

**Journal of the National Association for  
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# **Journal of the National Association for Alternative Certification**

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## From the Managing Editor

Welcome to a new issue of *JNAAC*. There are three articles for this issue. The first article is from Donna Sayman from Wichita State University, Calli Lewis Chiu from California State University, Bakersfield, and Mandy Lusk from Clayton State University. Their qualitative research study used the Critical Incident Technique to determine specific areas in which novice alternatively certified special education teachers need support. Analyzing these critical incidents provides information for teacher preparation programs to bolster areas that can lead to stress, burnout, and attrition among special education teachers. Participants were enrolled in a special education intern program, meaning they taught in special education classrooms full-time, while also taking full course loads leading to special education teacher credentials. Twice per academic quarter, they wrote narratives detailing critical incidents they experienced related to teaching. The critical incident narratives were submitted for scoring purposes and the content was analyzed for recurrent themes.

The second article is a Best Practices article from Jeff Henning-Smith from the University of Minnesota. The purpose of the article was to examine the use of a gradual release of responsibility (GRR) model (Pearson & Gallagher, 1983) embedded in a co-teaching framework (Heck & Bacharach, 2015) during the student-teaching portion of an alternative teaching licensure program. The goal was to improve an already existing student-teacher field experience summer residency program at a large Midwestern university by better attending to its desire to help all teachers become better equipped with their selection of teaching strategies.

The third article is from the editor for this issue's Editor's Perspective article. The focus is on the future of education examined through the lens of disruptive innovations. Recent technological developments have changed the ways in which many industries have operated, and while we have not seen much impact on schools and universities yet, those changes will likely manifest not far into the future. This article addresses several areas of change that new teachers may experience in their careers and lifetimes. This will be contextualized through alternative certification preparation for teachers.

Brian R. Evans  
JNAAC Managing Editor

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# **Critical Incident Reviews of Alternatively Certified Special Educators**

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## *Abstract*

*This qualitative research study used the Critical Incident Technique to determine specific areas in which novice alternatively certified special education teachers need support. Analyzing these critical incidents provides information for teacher preparation programs to bolster areas that can lead to stress, burnout, and attrition among special education teachers. Participants were enrolled in a special education intern program, meaning they taught in special education classrooms full-time, while also taking full course loads leading to special education teacher credentials. Twice per academic quarter, they wrote narratives detailing critical incidents they experienced related to teaching. The critical incident narratives were submitted for scoring purposes and the content was analyzed for recurrent themes.*

*Keywords: critical incidents techniques, alternative certification, special educators*

Please contact the first author for all correspondence regarding the content of this article.

Significant challenges in the field of special education include producing qualified, effective educators and promoting work environments that support special educators' skills and commitment to the profession (Billingsly, 2004). For decades, however, maintaining highly capable special educators has been challenging as demonstrated in the nation-wide shortage of teachers in special education (Barth, Dillon, Hull, & Higgins, 2016). Many factors contribute to the shortage, but the effects on students with disabilities are significant and far-reaching: substandard educational experiences and decreased academic achievement.

Special education (SPED) faculty across the nation are mandated with the daunting task of responding to the ever-increasing special education teacher shortage. A report from the National Coalition on Personnel Shortages in Special Education and Related Services (2015) found that in the 2013-2014 school year, 49 states reported special education teacher shortages. In addition, special education teacher attrition is nearly double the rate of general education teacher attrition (12.3% compared to 7.6%), and 51% of school districts across the United States report difficulty recruiting highly qualified special education teachers. The teacher shortage in SPED has resulted in a surge of alternative certification programs over the past 20 years. Teacher shortages are so tremendous that districts frequently hire individuals who are not fully certified via provisional contracts with the agreement that they will concurrently take coursework toward a teaching degree (Rock & Billingsley, 2015). Alternatively certified teachers assume the complete responsibilities of classrooms before they have obtained full teaching credentials (Griffin, 2010; Wasburn-Moses & Rosenberg, 2008).

### **Problem and Research Questions**

This qualitative study used the Critical Incidents Technique (CIT), found in Flanagan (1954), to examine writings reported by first and second year teachers in an alternative special education certification program. It was determined that critical incidents reported by the teachers would provide insight into issues critical to these teachers and assist faculty in improving teacher preparation programs and systems of support for the novice teachers during their initial, often challenging, years of teaching. As many as 30% of new teachers leave the field within three years, and research suggests an even greater percentage of SPED teachers leave the profession within that time frame (Billingsley, 2004). Researchers have examined the causes of special education teacher attrition in broad generalities. However, little, if any, research has examined specific critical incidents experienced by novice, alternatively certified teachers, which likely contribute to stress, burnout, and subsequent attrition. In the critical incidents technique, the participants invite the researcher into their life stories providing a unique glimpse into the struggles and successes of alternatively certified teachers in special education. As Bochner (2009) stated, "stories are the narrative frames within which we make our experiences meaningful" (p. 229). The questions guiding this research were: What are the perceptions of critical incidents for students in an alternatively certified special education program? Are these critical incidents sufficient to address strengths and needs of the program? Will addressing the critical issues assist in retention of special educators in the field? Perhaps if teacher educators can understand the critical stories told by these educators, these educators can be better prepared for the classroom.

