

# Comparison of Alternative and Traditional Teacher Preparation Programs for First Year Special Education Teachers in Northwest Ohio

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*This study compares knowledge as measured by grade point averages and Praxis II scores between first-year special education teachers who completed one university's alternative teacher preparation program (ATTP) and those who completed the university's traditional teacher preparation program (TTPP). A total of 33 teachers, 15 from the ATTP and 18 from the TTPP participated in the study. Findings indicate that teachers from both programs had similar outcomes on the Praxis II licensure exam and final grade point averages. Although the sample was small, findings of this study indicate that both programs adequately prepared teachers to work with special education populations.*

**Key Words:** *Special education; Teacher preparation; Praxis II; Alternative & traditional; Academic outcomes*

Cochran-Smith and Power (2010) cited 10 trends that indicate the direction of teacher preparation is changing from the traditional baccalaureate teacher education programs to alternative routes to becoming fully-licensed teachers. These trends include: (a) linking teacher preparation, teacher quality, and the economy, (b) recognition of teacher-quality gap, (c) accountability for student learning outcomes, (d) statewide data systems linking teachers, students, and preparation, (e) more widespread performance assessments of teacher candidates, (f) *proliferation of multiple routes into teaching*, (g) school district-based teacher residency programs, (h) practice as the center of teacher preparation, (i) teachers as researchers, and (j) preparation to teach diverse learners.

The purpose of this study was to compare content knowledge in special education and instructional methodology as measured by grade point averages and scores on the Praxis II subject assessment in a specific content area (i.e., special education) between first-year teachers who have completed an alternative program for special education for students with mild to moderate educational needs and first-year teachers who have completed a traditional program for special education for students with mild to moderate educational needs.

While all participants in the study were employed previously as teachers, they were not working in special education programs prior to completing their teacher preparation programs. Prior to becoming licensed as intervention specialists, the teachers had to successfully complete either the alternative or traditional program at The University of Toledo and successfully pass the Praxis II exam.

According to Hecker (2001), special education teachers are considered to be one of the fastest growing occupations in the United States. The number of special education teachers is expected to increase from 473,000 in 2002 to 554,900 in 2018 (Bureau of Labor Statistics, 2010). The additional 81,900 special education teachers who will be needed by 2018 represent a 17% growth rate in the field. Because of the need for a greater number of special education teachers nationwide, alternative teacher preparation programs have been developed by universities working with local school districts or state boards of education.

### **Related Literature**

According to researchers (Nougaret, Scruggs, & Mastropieri, 2005; Sindelar & Rosenberg, 2000), a growing source of licensed special education teachers is alternative teacher education programs. The presence of alternative teacher preparation programs is increasing due to the imbalance in the supply and demand of special education teachers. Alternative teacher preparation programs are increasing to meet the needs of nontraditional students who are returning to the classroom to become certified teachers (Feistritzer, 2001). Some alternative teacher preparation programs focus on increasing diversity (e.g., race, ethnicity, and gender) in the teaching profession (Grossman & Loeb, 2010). According to Harrell, Harris, and Jackson (2009), the number of states allowing alternative teacher education programs have increased from 8 in the 1980s to all 50 states.

Most alternative teacher preparation programs are intended to meet the demands for teachers in high need areas (e.g., mathematics, science, special education, etc.). According to Clarke and Thomas (2009), Georgia State University has had a nontraditional approach to certification in mathematics secondary education since 1996. The University of Toledo began an alternative program for special education teachers to meet the demands for special education teachers in Northern Ohio.

However, some concerns have been raised regarding the quality of the graduates of alternative teacher preparation programs nationally. Some alternative teacher preparation programs have been designed for older, nontraditional students who have bachelor degrees in education (Sindelar & Rosenberg, 2000; Zeichner & Schulte, 2001). Research results have been mixed, suggesting that programs vary substantially across program content, with little known about completion rates and teacher performance (Nougaret et al., 2005; Rosenberg & Sindelar, 2005)

State legislatures, federal courts, and the United States Congress have passed laws that have increased educational options for children with disabilities. Children who previously had been excluded from public school programs now were included in the least restrictive environment. The foundation for implementing and maintaining effective special education

services resulted from federal and state laws and mandates. Two landmark pieces of legislation had profound effects on special education.

