A Qualitative Study of Special Education Certification Methods and How They Affect Teacher Efficacy

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Abstract

A teacher shortage in the area of special education has led to an increase in the number of special education teachers who are teaching out-of–field. The lack of pedagogical training of these teachers creates concern about the effectiveness of these teachers. This qualitative study explores the teacher-efficacy of four special education teachers with varying backgrounds. One of the teachers was a traditionally certified special education teacher; the other teachers had received their initial certification in areas other than special education, and later became certified in special education by passing a state examination. Qualitative data demonstrated that all four had genuine concern for their students, and all four voiced belief in their ability to teach students with disabilities. However, there was a clear difference in instructional strategies used as well as their concerns about external factors, which may affect a student’s ability to learn.

Introduction and Literature Review

The federal reauthorization of the Elementary and Secondary Education Act also known as No Child Left Behind (NCLB) was signed into law in 2001, and went into effect in 2002 (United States Department of Education, 2011). A key component of NCLB is that all teachers including special education teachers must be highly-qualified; however, the definition of highly qualified is vague (Gelman, Pullen, & Kauffman, 2004). The law requires that all teachers pass a state certification test, and it also requires that the teacher hold at least a bachelor’s degree, however the law does not require that the teacher’s degree be related to the subject area that they are teaching, and the law does not establish any standards for the certification test (Gelman et al., 2004; Stotsky, 2009).

Teacher shortages in special education has led to a phenomenon in which many special education teachers are teaching out-of-field. An out-of-field teacher is one who has gone through a traditional teacher preparation program in one content area, but is teaching in a different area (Stotsky, 2009). Once a teacher is certified in the state of Georgia, they may take a certification test in any area, and if they pass the test in that area they become certified to teach that particular subject or in the case of special education they are considered highly qualified to work with students with disabilities (SWD). Working with SWD requires a specialized pedagogical knowledge that is difficult to measure on a test (McCormick, 2005; Stotsky, 2009). Certification tests rely on measuring content knowledge rather than pedagogical knowledge. Georgia uses the Georgia Assessment for the Certification of Teachers (GACE) test to certify teachers. A prospective special education teacher must pass the general curriculum test in order to become certified to
teach SWD. The test has 124 questions and only 8 of them are related to pedagogy and the delivery of instruction (Georgia Assessment for the Education of Teachers, 2010).

There has been a critical teacher shortage in special education since the 1980s (Boe & Cook, 2006). This shortage is exacerbated by the fact that the attrition rate is higher in special education than it is in general education. For this reason the teacher shortage in special education continues to be an issue (Boe, Cook, & Sunderland, 2008; McLeskey & Billingsley, 2008). One factor that affects the shortage of special education teachers is job attrition (Quigney, 2010). There is also a rising number of students being identified with disabilities requiring more special education teachers to serve these students (deBettencourt & Howard, 2004; Robertson & Singleton, 2010). The teacher shortage combined with the requirements of NCLB has led to the proliferation of alternative certification routes for special education teachers (Darling-Hammond, 2010; Quigney, 2010). Alternative certification programs allow people to become certified without completing a traditional teacher preparation program (Darling-Hammond, 2010; deBettencourt & Howard, 2004). There are also many special education teachers who went through a traditional teacher preparation program in an area other than special education, but are teaching out-of-field because of the high demand for special education teachers (Gelman et al., 2004).

Concern over the effectiveness of special education exists because there is an achievement gap, between students with disabilities and their peers. A 2007 report from the National Assessment of Educational progress showed that students with learning disabilities performed at a lower level than their peers without disabilities even with special education accommodations in place (Lee, Griggs, & Dion, 2007). Currently, NCLB judges the effectiveness of schools by test scores in language arts and math, and states must test students in grades in 3rd through 8th (Aldridge & Goldman, 2007). In order to measure a school’s progress towards this goal, NCLB establishes a system to measure whether schools were making Adequate Yearly Progress (AYP) (Eckes & Swando, 2009). Each year schools have to show that a minimum number of students are proficient in both subjects, and this number increases each year until 2014, when all students are to be proficient in these two subjects (Eckes & Swando, 2009). In addition to showing that a minimum percentage of the entire student population are meeting this goal, schools also had to break down their population into four different subgroups, and demonstrate that each of these different subgroups are also making sufficient progress. The four subgroups are based on economic background, disability, race and ethnicity, and English proficiency (Eckes & Swando, 2009).