## Review of Literature

The Every Student Succeeds Act (ESSA) of 2015, the most recent reauthorization of the No Child Left Behind (NCLB) Act of 2001, places high demands on teacher quality and high stakes accountability for schools. Since the initiation of NCLB, however, schools have struggled to meet the demands of the law due to increasing teacher shortages (Washington, 2016). Many factors contribute to the teacher shortage such as retirement, restricted school budgets, and better opportunities for mathematics and science majors outside of education (Barth, Dillon, Hull, & Higgins, 2016; Haj-Broussard et al., 2016). However, nearly a quarter of all teachers have entered the profession through alternative programs (Redding & Smith, 2016). The National Coalition on Personnel Shortages in Special Education and Related Services (2015) stated there are consistent critical attrition of SPED teachers across the country. Reasons cited include insufficient resources such as supplies and materials needed for daily teaching activities (Kaufhold, Alvarez, & Arnold, 2006) and feeling isolated, alienated, and unsupported by administration (Schlicte, Yssel, & Merbler, 2005).

To combat the chronic scarcity of SPED teachers, many states developed alternative routes for certification, however, the structure and efficacy of these programs are variable (Karge & McCabe, 2014). There are no national standards for alternative special education programs. Many teacher preparation programs are more akin to a “boot camp” than to mentoring caring special educators (Oklahoma State Department of Education, 2017). These teacher candidates may enter the alternative program with no prior teaching experience. They are then placed in a classroom with minimal knowledge of how to teach any children, and most crucially, they have no knowledge of how to teach children with exceptionalities (Ricci & Zetlin, 2013). Nationally, there are differences and similarities in these programs compared to traditional teacher preparation paths. While the content is usually similar in each, the length of time is disparate. Often the students in the alternative programs have fewer requirements for student teaching experience, sometimes consisting of only a brief summer student teaching. Some candidates immediately begin teaching in a classroom in conjunction with their classes. While meeting the need to put a teacher in every classroom, this practice can be detrimental to retention. Connelly and Graham (2009) found that special education teachers who had completed at least 10 weeks of student teaching were more likely to remain in the field than those who had completed less than 10 weeks of student teaching. Likewise, Redding and Smith (2016) contended that insufficient preparation in pre-service training contributes to the high attrition rates for alternatively certified teachers.

In comparison with the substantial amount of research pertaining to SPED teacher attrition, scant research is available pertaining to alternatively certified SPED teachers. Given the increasing number of alternative programs, and in order to strengthen retention, it is imperative that faculty are aware of the unique challenges faced by alternatively certified teachers. Examining critical incidents reported by these teachers may help to understand their experiences and identify variables needing additional support and training.

## **Methodology**

This qualitative study utilized the Critical Incident Technique (CIT) introduced by Flanagan in 1954. This technique helps to signify important, specific events and understand how participants perceive the event (Nassif, Andreassi, & Tonelli, 2016). CIT consists of specific procedures for collecting data about human activity and analyzing the significance of the information to the people involved (Larsson, Sahlsten, Segesten, & Plos, 2011). In fact, Larsson et al. (2011), stated, “The central concept in CIT is a critical incidence which is a major event of great importance to the person involved.” (p. 2). This approach seemed distinctively appropriate in understanding issues of importance to teachers in an alternative special educator program. CIT yields contextualized data reflective of authentic experiences involving significant instances of a specific activity as observed or experienced by research participants. Analysis of the incidents allows researchers to identify patterns, similarities, and differences among participants’ experiences. CIT findings are utilized to support practical outcomes related to education and training and to provide a knowledge base for future research.

## **Participants**

Participants were recruited from a university special education intern program. All participants are over the age of 18 years and all have a bachelor’s degree. This was a purposive sample (Patton, 2014) in that all the participants were teachers of record who enrolled in an alternative special education certification program. They were given an overview of the proposed study at a seminar meeting. After the overview of the study, students were asked if they would like to participate. Those who agreed to participate were provided with a consent form. Students were given the opportunity to read the consent form and ask questions about the study. Students who agreed to participate in the study signed the form.

There were 35 participants in this study. Data were collected during the fall of 2015 and spring of 2016. The alternative special education teacher certification program is at a Hispanic Serving Institution (HSI) located in the western United States. This is a post-baccalaureate program and a majority of the participants were female. The critical incidents were collected during their first or second year of intern teaching on an emergency teaching license. The pre-kindergarten-12<sup>th</sup> grade schools in which the interns were teaching were also largely Hispanic in population and receive Title 1 funding.

## **Data Sources and Collection**

The participants recorded their critical incidents using a specific template twice per academic quarter. This template contained the following prompts, (a) When did the incident occur?, (b) Where did the incident occur?, (c) Who was involved in the incident?, (d) What occurred?, (e) Why was the incident critical? (f), Outcome, and (g) Reflection. Flanagan (1954) emphasized that sample size should be based on the number of incidents collected rather than on the number of participants. Each participant provided at least one incident report: Fifteen participants completed one critical incidence report, 13 participants completed two reports, one participant



completed three reports, five participants completed four reports, and one participant completed five reports. From the 35 participants, 69 critical incidents were reported.

### **Analysis**

Preliminary data analysis was conducted through an initial reading of each response by each researcher. As recommended by Flanagan (1954), analysis of the CIT does not follow a prescribed set of rules, but is a subjective, “flexible set of principles which must be modified and adapted to meet the specific situation at hand” (p. 335). The first step in data analysis for this study consisted of an initial reading of the incidents, which were coded and analyzed for similarities using a constant comparison method, outlined by Lincoln and Guba (1985). The researchers then looked for concepts and themes within the data to identify preliminary categories of the incidences (Rubin & Rubin, 2011). Clarifications were finalized and the incidences were categorized into three main categories and twelve sub-categories. The next step in the analysis was a second reading of the incidents. After the second reading, data in each incident were coded and identified according to categories and subcategories.