Public Law 94-142, passed by Congress in 1975, guaranteed a free, appropriate public education to all children with disabilities in the least restrictive environment. Reauthorized in 1990, 1997, and 2005, the law was renamed the Individuals with Disabilities Education Improvement Act (IDEA) and expanded school district responsibilities for providing special education services. IDEA includes key principles to guide families and professionals to work collaboratively and enhance educational opportunities for children with disabilities.

The second legislation, the No Child Left Behind (NCLB) Act of 2001 became law in 2002. This law requires students with disabilities to participate in annual assessments, with their scores disaggregated to provide information to the public regarding their progress. Both IDEA and NCLB are considered important legislation in meeting the needs of students with disabilities and in providing an adequate supply of highly qualified special education personnel. For a comparison of NCLB and IDEA, see Table 1.

**Table 1**

**NCLB/IDEA Comparison on Key Topics**

	NCLB	IDEA
Participation in assessments	Annual assessments in all grades tested must be administered with appropriate accommodations, guidelines, and alternate assessments for all students covered by IDEA.	Students with disabilities must be included in all state and local assessments using appropriate accommodations or through alternate assessments.
Adequate yearly progress	States must submit a plan to demonstrate that they have adopted challenging academic standards for all students and the school district must use academic assessments described in their plan to annually review the progress of each school to determine whether the school is making adequate yearly progress.	There is no corresponding language regarding AYP in IDEA.
Highly qualified teachers	Defines “highly qualified” as any public school teacher who has a bachelor’s degree, holds state certification, and demonstrates subject matter competency (test or high objective uniform state standard of evaluation [HOUSSE] document).	Uses the term “qualified personnel” which means personnel who have met state approved or recognized certification, licensing, registration, or other comparable requirements in the area in which the individuals are providing special education or related services.

Note: Cole, 2006, p. 6

Special education teachers were required to meet the highly qualified requirements by the end of the 2005-2006 academic year. These requirements included: (a) holding at least a bachelor’s degree, (b) holding full state certification or licensure as a special education teacher, and (c) demonstrating subject matter competence in each area taught for special education teachers in 7<sup>th</sup> through 12<sup>th</sup> grades (S. Zake, personal communication, 2005). The NCLB and

IDEA teacher requirements apply regardless of where a special education teacher provides instruction (e.g., core academic subject in a regular classroom, a resource room, or any other setting). NCLB and IDEA requirements regard competence in core academic subjects as more important than teaching in a particular instructional setting (California Department of Education, 2010).

IDEA recognized that many students with disabilities can and will meet standards at a proficient level, however more time and additional accommodations may be needed to master the standards. In contrast, a major premise of NCLB is that all students must attain proficiency on state-mandated standards at the same time and level. In addition, NCLB also mandates that all students at certain grade levels will test proficient on state standards (Reder as cited in Cole, 2004). Congress, in reauthorizing IDEA, attempted to align the law with requirements of NCLB. The alignment of NCLB and IDEA are presented in Table 1. These laws support projects that demonstrate how states and local school districts can meet challenges associated with staff recruitment, retention, and personnel preparation successfully.

### ***Alternative Teacher Preparation Programs***

While variations exist in alternative teacher preparation programs, some commonalities exist, including (a) nature of the provider, (b) response to labor market needs, (c) coursework, and (d) recruitment and selection. Most alternative teacher preparation programs are based on partnerships among institutions of higher education, private providers, and school districts. The programs are established to meet a niche in the labor market (e.g., specific high need shortages for mathematics, science, and special education teachers). While the programs have variations in regard to the scope and sequence within the curriculum and field work, they have to meet state and national certification standards. The alternative teacher preparation programs have been successful in attracting a new pool of students who had decided to become educators. These alternative teacher preparation programs are attractive to students because they can be completed at convenient times and locations, have reduced requirements when compared to traditional programs, provide tuition assistance through government grants, and have increased mentoring for new teachers.

