

Transferability and Alignment of Program Exemplars in Alternative Teacher Preparation

Juliann Sergi McBrayer

Georgia Southern University

jmcbrayer@georgiasouthern.edu

Teri Denlea Melton

Georgia Southern University

Abstract

Educational school leaders are experiencing challenges that include high teacher attrition rates and staffing difficulties. The goal of this study was to determine if program exemplars from traditional teacher preparation were transferable to, and aligned with, alternative teacher preparation in an effort to provide viable options for those desiring to enter the teaching profession. A survey ascertained perceptions about the effectiveness of alternative teacher preparation from the lens of those implementing the programs. Of the program exemplars identified in the literature, 32 of 37 (86.5%) were concluded to be highly transferable and aligned, demonstrating that traditional and alternative teacher preparation programs provide choice to those seeking to attain teaching credentials, as well as provide school leaders options for hire. Findings of this study are intended to support alternative teacher preparation programs in an effort to increase the number of effective teachers.

Keywords: alternative teacher preparation, non-traditional teacher preparation, teacher attrition, teacher certification, teacher preparation program effectiveness

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

Introduction

Currently, the growing shortage of highly effective teachers in public schools is reaching alarming numbers with up to 50% of new teachers leaving the field within their first five years of teaching, in turn costing up to \$2.2 billion annually (Haj-Broussard et al., 2016; Ingersoll, 2003; Lambert, 2006; Miron & Applegate, 2007). The challenge to our schools is not just a predicted teacher shortage, but rather a shortage of *great* teachers in the schools and communities where they are needed most (Duncan, 2009). In classrooms headed by teachers characterized as most effective, research has determined that students demonstrated higher achievement gains, whereas in classrooms led by least effective teachers, student achievement gains were lower supporting the notion that teacher quality is linked to student learning (Berry, 2010). In addition, teacher turnover fosters instability and negatively impacts teaching quality, particularly in schools that most need stability (Donaldson & Johnson, 2011).

The quality of a teacher preparation experience, and how well this professional learning is related to relevant pedagogical practices, influences students' academic performance (Berry, Daughtrey, & Wieder, 2009). Staffing schools with better-prepared teachers is beneficial to lowering teacher attrition rates and to achieving higher levels of teacher competence in an effort to improve student achievement (Darling-Hammond, 2003; Marzano, 2003). Rosenberg, Boyer, Sindelar, and Misra (2007) maintained that little is known about how different types of teacher education programs contribute to teacher supply, retention, and/or quality. Teacher preparation programs are intended to address the needs in public education to recruit, hire, and retain highly effective teachers for public school classrooms. However, research on beginning teachers has detected significant differences in the perceptions of how well graduates believed they were prepared after extended, formal teacher preparation in contrast to teachers entering the classroom through alternative licensure pathways, both of which often lack many of the criteria needed for efficient teacher preparation (Darling-Hammond, Chung, & Frelow, 2002; Clarke & Thomas, 2009). Identifying the specific teacher qualifications, characteristics, and classroom practices that are most likely to improve student learning is pertinent (Darling-Hammond, 2006). School leaders need to hold high expectations for teacher preparation, as well as provide support to teachers as they transition from teacher preparation programs to classrooms to achieve quality teaching and improved student learning in all schools (Lefkowitz & Miller, 2006).

For the purpose of this study, the terms non-traditional teacher preparation and alternative teacher preparation were used interchangeably. Non-traditional teacher preparation provides teachers with choice and schools with an increased hiring pool. According to Gatlin (2008), non-traditional teacher preparation is explained as routes specifically designed to recruit, prepare, and license individuals who hold a bachelor's degree in content fields including education without certification credentials, yet are in careers other than education and provide opportunities to transition into teaching. However, as with any teacher preparation program, alternative teacher certification programs vary in structure, duration, intensity, curriculum, participant characteristics, and the targeted market (Mitchell & Romero, 2010).