The final step in the analysis, as described by Flanagan (1954), was to determine the balance between specificity and generality in reporting the data. The aim was to “determine the optimal level of generality to be used” (p. 347). Mining the incidents took place through color-coding the reports, reviewing researcher notes, discussions between the researchers, and the using an Excel spreadsheet to interpret and report the findings (Flanagan, 1954; Larsson et al., 2011).

### **Trustworthiness**

A triangulation method was engaged to assure the trustworthiness of this study (Patton, 2014). This included the use of member checks, peer review, and observations. One researcher first analyzed the data and to increase the credibility of the data, the researchers discussed the categories together in conjunction with the observations. In the case of crossover of the categories within the incidents, only one category was chosen based on the participant’s emphasis during the “Why” section and the reflection. Specific behaviors were identified and classified and these were discussed by the researchers for trustworthiness (Larsson et al., 2011).

### **Results**

From the results of the analysis emerged three main categories: student behavior, collaboration, and job satisfaction. Within the category of student behavior, subcategories of positive or negative occurrences emerged. Collaboration contained eight subcategories: positive and negative instances with administration, peers, paraprofessionals, and parents. A compelling aspect of the analysis arose during the initial reading of the incidents, some participants seemed focused on a particular category, while others dovetailed into multiple categories. For example, one participant noted a negative occurrence with a student. In the reflection, the participant responded that they were proud of the way they handled the incident and noted it as a positive experience. The final determination was made in the reflection of the incidents to see how the participant reflected on the episode. The last category in Table 1, “Attitude Toward Job” revealed miscellaneous critical incidents that the researchers determined did not fit into any of

the other categories in the table. Instead, in these incidents, the participants were primarily reflecting on their perceptions of the day-to-day realities of teaching. In some instances, the participants were quite pleased with the situation or circumstances. In other cases, that were not. The final category listed attitude toward the job as either negative or positive.

Table 1  
*Number of Incidents Within Categories*

Category	Number of Incidents	Examples of Responses
<u>Student Behavior</u>		
Positive	13	<p>“She was very happy to see her grades and we praised her because we always knew she could do it.”</p> <p>“This was one of the best moments I have had in the classroom. To see Freddy start to smile and realize that he could do something he thought he couldn’t do was the best feeling ever!”</p>
Negative	20	<p>“When the aide intervened, the student became very aggressive, began growling, and attempted to hit and bite the aide.”</p> <p>“I found this event very alarming, what if, God forbid, he had been able to get his hands on a real weapon? This event has put me on a real roller coaster.”</p>
<u>Collaboration</u>		
Administration-Positive	2	<p>“She had very positive things to say about the student interactions and how I implement the program.”</p> <p>“The outcome of this meeting was very positive. We discussed some mistakes and weaknesses, but also my strengths.”</p>
Administration-Negative	6	<p>“I asked about the material (books) I had been waiting on since September!!! He got really mad and told me that I needed to let go of that one.”</p> <p>“Later that evening I received a long email from this admin. She wrote that my students were not in a line when walking from the library to our class...she went on to cc the principle, vice principle, the vice principle she was interim for, and the special ed. Director.”</p>
Paraprofessionals-Positive	1	<p>“My classroom aide is terrific...she truly cares about the students.”</p>
Paraprofessionals-Negative	6	<p>“This incident is critical because it was an example of someone just lying to my face.”</p> <p>“I found my aides still sitting under a tree both scrolling on their cellphones.”</p> <p>“...because my aide’s communication with the mother undermines my authority.”</p>

Parents-Positive	0	
Parents- Negative	2	“She said she instructed her daughter to defend herself and if he bothered her again, she could call him whatever names she needed to call him.”
Colleagues- Positive	2	“... I had the support needed to deal with the crisis situation.” “It is because of her that CHP has not found me walking down the 14 freeway.”
Colleagues-Negative	4	“However, being in the same classroom as her has been very challenging...I believe my experiences as a boy scout and now as a backpacker have given me the ability to survive.” “I let another teacher use my classroom. I came back from lunch and noticed some of my things were missing. Later on during class, I found drugs in my classroom.”
<u>Attitude Toward Job</u>		
Positive	4	“I actually dealt with something without an adverse reaction. I was able to maintain my cool the entire time, use positive direction and lead the lesson...” “This is what teachers strive for, for their students to come back to them reformed and an asset to society instead of a burden.”
Negative	9	“I felt like I personally lost control of my classroom, and my children could have been seriously hurt.” “Even with me being in my classroom by 6 A.M., I feel like there is not enough time to teach my current students...”
<u>Total Incidents</u>	69	

As reflected in Table 1, the category containing the most incident reports was in the area of student behavior. Negative behavior was reported 20 times; whereas positive student behavior was documented 14 times. This concern regarding student behavior is consistent with the literature of alternatively certified teachers in special education and in general education (Lee, Patterson, Vega, 2011). The next category, collaboration, contained 23 reported incidents. Attitude toward the job, with 13 reported incidents, was the most fluid category as some of the incidents were a tapestry of feelings about their profession, student behavior, or collaboration.