The Intervention Specialist Institute (ISI) at The University of Toledo is an alternative route to certification that was created to prepare highly qualified, skilled intervention specialists who teach students with mild to moderate disabilities and help them succeed in a variety of learning environments (Welch & Devlin, n.d). The increased focus on special education through legislation has created a need for more certified/licensed intervention specialists who can meet requirements of both NCLB and IDEA. Alternative routes to certification (ARC) in special education have become a viable way to obtain the necessary education, skills, and knowledge to become a certified/licensed intervention specialist. Numerous ARC programs exist, especially in states where school districts have difficulty recruiting highly qualified special education teachers. Institutions of higher education (IHE) in partnership with state and local education agencies provide ARC programs that incorporate coursework with field work that includes mentoring and supervision. Because of the diversity in these programs and the lack of a consistent definition of ARC, the quality of special education teachers emerging from these programs is unclear (Rosenberg & Sindelar, 2005).

Some features of ARC programs appear to be similar to traditional teacher preparation programs. For example, IHE involvement in ARC programs is considerable, nationally recognized teaching standards provide the basis for these programs, specific sequences of coursework are required, fieldwork that involves supervision and mentors is an essential part of ARCs, and admission criteria is selective (Rosenberg, Boyer, Sindelar, & Misra, 2007). Research on ARC programs for certification/licensure for special education teachers is limited. Studies on student achievement have found that teacher certification/licensure is the most important measure of teacher quality (Darling-Hammond, 2000). ARC programs generally are transient, with universities in states experiencing shortages initiating these programs and then phasing them out as shortages are mitigated or funding becomes less available.

A need exists to study the efficacy of ARC programs in producing special education teachers who can provide high quality, effective instruction to children with mild to moderate disabilities. Research is needed to compare completers of ARC and traditional teacher education programs on subject-area knowledge as measured by their program grade point averages and their scores on the Praxis II. The research question that will be addressed in this study is:

Does content knowledge of basic special education principles as measured by the Praxis II scores and program grade point averages differ significantly between intervention specialists who have completed the alternative teacher preparation program and those who have completed the traditional teacher preparation program?

### ***Participants***

Participants in the study were completers of two teacher preparation programs at The University of Toledo in 2005-2006. The participants had been licensed/certified general education teachers prior to becoming intervention specialists. A total of 23 teachers had completed the alternative teacher preparation program and 24 teachers had completed the traditional teacher preparation program. Of this number, 33 teachers, including 15 from the alternative teacher preparation program and 18 from the traditional teacher preparation program, completed and returned their surveys for a response rate of 70.2%. The largest group of teachers ( $n = 10$ , 30.3%) were between 36 and 40 years of age, female ( $n = 27$ , 81.8%), and Caucasian ( $n = 27$ , 84.4%) (see Table 2).

### ***Measures***

***Demographic survey.*** A short demographic survey was completed by the participants to collect data on the personal and professional characteristics of the participants. The items on this survey used forced-choice categorical responses.

***Praxis II.*** The Praxis II Special Education: Knowledge-Based Core Principles (0351) examination measures content knowledge of basic principles of special education. According to ETS testing materials, extensive knowledge of individual specialty areas (e.g., education of students with visual impairments) is not required. Educational Testing Service designed the Praxis II exam that is administered after completion of a teacher education program. This test

was previously known as the National Teacher Examination. The Ohio test includes 60 multiple-choice response items that measure three content categories:

- I. Understanding Exceptionalities (n = 15)
- II. Legal and Societal Issues (n = 8)
- III. Delivery of Services to Students with Disabilities (n = 37).