Research conducted by Eckes and Swando (2009) showed that schools with a measurable Students with disabilities (SWD) subgroup were more likely not to make Adequate Yearly Progress (AYP). These researchers studied the effects of the SWD on a school making AYP in California, Texas, and Florida. Of the 986 schools in California with a SWD subgroup 456 failed to make AYP at least partially because of the performance of the students with disabilities subgroup. “In each year [2001-02 thru 2005-06] the differences between the number of schools with and without special education subgroups making AYP were statistically significant at the p=.001 level. In 2005-2006, schools
containing special education enrollments were 71.8% less likely to make AYP than schools that did not contain special education subgroups” (Eckes & Swando, 2009, p. 2487).

The special education teacher is essential in ensuring academic success for SWD (McLeskey & Billingsley, 2008). Teaching SWD requires a unique set of skills (Landrum, Tankersley, & Kauffman, 2003). Special education teachers require a specialized pedagogical knowledge and background in order to work with a wide variety of students requiring different strategies in order to meet their educational needs (McCormack, 2005; McLeskey & Billingsley, 2008). Teachers must provide more specialized and individualized instruction in the classroom in order to be successful (Landrum, Tankersley, & Kauffman, 2003). Special education teachers are responsible for differentiating instruction, and creating accommodations for individualized students in order to help them be successful (Landrum et. al. 2003). The teacher is the most important link for student success in the classroom (Sanders, 1998; Sanders and Horn, 1998).

The skills used by teachers’ effect learning of SWD. Teacher behaviors and characteristics can determine if a SWD succeeds or not (Mastropieri & Scruggs, 2001). Teachers’ with a high sense of efficacy exhibit many teaching characteristics which promote student achievement (Ross & Bruce, 2007). Teacher efficacy is of particular importance in the area of special education due the nature of the students with which teachers are working (McDaniel & Dibella-McCarthy, 1989).

Teacher efficacy is a teacher characteristic which is consistently linked to student learning (Poulou, 2007; Tournaki and Podell, 2008). Collier asserts that “teacher efficacy has been identified as perhaps the most important belief system in terms of its effect on the behavior of teachers and subsequently student performance (2005). “A teacher’s efficacy belief is a judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated” (Tschannen-Moran and Hoy, 2001, p.783). Teachers with a high TE are committed to the profession and believe that they can affect the outcome of student learning (Coladarci and Breton, 1997). Teachers with a lower self-efficacy blame outside factors such as the environment when a student does not perform up to expectations (Tschannen-Moran and Hoy, 2001).

The first study involving teacher efficacy was conducted by the Rand corporation in 1976 (Tschannen-Moran, Woolfolk-Hoy, & Hoy, 1998). The purpose of the Rand study was to evaluate reading programs in elementary schools (Armour et al., 1976). The Rand research contained two questions based on Joseph Rotter’s social learning theory (Lamorey & Wilcox, 2005; Rotter, 1966). Central to Rotter’s social learning theory was the concept of expectancy. Expectancy is defined “as a belief held by an individual that a certain reinforcing outcome would occur as the result of a specific behavior on the part of that individual” (Lamorey & Wilcox, 2005, p. 71). Rotter focused on the differences between internal versus external control. Rotter was interested in one’s belief that they could overcome external factors in order to create change (Rotter, 1966; Skaalvik &
Skaalvik, 2007). Based on this idea it was believed that a teacher’s self efficacy would increase if the teacher believed they could overcome external factors such as home life or students’ abilities in order to help the student learn (Skaalvik & Skaalvik, 2007). Based on Rotter’s theory the Rand researchers comprised two items to measure teacher efficacy (Lamorey & Wilcox, 2005; Tschannen-Moran et al., 1998). The first item was, “When it comes right down to it, a teacher really cannot do much because most of a student’s motivation and performance depends on his or her home environment,” and the second item was “If I try really hard, I can get through to even the most difficult or unmotivated students” (Armour et al., 1976). The RAND study found that teacher efficacy was a strong predictor of student success (Armour et al. 1976). This finding led to a growth of research on teacher efficacy and it how it relates to student achievement (Tschannen-Moran et al., 1998).

Much of the subsequent research on teacher efficacy was based on the social cognitive theory of Albert Bandura (Lamorey & Wilcox, 2005). Bandura defined self efficacy as “belief in one’s capabilities to organize and execute the courses of action required to produce given attainments” (Bandura, 1977, p.3). Bandura’s work is based on outcome expectancy. As people experience life they begin to realize that certain actions will produce certain results (Gibson & Dembo, 1985). Self Efficacy is the belief that one can produce the actions necessary to produce the desired result (Bandura, 1977). People with a higher self efficacy will exert more effort to meet a challenge (Bandura, 1977).