### **Discussion and Limitations**

Schonfeld and Feinman, (2012) cited classroom management as the most critical issue that alternatively certified teachers face in their work with students with disabilities. Within this research, the alternatively certified teachers also listed student behavior as the most pertinent issue within their classrooms. Some of the student behavior issues consisted of inattention,

refusal of work, and defiance to the teacher. It was clear from the CIT reports that the participants felt frustrated by negative behaviors and often felt helpless to correct it. For example, this response in reaction to student misbehavior, “I am unsatisfied with my response to the incident...although I did not physically hurt her, I would have because a movement she could have made by moving her head, I could have poked an eye.” In this incident, both the teacher and paraprofessional were inadequately trained to handle the aggressive behavior of the student. This also occurred with another participant as they told about an incident involving a fight between students in a high school, “I need to remember that they always have retaliation on their minds.” This statement indicates the teacher has not received training in positive behavior supports and was relying on assumptions and stereotypes of behavior. The findings from this study using critical incidents confirmed that alternatively certified teacher preparation programs need to focus more heavily on classroom management strategies and behavior modification techniques. There were numerous critical incidences reported regarding student behavior that happened outside of the classroom (e.g., physical education classes, recess, and transition times). It is important for alternatively certified teachers to understand that these incidences, even though they occurred outside of their classrooms, remain issues that the classroom teachers will need to address. For example, training in positive behavior supports such as a token economy could be implemented for problematic students and encourages appropriate behavior when these students are in other classrooms.

The results of this study indicate there is a need for the alternatively certified teachers to understand how to handle negative student behavior without the need for administrative oversight unless the student is in danger of hurting himself/herself or others. If the alternatively certified teachers practiced positive behavior supports in their own classrooms, then the likelihood of the negative collaborative/administrative incidences may also decrease. The authors also suggest that evidence-based practices are better learned within a strong mentorship relationship coupled with open communication and consultation between the preparation programs and the school district.

Finally, critical incidences related to the negative student behavior contained roughly five circumstances noting students with autism spectrum disorders were demonstrating challenging behavior and some of these behaviors caused office referrals. With proper training and understanding of these students’ disabilities, the alternatively certified teachers would recognize these behaviors are a manifestation of the student’s disability and not misbehavior. These teachers are responsible for constructing a classroom behavior modification plan and perhaps an individualized behavior modification plan to serve students with autism spectrum disorders better.

Furthermore, the researchers found that the alternatively certified teachers delineated multiple negative incidences when working with paraprofessionals. Even within the special education certification teacher preparation programs, there was limited time or resources to educate pre-service teachers to the knowledge and skills necessary for working with paraprofessionals. The alternatively certified teacher programs are no exception. Unfortunately, when teachers are faced with challenges from paraprofessionals (e.g., communication, student and parent relationships, and program operation), the alternatively certified teachers are at a disadvantage in “soft” skills requiring collaboration with various stakeholders. According to one participant, as told in the

critical incident report, “I realized communication with my aide is very poor, realized this. I also realized that I should stop ignoring the behavior of my instructional aide as she ignores some of the students.”

Negative incidents with paraprofessionals, peers, and parents seemed to be a decisive source of frustration for many of the participants; however, it was noted that few of them seemed to have the management skills to effectively handle the incidents. One participant reported how her peers were speaking poorly of her behind her back, “I was shocked and saddened by the news that a colleague would slander my name in such a way.” As for the outcome, the participant reported, “The outcome is still underway. We agreed to contact each other more and talk about any concerns we have, but the one teacher is still making hurtful remarks about the other.” The researchers suggest that the alternatively certified teacher programs spend ample time focusing how to work in partnership with the myriad people with whom they come into contact. The researchers also suggested activities such as classroom team meetings, preparation for specific roles, planning and scheduling daily activities for the paraprofessional to complete with students, and reinforcing the paraprofessionals’ contributions.

The researchers understand that the alternatively certified teachers described many positive critical incidents, as well as negative. The researchers were pleased to read these positive circumstances and understand that, even though working with students with disabilities can be challenging, this work is a most rewarding career choice. The researchers felt it necessary to elaborate on the some of the major negative critical incidences delineated by the alternatively certified teachers to bring attention to the ongoing issues within the field of special education and suggest ways to overcome these issues.

The results of this study indicate that alternative special education teacher programs may need to focus on the importance of classroom management, collaboration, mentorship, and evidence-based practices. It is essential for the alternatively certified teachers to be thoughtful reflective practitioners. Alternative certification programs should strive to prepare the alternatively certified teachers to think critically through challenges within their classrooms. Finally, the alternatively certified teachers will need to be consumers of empirical research for those effective evidence-based practices in their work with students with disabilities.

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# **Best Practices Article: Gradually Increasing Individuality: Suggestions for Improving Alternative Teacher Education Programs**

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## *Abstract*

*The purpose of this article was to examine the use of a gradual release of responsibility (GRR) model (Pearson & Gallagher, 1983) embedded in a co-teaching framework (Heck & Bacharach, 2016) during the student-teaching portion of an alternative teaching licensure program. The goal was to improve an already existing student-teacher field experience summer residency program at a large Midwestern university by better attending to its desire to help all teachers become better equipped with their selection of teaching strategies.*

*Keywords: alternative certification, teacher preparation, mentoring, co-teaching*

Please contact the author for all correspondence regarding the content of this article.