Scoring on the Praxis II is accomplished by first obtaining a raw score that is the number of correct responses. A scaled score is then calculated that weighs the items by the difficulty of the question. According to Dr. Richard Welsch (personal communication, August 9, 2007), the minimum qualifying score for the intervention specialist (mild/moderate, K-12) licensure was 151.

**Table 2**

**Cross Tabulations: Personal Characteristics of the Teachers (N = 33)**

Personal Characteristics	<u>Type of Teacher Preparation Program</u>					
	<u>Alternative</u>		<u>Traditional</u>		<u>Total</u>	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
<u>Age</u>						
21 to 25	2	13.3	3	16.7	5	15.2
26 to 30	1	6.7	5	27.8	6	18.2
31 to 35	2	13.3	3	16.7	5	15.2
36 to 40	7	46.7	3	16.7	10	30.3
41 to 45	2	13.3	2	11.1	4	12.1
46 to 50	1	6.7	1	5.5	2	6.0
Over 50	0	0.0	1	5.5	1	3.0
<u>Gender</u>						
Male	3	20.0	3	16.7	6	18.2
Female	12	80.0	15	83.3	27	81.8
<u>Ethnicity</u>						
African American	0	0.0	2	11.1	2	6.3
Caucasian	11	78.6	16	88.9	27	84.4
Hispanic	2	14.3	0	0.0	2	6.3
Other	1	7.1	0	0.0	1	3.0
Missing	1					
<u>Educational Level</u>						
Bachelor's Degree	12	80.0	16	88.9	28	84.8
Master's Degree	3	20.0	2	11.1	5	15.2

**Grade Point Average.** Cumulative grade point averages (GPAs) were obtained from student records at The University of Toledo. The GPAs were on a traditional 4-point scale, with a 4.0 indicating an A average.

## **Data Analysis**

The data were analyzed using SPSS – W. The demographic characteristics were analyzed using cross tabulations to compare participants who had completed the alternative teacher preparation program and those who had completed the traditional teacher preparation program. The research question was addressed using t-tests for two independent samples and t-tests for one sample.

## **Findings**

### **Description of the Samples**

The teachers in both the alternative and traditional teacher preparation programs reported completion of a bachelor's degree prior to their entry into their Intervention Specialist Licensure programs, with 3 (20.0%) in the alternative teacher preparation program and 2 (11.1%) in the traditional teacher preparation program indicating they had also completed a master's degree (see Table 2). The teachers in the study had worked in education as licensed teachers from 1 to 21 years, with work in special education ranging from 0 to 6 years. Twenty-six (83.9%) of the responding teachers were fully licensed as intervention specialists, with licensure pending for four program completers. The type of licensure was either two-year provisional ( $n = 11, 38.0\%$ ), five year provisional ( $n = 9, 31.0\%$ ), or "other" ( $n = 9, 31.0\%$ ). Some graduates of both the alternative teacher preparation program and the traditional program were working in other states and the exact type of licensure was not provided. Some types of disabilities on the intervention specialists' caseloads included cognitive disabilities, speech/language impairments, other health impairment, specific learning disabilities, orthopedic impairment, and autism. The teachers were working across the grade levels from pre-K to twelfth grade.

The results of the t-tests for two independent samples that compared Praxis II scores of teachers in the alternative teacher preparation program ( $M = 164.13, SD = 11.77$ ) and teachers in the traditional teacher preparation program ( $M = 168.13, SD = 10.91$ ) were not statistically significant ( $t(46) = -1.22, p = .228$ ). This result indicated that students, regardless of which program they had completed, had similar scores on the Praxis II.

The comparison of students' cumulative grade point averages was not statistically significant ( $t(46) = -.04, p = .967$ ). Based on this finding, the mean scores for teachers in the alternative teacher preparation program ( $M = 3.76, SD = .31$ ) were similar to those attained by teachers in the traditional teacher preparation program ( $M = 3.77, SD = .18$ ; see Table 3).

