? Why or why not?
- Student-Centered Learning was ranked the most impacting strategy for student learning, and yet in frequency of use, it was ranked at the bottom. Why do you think this is? Is it more challenging to employ?
- Reflecting on your first semester of teaching, how have your choices of teaching strategies impacted student learning outcomes?

Interview Questions for Administrators:

- How satisfied are you with hiring Career Switchers? Would you hire more?
- We have been conducting a study on what teachers find to be the most impactful in helping students master their learning goals and the results indicated the two most significant were building relationships and differentiation. What are your thoughts?
- How do you assess/measure that teachers are building relationships and differentiating instruction?
- What would you like to see programs such as ours focus when preparing teachers for the classroom?