## Background

The billboards are back! All across the country, there has been a re-emergence of billboards urging teachers to apply for jobs in various school districts. Once again, the alarms are going off, warning of the growing teacher shortages and of schools struggling to fill their teacher vacancies (Sutcher, Darling-Hammond, & Carver-Thomas, 2016). In response, state educational departments and university teacher programs have begun to make changes to their existing policies and programs (Aragon, 2016). According to Sutcher, et al. (2016), there was an estimated teacher shortage of 64,000 teachers in 2015. Sutcher, et al. (2016) said, “unless major changes in teacher supply or a reduction in demand for additional teachers occur over the coming years, annual teacher shortages could increase to as much as 112,000 teachers by 2018, and remain close to that level thereafter” (p. 16). Increased teacher retirement, coupled with the challenge of teacher retention is both educationally and financially disastrous for schools. The Alliance for Excellent Education (2014) found that the high volume in teacher turnover costs school districts over \$2.2 billion a year. One common response by states has been to change the parameters for teacher licensing. States have attempted to expedite the process, and enlarge the applicant pool for individuals becoming teachers by removing previous requirements for licensure (Kamenetz, 2014). Alongside this response, universities also have begun to increase the availability of “alternative” teacher licensing programs they offer (Aragon, 2016). For example, Minnesota Governor Mark Dayton signed into law a new state alternative teacher certification program in 2011. With bipartisan support, Governor Dayton and his fellow supporters argued that:

Minnesota needed to be able to cast a wider net to recruit and train top teaching talent, particularly mid-career professionals who didn't want to invest the time it would take to earn a teaching degree from a traditional college or university (McGuire, 2012, para. 3).

The goal of Minnesota’s alternative teacher certification program was to recruit more professionals into becoming teachers. Proponents of the legislation said, “an alternative certification program ... would reinvigorate the state's teaching ranks and provide another weapon in attacking the achievement gap between white and minority students” (McGuire, 2012, para. 3). After the legislation passed, Minnesota had only one alternative licensing program. Six years later, Minnesota currently has 11 distinct alternative licensing programs (Minnesota Board of Teaching, 2015).

Another problem widely identified and attended to is the issue of teacher retention and ways to shrink the alarming rates of teacher exodus. The Alliance for Excellent Education (2014) found that about 13 percent of teachers, which is about half a million teachers every year, either change schools or change professions every year. Research has shown that students do worse on standardized tests in reading and mathematics in years when teacher turnover rates were high (Ronfeldt, Loeb, & Wyckoff, 2013). In fact, Ronfeldt, et al. (2013) found there is a disruptive impact of teacher turnover beyond changes to teacher quality. In other words, the act of teacher turnover has an adverse effect on schools regardless of the quality of teacher who leaves. In particular, the Alliance for Excellent Education (2014) study found teacher turnover is especially high among beginning teachers, with 40 to 50 percent leaving the profession after five years. In response, schools have begun to focus more attention to induction supports for beginning teachers. According to Ingersoll, “The percentage of teachers that get some kind of induction has

doubled over the last couple of decades” (as cited in Phillips, 2015, para. 19). Collectively, research highlights a variety of needs that must be met in order for beginning teachers to continue teaching. Teachers need: equal support, especially in high needs schools (Johnson, Kardos, Kauffman, Liu, & Donaldson, 2004), emotional support (Odell & Ferraro, 1992) to feel successful (Fluckiger, McGlamery, & Edick, 2006), and to develop desire and persistence to continue teaching (Buchanan, Prescott, Schuck, Aubusson, & Burke, 2013). Studies have also shown that having a mentor in the same field as a beginning teacher reduced the risk of leaving in the first year by 30 percent (Ingersoll & Strong, 2012). In particular, studies have found that mentoring with relation to collegial support equaled lower rates of turnover in beginning teachers (Guarino, Santibañez, & Daley, 2006).

These studies reinforce the specific and unique needs beginning teachers have when entering and remaining in the profession. In the noise and rush to fill classrooms with teachers, new problems are created when short term solutions are prioritized over long term improvements. Making teaching a more attractive profession to a wider audience, or lowering the standards to becoming a teacher, might ease fears over classroom shortages, but, “if teachers are hired without having been fully prepared, the much higher turnover rates that result are costly in terms of both dollars spent on the replacement process and decreases in student achievement in high-turnover schools” (Sutcher, et al., 2016, p. 6). While it is helpful to look at ways to increase the teacher pool, and help support the retention of teachers who are already in the classroom, we must not forget to look at the importance of teacher preparation programs and the unique supports needed for preservice teachers, especially in alternative licensing programs.

Preservice teachers and their future students are becoming more diverse (Krummel, 2013). As states and universities continue to draw a wider net for potential teachers, teacher licensing programs, who are creating or expanding their alternative routes to becoming a teacher, will need to acknowledge and respond to the growing diversity of candidates that will be looking to them for support and guidance in their quest to becoming teachers. Teacher preparation programs provide this support through coordinated clinical experiences and university coursework, and “how teacher candidates use both when they enter teaching may be one of the strongest characteristics of preparation programs” (DeMonte, 2015, p. 10). This fusion of coursework and classroom teaching experience has been the standard approach (Wentz, 2001) to student teaching since the 1920s (Guyton & McIntyre, 1990). According to Bacharach, Heck, and Dahlberg (2010), while the earlier method of teacher preparation relied on the “sink or swim” model, current programs have begun to utilize co-teaching as a way to support preservice teachers gradually during their student teaching.

### **Theoretical Perspective**

The purpose of this article was to examine the use of a gradual release of responsibility (GRR) model (Pearson & Gallagher, 1983) embedded in a co-teaching framework (Heck & Bacharach, 2016) during the student-teaching portion of an alternative teaching licensure program. The goal was to improve an already existing student-teacher field experience summer residency program at a large Midwestern university by better attending to its desire to help all teachers become “fluent, flexible, and self-regulated [in their] selection and use from a repertoire of strategies –

namely, successful transfer of learning for comprehension [in their understanding of teaching]" (Wiggins, 2015, para. 12).