There have been a few studies demonstrating the impact of a teacher with high TE on student learning in the general education setting, but there has been very little research in the area of special education (Coladarci and Breton, 1997). Allinder found that there was a positive correlation between the degree of teacher efficacy and student achievement gains (1995). Teachers with higher teacher efficacy are more persistent, had higher student expectations and goals (Allinder, 1995; Poulou, 2007). Highly efficacious teachers create more challenging lessons, and persist until the student understands the material (Poulou, 2007). Teachers with a higher TE believe that they can control student motivation and performance (Poulou, 2007).

Tournaki and Podell found that teachers with high TE adapted to student needs and provided more individualized instruction (2008). This is an important characteristic when teaching students with disabilities (Quigney, 2010). Research shows that between 5% and 8% of all students have a cognitive deficit that keeps them from being able to learn the concepts or procedures necessary to be successful in math (Geary, 2004). “The struggle for students to not only learn, but also retain information is one of the biggest challenges educators face” (Evans, 2008, p. 17). If a student does not understand the material it is important that we do not blame the student, but rather look at the delivery method of the instruction. Egan (2008) explains, “The first and perhaps still the most important was the recognition that failures to learn the curriculum might be due to faults other than the child’s recalcitrance. It might, for example, be due to the method of teaching, or the stage at which a topic is taught” (p. 7). Students with learning disabilities are more likely to fail if proper supports and instruction are not put in place (Witzel, Riccomini, & Schneider, 2008).
Classroom management is particularly important when teaching students with disabilities (Witzel & Mercer, 2003). In order to teach effectively a teacher must provide an orderly and safe environment. Teachers with a high teacher efficacy are more effective at handling classroom discipline issues (Morin and Battalio, 2004). Teachers with a low self efficacy blame the student for bad behavior while teachers with a higher teacher efficacy look for other issues which may be causing the misbehavior (Morin and Battalio, 2004). Teachers with high TE establish routines and institute clear behavioral expectations (Poulou, 2007).

The conceptual framework for this research is based upon the researcher’s hypothesized relationship between the two variables: method of certification for special education teachers and teacher efficacy. The theory of teacher efficacy is based on the work of Rotter and Bandura. Rotter was the developer of social learning theory. Central to Rotter’s social learning theory was the concept of expectancy. Expectancy is defined “as a belief held by an individual that a certain reinforcing outcome would occur as the result of a specific behavior on the part of that individual” (Lamorey & Wilcox, 2005, p. 71). Rotter focused on the differences between internal versus external locus of control. Rotter was interested in one’s belief that they could overcome external factors in order to create change (Rotter, 1966). Based on this idea it was believed that a teacher’s self efficacy would increase if the teacher believed they could overcome external factors such as home life or students’ abilities in order to help the student learn (Skaalvik & Skaalvik, 2007).

Many of the concepts of teacher efficacy are based on the social cognitive theory of Bandura (Lamorey & Wilcox, 2005). Bandura defined self-efficacy as “belief in one’s capabilities to organize and execute the courses of action required to produce given attainments” (Bandura, 1977, p.3). Bandura’s work is based on outcome expectancy. As people experience life, they begin to realize that certain actions will produce certain results (Gibson & Dembo, 1984). Self Efficacy is the belief that one can produce the actions necessary to produce the desired result (Bandura, 1977). People with a higher self efficacy will exert more effort to meet a challenge (Bandura, 1977). Teachers with a higher sense of efficacy will exert more effort to help struggling students (Tschannen-Moran & Hoy, 2001). Teacher efficacy is divided into two constructs, general teaching efficacy (GTE) and personal teaching efficacy (PTE) (Tschannen-Moran, Woolfolk-Hoy, & Hoy, 1998). GTE is the belief that education in general can overcome external factors such as ability to help students learn, and PTE is the self-confidence in one’s ability that they have the skills to overcome these outside influences and help the student develop (Tschannen et al., 1998).

Methodology

A qualitative approach was used in order to study this phenomenon. The researcher wanted to learn how the method of certification affected teacher efficacy? Teacher efficacy is defined as “a judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be
difficult or unmotivated” (Tschannen-Moran & Hoy, 2001, p.783). The research question which guided the research was:

“How does the way in which a teacher becomes certified to teach special education affect the way that they perceive their ability to teach students with disabilities?”