The typical regime for certification in public education has become one of which individuals who complete training in traditional teacher education programs are deemed to be certified to

teach; individuals who are not traditionally certified may also pursue opportunities to teach with the required pre-service training via non-traditional pathways (Arias & Scafidi, 2009). Non-traditional teacher preparation first emerged to address teacher shortages and failures of traditional licensure programs to successfully prepare highly effective teachers to improve student achievement. In recent years, various alternative teacher certification programs have been developed, and the number of teachers obtaining teaching certificates through routes other than traditional teacher preparation is on the rise (Feistritzer, 2007; Sass, 2011). Currently, all 50 states and the District of Columbia reported that they had at least some type of alternate route to teacher preparation and certification (Mitchell & Romero, 2010).

Alternative teacher preparation programs have been successful in expanding the pool of teacher candidates and in increasing the diversity in the teacher workforce without sacrificing quality (Sullivan, 2001). In a seminal study, four out of ten new public school teachers hired since 2005 were prepared through alternative teacher preparation, which is a 22% increase from teachers hired in previous years (Heitin, 2011). In addition, one study found the three-year teacher retention rate for completers of alternative preparation programs in this study was 74% in 2014 (Haj-Broussard et al., 2016). Policy makers who invest resources in alternative licensure programs invest wisely, as these teachers appear to persist in their teaching careers at roughly the same rate as regularly prepared teachers (Zhang & Zeller, 2016).

The research is mixed on how successful traditional teacher preparation pathways are in preparing a sufficient number of highly effective teachers to meet the growing hiring needs of public schools, particularly in critical needs and subject areas such as mathematics, science, special education, and foreign languages (Gatlin, 2008; Viadero, 2009). The goal of alternative teacher preparation is to support innovative practices, rather than replicate traditional approaches that have presented mixed findings on effectiveness in preparing teachers (Gatlin, 2008). The research on alternative teacher preparation programs has been, despite concerns, important and necessary. According to Darling-Hammond (2010), there are too few direct pathways from traditional universities that are designed to meet schools' staffing initiatives because colleges and universities do not always provide an adequate supply of teachers in all of the fields where they are needed because most states do not assess and manage teacher supply and demand. Teachers who have completed a traditional teacher preparation program were not any better prepared for curricular and pedagogical delivery than teachers who chose alternative pathways into the classroom; in fact, there was no significant difference in the performance of students whose teachers were prepared through non-traditional routes and those whose teachers completed traditional teacher preparation pathways (Viadero, 2009).

Research has shown that alternative routes to certification are attracting people who would not have entered teaching if these programs were not a possibility (Jacobson, 2005). The unprecedented demand for new teachers, together with the need for increased quality in the profession, means that schools must develop strategies for identifying teachers who have the greatest potential for achieving success in the classroom, and who may have not entered teaching if these tactics were not in place. If the policy goal is to maximize student achievement, states and school districts should have aggressive programs in operation to recruit capable individuals to enter teaching through both traditional and alternative pathways and mechanisms to evaluate these programs need to be in place (Arias & Scafidi, 2009). In order to foster the development

and implementation of innovative teacher preparation, alternative routes to teacher preparation and certification must prioritize effective, high quality teacher education (Yancey, 2006).

In order to address the growing need for highly effective teachers, both traditional and alternative teacher preparation programs have been offered. Research suggested that program exemplars required for implementing effective traditional teacher preparation vary widely (Boyd, Goldhaber, Lankford, & Wyckoff, 2007; Gatlin, 2008; Sullivan, 2001). Programs exemplars pertinent to alternative teacher preparation programs also vary widely and are very diverse both across and within states (Feistritzer, 2007; Humphrey, Wechsler, & Hough, 2008). Existing research on the program exemplars indicative of success in both traditional and alternative teacher preparation is readily available (Anthony & Kritsonis, 2006; Arias & Scafidi, 2009; Boyd et al., 2007; Chin & Young, 2007; Darling-Hammond, 2006, 2010; Feistritzer, 2007; Gatlin, 2008; Heitin, 2011; Humphrey, Wechsler, & Hough, 2008; Nagy & Wang, 2007; Reese, 2010; Mitchell & Romero, 2010; Walsh & Jacobs, 2007; Yancey, 2006). However, the variation and quality within these programs has not been adequately determined and thus, further research is warranted.