The author has chosen to take up the challenge set forth by Vagle (2012) and engage with his first plea to educators to "move away from a developmentally responsive vision to a contingently and recursively relational vision" (p. 12). Vagle (2012) argued that schooling of young people is too often blinded by assumptions that prioritize developmental stages over "seeing young adolescents in innumerable, lived (de-naturalized) contexts" (p. 20). The author draws a parallel critique of stage development connecting Vagle's (2012) critique on how schooling of adolescents assumes a certain universal set of norms when it comes to child development with a similar assumption toward the development of preservice teachers. Often, the idea of stage development is applied to preservice teachers and their assumed needs and stages of growth. This assumption is most evident in the way preservice teachers are inducted into the profession through a clinical co-teaching experience, with preservice teachers being partnered with cooperating teachers as their mentors.

In order to confront the pervasiveness of stage development, the article highlights two theorists and their beliefs in the need for individuality to be recognized and honored. Gadamer (1975) wrote about the concept, *fore-meaning*, as it related to the uniqueness of each individual in making meaning. Gadamer (1975) said, "all that is asked is that we remain open to the meaning of the other person or text" (p. 271). Bakhtin (1993), wrote about *answerability*, or the obligated uniqueness each person has to themselves and others. Bakhtin (1993) argued, "uniqueness...is compellingly obligatory... everyone occupies a unique and never-repeatable place, any being is once-occurrent" (p. 40). Gadamer's (1975) concept of *fore-meaning* and Bakhtin's (1993) concept of *answerability* are useful theoretical tools to both see and respond to each individual teacher candidate as a unique person with unique experiences, strengths, and needs, as a way to push against the creation of programmatic developmental norms, assumptions, and expectations. By utilizing a critical stance on the normative assumptions of development, the author will attempt to explicate the ways in which development is at work in an alternative teacher licensure program as a means to offer insights for other programs around the country.

### **Methodology**

Guided by these two theoretical concepts, the question for this article was as follows: How might the theoretical concepts of Gadamer (1975) and Bakhtin (1993) be used to reconceive the utilization of the gradual release of responsibility (GRR) model in a co-teaching environment designed to support the growth of preservice teachers?

Data came from an alternative licensing program at a large Midwestern university. This was conducted during the summer of 2015, when 30 elementary education preservice teachers enrolled in an alternative licensing program began university coursework and student teaching. The GRR model was the framework for the summer residency program as it related to the use of co-teaching in the clinical student-teaching placements. The summer residency program was divided into three distinct parts and lasted nine weeks. Part I focused on developing a teacher identity, understanding the local context, and foundations of teaching coursework. Part II offered

a space for application and testing of practices through a supported field experience. Part III was designed to support synthesis, reflection, and planning forward.

Using Gadamer's (1975) *fore-meaning* and Bakhtin's (1993) *answerability*, the author analyzed the structure of the first week of Part II. During Part II of summer residency, preservice teachers (teacher candidates) worked with experienced cooperating teachers (teaching mentors) and received individualized coaching support from a university supervisor (university mentor), which helped to support the link between daily instructional practice and research and theory from their graduate coursework. This co-teaching experience in Part II was designed to provide a concrete link between the theoretical knowledge learned in Part I (and continued in Part II) with the experience of designing, facilitating, and reflecting on daily classroom instruction in a supportive setting using scaffolding.

The goal of the program's first week of student teaching (Part II) was to provide opportunities to build relationships between preservice teachers and their students by helping build classroom culture, create routines, and establish guidelines and expectations for students while "seeing" what a complete teaching day looked like. Teaching mentors served as the lead for the planning and teaching during this week with the very important role of modeling their instructional planning and design decisions with teacher candidates during the co-planning process. During the first week, research focused on the experiences of the teacher candidates and data was gathered from multiple sources. Data included daily conversations with teacher candidates, cooperating teachers, and university supervisors. Daily observations were also conducted by the researcher throughout the entire five-week student teaching portion of the summer residency program.

After examining the data from the first week of Part II through the lens of Gadamer's (1975) *fore-meaning* and Bakhtin's (1993) *answerability*, the study found three potential "openings," or opportunities for a reimagined program design. Here are three opportunities/questions to consider in which revision could occur:

1. How might our understanding of *fore-meaning* influence the types of questions that are asked of candidates in pre-residency surveys? What should programs do with this information?
2. What would it look like to acknowledge our inherent bias toward traditional models of teacher development based on the perceived past and future of the candidates, and instead recognize our teachers in the present while allowing for more possibilities and places of individualized support?
3. How could the program better respond to each individual candidate with an "obligation" to honor their uniqueness?

## Results

Looking at each question and applying the theories of *fore-meaning* and *answerability*, the questions are "opened-up" for a reimagined and improved alternative teacher preparation program. Here are three reimagined programmatic commitments that might improve the development of the next group of teacher candidates who enter this or other similar programs.