A second analysis used t-tests for paired samples to determine if the scores on the Praxis II attained by the teachers in the alternative and traditional teacher preparation programs were significantly above the Ohio Board of Education's (2006) required minimum score of 151. The mean score of 164.13 ( $SD = 11.77$ ) attained by the teachers in the alternative teacher preparation program was significantly higher than the required minimum score of 151 ( $t(23) = 5.46, p < .001$ ). In addition, teachers in the traditional teacher preparation program ( $M = 168.13, p < .001$ ) had statistically significant higher scores on the Praxis II than the Ohio minimum standards ( $t(23) = 7.69, p < .001$ ) (see Table 4).

**Table 3****t-Tests for Two Independent Samples: Praxis II Scores and UT Grade Point Averages**

Group	Number	Mean	SD	DF	t-Value	Sig
Praxis II						
Alternative	24	164.13	11.77	46	-1.22	.228
Traditional	24	168.13	10.91			
UT Grade Point Average						
Alternative	24	3.76	.31	46	-.04	.967
Traditional	24	3.77	.18			

**Table 4****t-Tests for One Sample: Praxis II Scores**

Group	Number	Mean	SD	DF	t-Value	Sig
Alternative teacher preparation program	24	164.13	11.77	23	5.46	<.001
Traditional teacher preparation program	24	168.13	10.91	23	7.69	<.001

Test Statistic – Ohio Minimum Passing Score of 151

## Discussion

In areas of critical teacher shortages (e.g., special education, mathematics, science), alternative teacher preparation programs are being used to prepare teachers in these areas. According to the report, “Tables and Figures for the 2007 Condition of Teacher Supply and Demand in Ohio” (Driscoll & Fleeter, 2007), the problem in Ohio is not a shortage of fully licensed teachers, but, rather, it is an imbalance between critical teacher shortage areas (special education, mathematics, and science) and general education. The shortages are especially critical in urban and rural areas and in schools with high enrollments of poor and minority students.

Effective intervention specialists need both knowledge of their content area and knowledge of strategies to teach the content to students with mild to moderate disabilities (Sindelar, Bishop, Brownell, Rosenberg, & Connelly, 2005; Hill, Rowan, and Ball, 2005). Where previous research has been mixed regarding the efficacy of these programs to produce teachers who were effective in the classroom, the present research found that teachers from both alternative and traditional teacher preparation programs had similar outcomes on Praxis II and academic grade point averages. In general, the Praxis II exam measures content knowledge, including environment, knowledge of specific subjects that K -12 educators are expected to teach, and principles of learning and teaching. The exam completed by the participants in the present study focused on special education topics, including understanding exceptionalities, legal and societal issues, and delivery of services to students with disabilities.

Completers in both groups had significantly higher total scores on the Praxis II than the



required passing score of 151 for intervention specialists seeking licensure in the state of Ohio. Based on these findings, it appears that teachers who completed the alternative teacher preparation program were performing at the same levels as teachers from the traditional teacher preparation program. The findings of the present study provide an objective examination of knowledge (as determined by Praxis II scores and grade point averages) and support that both programs are producing intervention specialist teachers who have similar knowledge of special education processes.

The teacher preparation programs differed in that the alternative teacher preparation program was afforded more intense mentoring and supervision. A mentor was defined as an experienced classroom teacher who helped and supported first-year teachers. The alternative teacher preparation group participated in a series of workshops (1 credit per semester) that included a supervision and mentorship component as well as instruction in preparing and writing Individualized Education Plans (IEPs). A key feature of the supervision and mentorship support in the alternative teacher preparation program was the ongoing collaborative partnership between the university and local school district personnel. Ongoing supervision and mentoring was provided to participants by both university program faculty and on-site school district personnel. Teachers in the alternative teacher preparation program had visits from the school district mentor at least once every 2 weeks during the first 10 weeks in the special education classroom, with a minimum of 4 additional classroom visits over the next 20 weeks of teaching. Additionally, participants received on-site supervision, ongoing telephone and email support from university program faculty as requested by the teacher or supervisor. Four on-campus group meetings were offered throughout the year for the alternative teacher preparation program completers. Table 5 provides the core differences between the traditional and alternative teacher preparation programs.