Undoubtedly, effective teaching begins with effective teacher preparation, including both curricular and pedagogical best practices to be adequately prepared to teach (Darling-Hammond, 2006). In essence, program exemplars are criteria of programs that effectively prepare and train highly effective teacher candidates with the ability to teach the core concepts of the discipline in the areas of curriculum and pedagogy, differentiation, assessment, relevance and rigor, and professionalism and support so that these concepts are deeply understood and teachers are prepared to teach diverse learners (Darling-Hammond, 2006).

Program exemplars that are indicative of teacher preparedness were identified in traditional teacher preparation to better prepare teachers for classroom teaching and learning and are outlined in a comprehensive and seminal study (Darling-Hammond, 2006). The study included a survey to ascertain teachers' preparedness upon completion of their traditional teacher preparation program from the perspective of the program completer. For the purpose of this study, Darling-Hammond's (2006) survey was modified in order to ascertain perceptions of program providers implementing alternative teacher preparation programs to determine if identified program exemplars in traditional teacher preparation programs were transferable to, and aligned with, alternative teacher preparation programs. Shifting the audience for the survey was intentional to capture data through another lens to determine teacher preparedness. This study specifically focused on a Georgia-based alternative teacher preparation and certification program (Georgia Teacher Academy for Preparation and Pedagogy [GaTAPP]). The GaTAPP program is a series of pathways to earn Georgia teacher certification that are performance-based, job-embedded alternate to traditional teacher preparation routes for those who hold a Bachelor's degree or higher in the content area of which they seek to teach and is under the guidelines and rules of the Georgia Professional Standards Commission, the sole teacher licensing agency of Georgia.

Because no research to date has examined whether or not program exemplars identified as being indicative of traditional teacher program effectiveness were transferable to, and aligned with, alternative teacher preparation and certification programs, further research is warranted. The

findings may provide increased support for alternative pathways to teacher preparation as a viable option to those desiring to enter the teaching profession. Alternative teacher preparation may be the answer to preparing, certifying, hiring, and retaining highly effective teachers in the public school arena in an effort to meet school staffing needs and combat teacher attrition.

Research Questions

This study examined the extent to which program exemplars identified as being indicative of efficient traditional teacher preparation were transferable to, and aligned with, non-traditional teacher preparation to prepare highly effective teachers. The following overarching research question guided this study: Are traditional teacher preparation program exemplars transferable to, and aligned with, non-traditional teacher preparation programs, specifically in the Georgia Teacher Academy for Preparation and Pedagogy (GaTAPP)? The following sub-questions supported the overarching question: Which traditional teacher preparation program exemplars are transferable to non-traditional teacher preparation?; To what degree are traditional teacher preparation program exemplars aligned with non-traditional teacher preparation?; and, What program exemplars not identified in the literature are perceived by non-traditional programs providers as being indicative of efficient teacher preparation?

Methods

A comprehensive review of the literature on teacher preparation suggested that there are many similarities, as well as variations, in how both traditional and non-traditional teacher preparation programs operate. However, the work of a leading researcher in the field of teacher preparation identified in a seminal study 37 program exemplars that were needed for efficient teacher preparation and training in traditional teacher preparation pathways. This research resulted in a survey published in the book *Powerful Teacher Education: Lessons from Exemplary Programs* (Darling-Hammond, 2006). For the purposes of this study, the survey was modified and used to determine how well program exemplars proven efficient in traditional teacher preparation were transferable to, and aligned with, non-traditional teacher preparation to efficiently prepare highly effective teachers for classrooms. The researcher shifted the survey audience from that of the teacher completer to that of the non-traditional program provider to ascertain their perceptions about the efficacy of the alternative teacher preparation from a different lens.