### ***Fore-meaning is Contingent***

Based on Gadamer's (1975) theory of *fore-meaning*, one cannot simply rely on one's own *fore-meaning* in analyzing another person or text. This is precisely where the program needs to begin its redesign. Too frequently the program allowed itself to construct an image of a "normal" preservice teacher in order to create systems of support. In doing so, the program failed to let the actual candidates "speak" to them. For example, during the first week of student teaching, while some teacher candidates reported that their teaching experiences were lacking substance, as if their natural instincts were being blocked in order to follow a set of daily expectations, others voiced concern that they needed more time to practice skills. One teacher candidate said, "I am very comfortable being around kids and getting to know them, but I need a lot more help with designing lesson plans." This candidate, who did have extensive nonacademic experience working with children, was being supported in a manner not best suited to the candidate's needs. The task for programs is to find balance between programmatic expectations and individual teacher candidate's needs.

This task is paramount to recognizing each individual candidate because as Gadamer (1975) wrote, "[this] is obviously not a matter of a single, 'conscientious' decision, but is 'the first, last, and constant task'" (p. 269). In other words, programs need to meet each candidate where they are before they start teaching, and begin to form individual plans of support based around them. Obtaining more information about teacher candidates to ascertain their "funds of knowledge" (Vygotsky, 1978) can allow programs more insight into their candidate's previous experiences with teaching, working with students, and collaborating with adults in professional learning situations. One way to recognize the importance of a contingent program design would be to create pre-residency surveys that could be collected and analyzed to better design a more individualized program for each candidate.

### ***The GRR Model through a Recursive and Temporal Lens***

In recognizing the uniqueness of each candidate, the program must take the initial model for GRR, first used in summer 2015, which was too simple and assumptive, and go deeper into what it means to be a teacher by engaging in the act of teaching on a recursive level. While using a GRR model for teacher development does limit the availability of possible outcomes, experiences, and expectations, it can be adjusted to allow for more possibilities and places of support. Gadamer (1975) wrote of this possibility when he talked about time and distance. "Temporal distance obviously means something other than the extinction of our interest in the object. It lets the true meaning of the object emerge fully.... [and]... new sources of understanding are continually emerging that reveal unsuspected elements of meaning" (p. 298). In other words, "temporal distance" is not about overcoming our prejudices, but is about recognizing them and using that recognition to fuel new possibilities of understanding. For example, the GRR framework leaned heavily toward teacher candidates working on three aspects of teaching: student interactions, lesson planning, and instruction/assessment.

One possible change programs could make when using a co-teaching model is to be more explicit with candidates when they are being asked to engage in particular aspects of co-teaching. For example, when teacher candidates are primarily observing their cooperating teacher, what

exactly are they observing? How are they deciding what to watch, ask questions about, replicate, and challenge in their own future teaching? In supporting teacher candidates, it is helpful to recognize the importance of communication and transparency through the act of making thinking visible. For preservice teachers, this action occurs on three levels. First, there is much to gain from having cooperating teachers share insights into explaining their actions and instructional decisions. Second, through practice, teacher candidates can begin to share their own understandings, misconceptions, observations, and feelings. Third, these skills can then be shared by beginning teachers to their future students (McLean, 2012).

### ***Answerability is Relational***

Lastly, it is not enough to acknowledge the inherent uniqueness in each and every individual, and then continue to design support around a progression of development based on an assumption of universal needs. Do teachers really develop in a linear, or “staged” fashion, improving one skill after the next, always checking off a new box of growth? The answer is “no.” Teachers do not have a consistent step-by-step development within themselves, or in relation to their colleagues. Bakhtin (1993) said, “everyone occupies a unique and never-repeatable place, any being is once-occurrent” (p. 40). This means that in every action taken, there is a “never-repeatable” action that only the teacher can create. While teachers are in the beginning intersections of their own development, they are creating never repeatable acts that begin to grow their teacher identity and thus foster their individual development. For a program to support each individual candidate, it must act with an obligation to honor that candidate’s once-occurrent presence in the present, while simultaneously recognizing that a once-occurrent event is a product of all the events in a person's life. Simply put, programs need to place the responsibility for “developmental” support on their ability to interact with each candidate equitably.

### **Educational Importance**

Teachers develop and change over time, but this change and development does not occur in universal stages. There is a need to fundamentally change the way programs use the GRR model with co-teaching and pivot from a large scale, universally normed programmatic structure, toward an individualized, responsive, and flexible utilization of GRR. University programs need to help foster an increase in individuality by creating spaces that recognize the individual teacher and support the creation of a community of learners who are both *living* in university teacher education programs, and learning how to support, excite, challenge, and ultimately provide rich educational opportunities of learning for all their students.

If we truly wish to achieve the promise of equitable educational opportunities for all students, we must not neglect the need for preservice teachers to also be given an equitable opportunity to develop a pedagogy that represents their uniqueness. What if programs were to move away from the idea of preparation in an “additive” sense, where alternative teacher education programs seek to find and relay best practices to teacher candidates and instead conceptualize teaching as “adaptive,” where teachers learn to confront historical inequities in our educational system with an eagerness to serve all learners and an appreciation of the ever-changing contextual realities of their classrooms?

Related to this perspective is found in Aguilar (2013):

Although art may seem magical, sometimes effortless, and perhaps impossible to replicate, it requires scientific knowledge and skills. The end product may be a delightful surprise ... but a great deal of intention, planning, thought, and knowledge lie deeply embedded within the outcome (p. xii).

Teacher preparation programs can create both a structure of support that is embedded with core principles around pedagogy and practice and still be intentional around creating the space that allows for the unknown, *never-repeatable* moments of individual development to occur.