**Table 5**

**Comparison of Program Characteristics between Alternative Routes to Certification and Traditional Programs for Special Education Teachers**

Alternative Route to Certification/Licensure	Traditional Teacher Preparation Programs
24 semester hours	30 semester hours
Cohort group	Individual scheduling
Completed in 3 semesters	Completed in 4 semesters (minimum)
Minimum 240 clock hours of job-embedded field work	Minimum 255 clock hours of field work
On-the-job mentoring and supervision of teaching over academic year	Traditional student teaching after content/methods coursework
Saturday/Sunday classes once a month, webct synchronous and asynchronous communication, evening workshops once a month, 2-week summer institutes	Evening classes (Monday through Thursday) on 16-week terms, minimal webct supported instruction
Tuition support through state grant	Some scholarships, graduate assistance

The findings of this study support the efficacy of The University of Toledo alternative teacher preparation program, conducted in collaboration with local school districts, in preparing teachers to work as intervention specialists. As a critical shortage exists for special education, the use of alternative teacher preparation programs to provide the education and experience to teach in this area appears to be a viable way to provide qualified teachers to fill the need. However, additional research is needed to replicate the findings of this study.

### **Recommendations**

Administrators in school districts should continue to encourage high quality general education teachers from these areas who have demonstrated successful teaching in the past to participate in alternative teacher preparation programs to become intervention specialists. These teachers could obtain an add-on licensure area to enhance their employment opportunities.

Potential teachers who are considering alternative pathways to certification need to consider the type of program. They need to communicate with their State Boards of Education to determine if the program can lead to either certification or licensure. In addition, they need to ensure that the program is recognized by their local boards of education.

The curriculum of the alternative teacher preparation programs also should be closely scrutinized by potential teachers. If the individual already holds a bachelor's degree, he/she may want a program with extensive field work with students. Others may need additional coursework to update their content knowledge. Many alternative teacher preparation programs can custom tailor their requirements to meet the needs of the potential teacher, but others offer a standard curriculum that may not prepare teacher candidates adequately to pass state licensure exams or work effectively with students.

To meet requirements of federal and state mandates associated with highly qualified teachers in core curriculum areas, intervention specialists will need to obtain add-on teaching certification or licensure in one or more core curriculum areas. Alternative and traditional teacher preparation programs will need to be restructured to incorporate the necessary subject-area content with effective instructional strategies for students with disabilities (Ohio Department of Education, 2005). These programs need to add content area curriculum in areas taught (e.g., English language arts) by intervention specialists who are assigned to 7<sup>th</sup> through 12<sup>th</sup> grade programs.

The university and urban school districts involved in the development of the alternative teacher preparation program need to formalize their mentoring programs to provide continued support for new intervention specialists. These programs have been shown to be effective in providing general education teachers who are moving into special education with the support they need when faced with difficult situations (Darling-Hammond & Sykes, 2003). The mentors could be professors and experienced special education teachers who could provide coaching and supervision for inexperienced teachers.

Continued research is needed on alternative teacher preparation programs to determine if teachers from alternative teacher preparation programs develop the same types of skills and strategies as teachers from traditional teacher preparation programs. Additional research could use a qualitative research design to determine the extent to which teachers from alternative teacher preparation programs feel their programs prepared them to be effective intervention specialists and what areas in these programs need to be strengthened to help them achieve success when working with students with mild to moderate disabilities.

An important consideration of teacher preparation programs is assessing the effectiveness of the program on the end users, students with disabilities. By measuring and evaluating student outcomes using standardized test scores and alternative assessment procedures (e.g., portfolios, etc.), the efficacy of teacher preparation programs can be determined.

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