The researcher reviewed the program exemplars for trends and patterns and identified five component areas that logically fit all 37 program exemplars, which included curriculum and pedagogy, differentiation, assessment, rigor and relevance, and professionalism and support. Because the survey is research-based, rationale for the use of the specific instrument, as well as reliability and validity were previously established (Darling-Hammond, 2006). Because the researcher had online public access to a comprehensive list of potential participants, a single-stage sampling procedure was used in this study (Creswell, 2009).

The researcher used a mixed methods approach, which included quantitative survey methods supported by descriptive analyses with statistical measures (means and percentages of individual parameters [program exemplars] and category metrics [program exemplars were categorized into five different component areas]) to examine the transferability (which) and alignment (to what

degree) of program exemplars from traditional to non-traditional teacher preparation programs. In addition, open-ended responses were used to further understand the degree to which program exemplars were being implemented in individual programs, as well as addressing program exemplars not represented in the survey, but noted as indicative of program effectiveness.

The GaTAPP program providers in Georgia were sent an email invitation containing the anonymous survey link. These program providers are responsible for implementing and assessing the Georgia-based alternative teacher preparation and certification program across Georgia and thus, were identified as the participants in this study.

The data were collected by means of an anonymous online survey instrument via SurveyMonkey[®]. The survey contained Likert scale items based on a scale ranging from 3-0, 3= “very well” (defined as very well with sound supporting evidence); 2 = “well” (defined as well with limited supporting evidence); 1 = “needs improvement” (limited or insufficient evidence); and 0 = “not evident.” Each program exemplar was followed by an open-ended question calling for a narrative response for program providers to submit at minimum one example of how each program exemplar played a role in the efficiency of their GaTAPP program. The survey also concluded with one open-ended question to ascertain program provider’s perceptions of GaTAPP program attributes that they deemed as important, but that were not represented on the survey and were needed to prepare teachers.

Findings

Scaled responses were examined and supported by narrative examples from program providers to determine how traditional teacher preparation program exemplars were transferable to, and aligned with, non-traditional teacher preparation. The sample size consisted of 93 participants and the survey outcome yielded a 47% response rate with 44 out of 93 responding. For all data tables the population number (*N*) is equal to 44, which corresponds to the total number of participants who responded to the survey.

Of these programs, 4.8% reported that 0-10 teachers had successfully completed their program since its inception, 26.2% reported 11-50 program completers, 9.5% reported 51-99 program completers, 38.1% reported more than 100 program completers, 11.9% reported they were not program providers, and 9.5% reported that they were unsure as to how many teachers were served in the program they operated and/or supported. Of the participants, 45.2% reported GaTAPP programs that were successful overall with supporting data, 40.5% reported successful with limited supporting data (equating overall success to an 85.7% success rate), 4.8% reported somewhat successful, but data were unclear, or the program was too new, or participants too few, to determine; 0% reported unsuccessful and needs improvement; and 9.5% indicated not a program provider.

This study examined the program exemplars within specified program component areas. Because all of the program exemplars and program component areas were identified in the literature as being evident of success in teacher preparation and certification programs (Darling-Hammond, 2006), the researcher identified high levels of transferability and alignment for each program exemplar and program component area at or above 80%. A high rating only included the

responses indicated as “very well” and “well” in terms of efficiently preparing teachers for classrooms. Program exemplars and program component areas reported as “very well” and “well” that were less than 80% were referred to as low transferability and alignment and required further inquiry. Also, highlighted were those program exemplars at or above 90%, which were identified as exceptionally high. According to the data in Table 1, of the program exemplars identified in the literature, 32 of 37 (86.5%) were confirmed to be highly transferable and aligned. Overall, the mean transferability and alignment levels for all of the 37 program exemplars collectively were as follows: 39.5% of the program exemplars were perceived by the participants as leading to efficient teacher preparation at “very well,” 48.3% reported as “well” (thus, equating to a high transferability and alignment [above 80%] at 87.8%), 9.7% at “needs improvement,” and 2.8% at “not evident.” For the 37 program exemplars, 17.1% of the program providers included examples as to how their programs were providing efficient teacher preparation based on each of the specified program exemplars. Exceptionally high transferability and alignment (at or above 90%) were noted in 19 of the 37 program exemplars = 51.0%. Program exemplars identified as needs improvement or not evident were noted as areas in need of further research. See Table 1.