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# **Editor's Perspective Article: The Future of Education through the Lens of Disruptive Innovations**

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## *Abstract*

*The focus in this issue's Editor's Perspective article is on the future of education examined through the lens of disruptive innovations. Recent technological developments have changed the ways in which many industries have operated, and while we have not seen much impact on schools and universities yet, those changes will likely manifest not far into the future. This article addresses several areas of change that new teachers may experience in their careers and lifetimes. This will be contextualized through alternative certification preparation for teachers.*

*Keywords: future of education, technology, alternative certification*

The views expressed in this article are the editor's views and do not necessarily reflect the views of the National Association for Alternative Certification.

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I have been interested in how technology changes both society and education for a very long time. For example, in the 1990s I had imagined that one day people would be able to communicate in modern languages through a headset with an ear piece, glasses, and microphone so that the other person could both hear and speak in his or her native language. The glasses would be used to help the user read in the other language. I had no idea how close we would get to this point by 2018 with automatic translation apps and software including Google Translate. Science fiction becomes reality. I'll have more to write about that later in this article.

The ubiquity of the Internet and smart phones in our lives has radically transformed how we live from buying plane tickets, banking, shopping, socializing, and soon the way in which we learn. Few could have predicted in the 1980s or 1990s how much change we would experience over such a short time. Entire industries have been disrupted by this seemingly simple technology that is essentially a communication tool. Newspapers, record companies, book publishers, traditional retail, and the travel industry, among others, have seen their profits reduced and/or redirected to other more innovative players such as Amazon and Google. The profitable New York City taxi industry, with its formerly desirable and expensive medallion system, enabled medallions that conferred the right to operate a taxi to be sold for approximately \$1.3 million in 2013, and in 2017 medallion prices hit a low of \$241,000 with averages between \$325,000 and \$750,000 (Agovino, 2017).

A comparison can be made between the Internet and Guttenberg's printing press in the mid-15<sup>th</sup> century, which would launch the scientific revolution soon after due to quick, cheap, and efficient spread of knowledge through print. Researchers had a better way to read what other researchers had produced, and they in turn could build on that knowledge and disseminate to others who were working on their own research. My hypothesis, as articulated in my book (Evans, 2014), is that we may enter a new golden age, and perhaps another scientific revolution, as we move toward the mid-21<sup>st</sup> century. While the Internet and smart phones certainly provide us with plenty of opportunities to enjoy entertainment and waste our time, valuable information can be gleaned quickly and efficiently at almost any time that we have a Wi-Fi connection or cell signal. This has profound implications on how we teach and learn in the coming years. Instead of focusing on facts and dates, teachers have opportunities to explore deeper and better topics. For example, children in the United States memorize that Christopher Columbus sailed in 1492. While that date is still very important in an historical context, it can be found rather quickly through a quick online search. In the United States in 2018, many people have a smart phone with them at nearly all times. The implication from this is that this information can be found quickly and effectively. The implication for teaching is that perhaps not as much time is required for dates and facts as we might devote more time for deeper learning such as, for example, a conversation about the implications of Columbus' voyage on the Americas and the people who were already living there.

We already see this situation arise in my area, mathematics. When I was in school, I learned how to take the square root of non-perfect square by hand (e.g., finding the square root of 10). However, later classes didn't spend time on this cumbersome process in the way that some schools may choose to deemphasize long division given the ubiquity of the hand held calculator. In fact, many people today have calculators on them at all times because of their smart phones.

Returning to the discussion of learning language, we're not very far from using glasses and headsets to communicate in another language, albeit through our phone which I didn't predict, to communicate to people on a trip overseas in a tourist or business environment. Will language instruction in school cease to be important? Probably not right away, if at all. Studies are clear that learning a second, or third, language has positive cognitive benefits beyond being able to communicate with another person in a different language (Delistraty, 2014; Marian & Shook, 2012). This means people will still learn other languages, but not necessarily for the same reasons that you and I would have. However, before we arrive there, we still might see technology change the way we learn language in the very near future. For example, a study showed that using the app, Duolingo, could be as effective as spending approximately one-third of the time as a traditional one-semester college class in Spanish, if we consider homework and class meeting hours (Vesselinov & Grego, 2012). The impact this might have on language instruction is that technology such as Duolingo would allow teachers to require students to study vocabulary and sentence construction through the app at home, and then use valuable class time for more important and bigger ideas such as practicing what was learned, discussing culture, and other important ideas that many teachers currently do not have time to do. In my own area, mathematics, we can see this happening in the "flipped" classroom in which students learn the basics at home and then use class time to practice, which is the opposite of how we traditionally teach mathematics (i.e., learn the basics in class and practice at home). The popularity of the Khan Academy videos relate to this.

The implications for disruptive innovations in education is a movement away from what technology can provide for us through computer software (including calculators and statistical software in a mathematics example) and online search, and a movement toward more critical thinking and deeper learning. At least for now, and until some point where artificial intelligence might replace every job, teachers still will be needed to foster deep thinking in their students. Teacher education programs will need to adapt to this new environment in the way newspapers, record companies, and retail outlets have had to adapt and will continue to adapt. Increasingly, we're likely to see a continued shift toward alternative teacher certification and a continued need for high quality teachers. Currently, one in five new teachers go through alternative pathways (Kamenetz, 2014; U.S. Department of Education, 2013), and *U.S. News and World Report* cited teaching as one of seven peak fields of the future including 1.4 million new jobs by 2020 (Favreau, 2013). The major shift will be in our expectations for good teaching. Teachers will be expected to foster deep thinking within their students, and also be adept at using technology that supports good learning. At least for the foreseeable future, good teachers are highly needed.

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