Table 1
Transferability and Alignment (All Program Exemplars)

Program Exemplar Number	Program Exemplar	Very Well (%)	Well (%)	Needs Improvement (%)	Not Evident (%)
PE 1	Teach concepts, knowledge, and skills to learn	43.9	48.8	7.3	0.0
PE 2	Understand how different students learn	39.0	58.5	2.4	0.0
PE 3	Set challenging expectations	41.5	56.1	2.4	0.0
PE 4	Help students achieve high standards	48.8	43.9	7.3	0.0
PE 5	Develop curriculum that builds on experience	41.5	48.8	9.8	0.0
PE 6	Evaluate curriculum materials	12.2	61.0	26.8	0.0
PE 7	Create interdisciplinary curriculum	14.6	53.7	26.8	4.9
PE 8	Use instructional strategies	61.0	36.6	2.4	0.0
PE 9	Relate learning to the real world	51.2	46.3	0.0	2.4
PE 10	Understand how social, emotional, physical, and cognitive aspects influence learning.	36.6	48.8	12.2	2.4
PE 11	Identify special learning needs	48.8	39.0	9.8	2.4
PE 12	Teach to support ESOL	7.3	51.2	26.8	14.6
PE 13	Choose teaching strategies for different purposes	48.8	48.8	2.4	0.0
PE 14	Provide rationale for teaching decisions	24.4	51.2	14.6	9.8

PE 15	Help students become self-motivated	22.0	58.5	17.1	2.4
PE 16	Integrate instructional technology	48.8	43.9	4.9	2.4
PE 17	Develop a classroom environment that promotes social development	43.9	51.2	2.4	2.4
PE 18	Develop students' questioning and discussion skills	34.1	48.8	14.6	2.4
PE 19	Engage students in cooperative work	61.0	36.6	2.4	0.0
PE 20	Use effective verbal and nonverbal communication	56.1	36.6	7.3	0.0
PE 21	Teach students from a multicultural vantage point	26.8	53.7	14.6	4.9
PE 22	Use questions to stimulate different kinds of learning	41.5	48.8	4.9	4.9
PE 23	Help students learn to think critically	39.0	43.9	14.6	2.4
PE 24	Encourage students to interpret idea from diverse perspectives	29.3	53.7	12.2	4.9
PE 25	Use knowledge of learning, subject, curriculum, & student development to plan instruction	61.0	36.6	2.4	0.0
PE 26	Understand how factors outside of school influence student learning	29.3	53.7	12.2	4.9
PE 27	Work with parents to better understand students	61.0	36.6	2.4	0.0
PE 28	Use a variety of assessments	56.1	41.5	2.4	0.0
PE 29	Give productive feedback	43.9	48.8	7.3	0.0
PE 30	Help students assess their own learning	29.3	56.1	12.2	2.4
PE 31	Evaluate the effects of their actions and modify plans accordingly	41.5	53.7	2.4	2.4
PE 32	Conduct inquiry or research to inform decision.	17.1	43.9	29.3	9.8
PE 33	Resolve interpersonal conflict	24.4	56.1	12.2	7.3
PE 34	Maintain discipline	61.0	39.0	0.0	0.0
PE 35	Plan and solve problems with colleagues	29.3	56.1	9.8	4.9

PE 36	Assume leadership responsibilities in the school	29.3	56.1	4.9	9.8
PE 37	Preparedness for P-12 classrooms	56.1	39.0	4.9	0.0
Mean		39.5	48.3	9.4	2.8

In addition, this study also examined program component areas that were based on the themes found among the 37 program exemplars and are noted in Table 2. Five component areas were identified from themes in the literature (Darling-Hammond, 2006) and included curriculum and pedagogy (C), differentiation (D), assessment (A), rigor and relevance (R), and professionalism and support (P). Each of the five categories, which contained all of the 37 program exemplars, were reported by program providers as being highly transferable and aligned to their respective programs as indicated by percentages at or above 80%. The program exemplar component area of curriculum and pedagogy was reported as high transferability and alignment with an overall efficiency of 88.5% (“very well” = 43.4%; “well” = 45.1%). The program exemplar component area of differentiation was reported at 84.8% (“very well” = 35.1%; “well” = 49.7%). The program exemplar component area of assessment was reported at 88.2% (“very well” = 38.2%; “well” = 50.0%). The program exemplar component area of rigor and relevance was reported at 89.7% (“very well” = 42.0%; “well” = 47.7%). The program exemplar component area of professionalism and support was reported at 86.6% (“very well” = 34.8%; “well” = 51.8%). See Table 2.

The findings demonstrated that programs were efficiently implementing 32/37 of the program exemplars and these 32 program exemplars were being represented in each of the five categories, which provided conclusive support that the program exemplars identified in the literature were highly transferable and aligned from traditional to non-traditional teacher preparation. Participants reported needs improvement or not evident at less than 15% for all five program component areas. This demonstrated that alternative routes in Georgia were offering well-balanced teacher preparation programs in accordance with the goals of teacher preparation programs. These data were further supported by the narrative feedback provided by the program providers. Additionally, program providers included best practices for alternative preparation programs that were not on the survey, but were resulting in positive outcomes in their program.

Table 2

Transferability and Alignment (All Program Component Areas)

Program Exemplar Number	Program Exemplar	Program Component Area	Very Well (%)	Well (%)	Needs Improvement (%)	Not Evident (%)
<u>Curriculum and Pedagogy</u>						
PE 1	Teach concepts, knowledge, and skills to learn	C	43.9	48.8	7.3	0.0
PE 5	Develop curriculum that builds on experience	C	41.5	48.8	9.8	0.0
PE 6	Evaluate curriculum materials.	C	12.2	61.0	26.8	0.0
PE 7	Create interdisciplinary curriculum	C	14.6	53.7	26.8	4.9
PE 8	Use instructional strategies	C	61.0	36.6	2.4	0.0
PE 16	Integrate instructional technology	C	48.8	43.9	4.9	2.4
PE 18	Develop students' questioning and discussion skills	C	34.1	48.8	14.6	2.4
PE 19	Engage students in cooperative work	C	61.0	36.6	2.4	0.0
PE 20	Effective verbal & nonverbal skills	C	56.1	36.6	7.3	0.0
PE 25	Use knowledge of learning, subject, curriculum, and student development to plan instruction	C	61.0	36.6	2.4	0.0
Mean		C	43.4	45.1	10.5	1.0
<u>Differentiation</u>						
PE 2	Understand how different students learn	D	39.0	58.5	2.4	0.0
PE 11	Identify special learning needs	D	48.8	39.0	9.8	2.4
PE 12	Teach to support ESOL	D	7.3	51.2	26.8	14.6
PE 13	Choose teaching strategies for different purposes	D	48.8	48.8	2.4	0.0
PE 21	Teach students from a multi-cultural vantage point	D	26.8	53.7	14.6	4.9
PE 22	Use questions to stimulate different kinds of learning	D	41.5	48.8	4.9	4.9
PE 23	Help students learn to think critically	D	39.0	43.9	14.6	2.4
PE 24	Encourage students to interpret idea from diverse perspectives	D	29.3	53.7	12.2	4.9
Mean			35.1	49.7	11.0	4.2

Assessment

PE 3	Set challenging expectations	A	41.5	56.1	2.4	0.0
PE 28	Uses a variety of assessments	A	56.1	41.5	2.4	0.0
PE 29	Give productive feedback	A	43.9	48.8	7.3	0.0
PE 30	Help students assess their own learning	A	29.3	56.1	12.2	2.4
PE 31	Evaluate the effects of their actions and modify plans accordingly	A	41.5	53.7	2.4	2.4
PE 32	Conduct inquiry or research to inform decision	A	17.1	43.9	29.3	9.8
Mean		A	38.2	50.0	9.3	2.4

Rigor and Relevance

PE 4	Help students achieve high standards	R	48.8	43.9	7.3	0.0
PE 9	Relate learning to the real world.	R	51.2	46.3	0.0	2.4
PE 10	Understand how social, emotional, physical, and cognitive influence learning	R	36.6	48.8	12.2	2.4
PE 14	Provide rationale for teaching decisions	R	24.4	51.2	14.6	9.8
PE 15	Help students become self-motivated	R	22.0	58.5	17.1	2.4
PE 17	Develop a classroom environment that promotes social development	R	43.9	51.2	2.4	2.4
PE 26	Understand how factors outside of school influence student learning	R	29.3	53.7	12.2	4.9
PE 27	Work with parents to better understand students.	R	61.0	36.6	2.4	0.0
PE 34	Maintain discipline	R	61.0	39.0	0.0	0.0
Mean		R	42.0	47.7	7.6	2.7

Professionalism and Support

PE 33	Resolve interpersonal conflict	P	24.4	56.1	12.2	7.3
PE 35	Plan and solve problems with colleagues	P	29.3	56.1	9.8	4.9
PE 36	Assume leadership responsibilities in the school	P	29.3	56.1	4.9	9.8
PE 37	Preparedness for P-12 classrooms	P	56.1	39.0	4.9	0.0
Mean		P	34.8	51.8	8.0	5.5

Discussion and Implications

Teacher preparation and certification programs should rely on program exemplars that have been proven efficient in preparing highly effective teachers for the public school arena. Quality teacher preparation is needed to address high teacher attrition rates and increase the number of highly effective teachers. The shortage of highly effective teachers will continue to present a problem to those seeking to enter the profession and to school leaders working diligently to hire.

By recognizing that teaching is a demanding profession requiring many skills, teacher candidates should be provided with extensive training to be prepared to enter classrooms after program completion. Because the definition of extensive training is highly variable, further research is needed to clarify the program exemplars required for teacher preparation and certification program success, specifically via non-traditional and alternative teacher preparation and certification pathways. The focus of maintaining quality control from program to program should drive continued efforts to promote alternative teacher certification programs that are effective, consistent, accountable, and sustainable. Such programs will provide talented individuals with opportunities to teach in their area of expertise.

Studies continue to present mixed findings on whether teachers with traditional licenses outperform peers who took an alternative pathway; therefore, further research will inevitably be required (Viadero, 2009; Zhang & Zeller, 2016). The program exemplars leading to effective programs should be used to implement more efficient non-traditional teacher preparation and certification programs, particularly in Georgia as Georgia's outcomes in preparing effective teachers via alternative means can serve as a model nationwide. Program exemplars identified by providers as not being evident and/or need improvement require further evaluation to better understand where programs could improve.

In summary, the information gathered from this study is intended to aid program providers in Georgia and throughout the nation in implementing effective alternative teacher certification programs. Thus, the implication is if the goal is to improve student achievement, we must focus on ensuring competent teachers are in classrooms and component teachers are prepared through effective teacher preparation and certification programs. The findings show that the program exemplars identified in the literature need to be present in both alternative teacher preparation programs, as well as traditional teacher preparation programs (Darling-Hammond, 2006), and this was found evident in the Georgia-based alternative teacher preparation and certification programs. Hence, the program exemplars identified in the literature were confirmed to be highly transferable and aligned, thus demonstrating that traditional and alternative teacher preparation programs are both viable options to those entering the profession. Further research could help improve the quality, consistency, accountability, and sustainability of teacher preparation such that reform efforts related to teacher quality are successful in an effort to promote continuous program improvement in both traditional and non-traditional teacher preparation and certification programs. Results of this study are intended to support alternative teacher preparation programs in an effort to increase the number of effective teachers.

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