In order to answer this question questionnaires were given to four special education teachers who had taken different paths to certification. Respondent #1 was traditionally certified in special education receiving his bachelor of education in mental retardation. He has been teaching for a total of 11 years and all of them in special education. Respondent #2 original degree was in psychology, but has since received a masters degree specific to special education, and has been teaching for 28 years. She taught general education her first year, but has taught special education for the last 27 years. Respondent #3 was originally certified in secondary history as well as political science. He taught eighth grade Georgia History for two years before becoming certified in special education, and he is now in his second year of teaching special education. Respondent #4 completed her original certification in secondary social studies, and taught high school social studies for 3 years before becoming certified in special education. She then taught special education for 3 years, and this year has returned back to high school social studies.

Initially the researcher received permission from the district in which the teachers were employed to have them complete the faculty questionnaire. The researcher then explained the study to the participants and received their consent to participate. The researcher worked with all of the participants, and therefore chose to have the participants complete a questionnaire rather than interviewing the participants. All of the questionnaires were filled out anonymously. The researcher decided to complete the research in this manner because he thought he would receive more accurate and truthful responses then he would if he directly interviewed each participant. However, this limited his ability to probe deeper into some questions and answers.

The researcher developed the questionnaire based on teacher efficacy questions found in research. Questions were based on the teacher efficacy instruments developed by Gibson and Dembo (1984) and Tschannen-Moran & Hoy (2001). The first eight questions were demographic in nature, and designed to elicit information such as areas of certification, years teaching, years teaching special education, and degrees attained. The remaining nine questions were designed gain insight into teaching methods, teacher efficacy, teacher’s perceptions of themselves, and perceptions of their students and their abilities to learn. The goal being to use the data to answer the question, “How does the way in which a teacher becomes certified to teach special education affect the way that they perceive their ability to teach students with disabilities?”

Data Analysis

In order to analyze the data the researcher first transcribed all of the answers of the respondents. The questionnaires were completed anonymously and for the purposes of
this study the four participants are referred to as respondent 1, respondent 2, respondent 3, and respondent 4. Respondent 1 was the only participant traditionally certified in special education, and has been teaching for 11 years. Respondent 2 original degree was in Psychology, but has since gotten a masters degree in special education, and has been teaching a total of 28 years, and 27 of those years have been spent teaching special education. Respondent 3 completed a traditional teacher education program in secondary social studies, and is teaching special education as an out-of-field teacher. He taught Georgia History for two years and is now in his second year teaching special education. Respondent 4 was originally certified through a traditional teacher education program in secondary history, and taught special education for three years as an out-of-field teacher. Initially, she taught high school social studies for three years before teaching special education for three years, and now she is in her first year back in the high school social studies classroom. Respondent 3 is only working in a co-teaching environment, although he did teach one resource class last year. Respondents 1 and 2 are both teaching in a resource environment as well as a co-teaching environment. Respondent 4 taught in both a resource and co-teaching environment, and she spent one year teaching in a classroom of mildly intellectually disabled students.

After transcribing the data the researcher read through all of the data one time looking for themes. Then the researcher read through and coded the data for areas of frustration. Then the researcher coded the areas of frustration into three different areas. First it was coded into frustration caused by factors directly related to teaching the student, but considered to be outside the control of the teacher such as home environment. Then the data was coded based on frustrations caused by the students’ disabilities. Finally, it was coded on frustrations caused by factors not related to teaching such as paperwork.

After coding based on frustrations the researcher coded the data for areas of positive reflections on the teachers’ own abilities. Then the data was coded for positive aspects of teaching students with disabilities. This positive data was then coded into two areas. The first area was data that demonstrated the teacher’s belief that all students had the ability to learn, and secondly it was coded for how teaching students with disabilities affected the teacher. All of the data was then coded for instructional techniques. Finally, the data on instructional techniques was coded for any mention of individualized instruction.

Several themes emerged from the data. First all of the teachers viewed themselves positively. All of the teachers except respondent #1 mentioned that they believed all of the students had the ability to learn, and all four expressed an ability to teach them. Respondent #3 who is teaching out of field and has the least amount of experience did express limitations on the students’ ability to grasp material on grade level. Only respondents #1 and #4 mentioned the rewarding aspects of teaching SWD. Also respondent #2 who is teaching in field expressed that the students were beyond her control, and that she did the best that she could during the time she was working with the students.

There were several themes expressed when it came to the frustrations or working with SWD. All of the respondents mentioned factors beyond their control which affected their
ability to teach SWD. All but respondent #4 mentioned issues that related to family structure, and the importance of a stable family life. All three expressed concerns that family support affected the students’ ability to learn. Respondent #4 expressed concern with school and district budgeting. She was concerned that funds were not allocated with the best interests of the students in mind and that this use of resources affected her ability to teach SWD. Another frustration mentioned by both respondent #3 and respondent #4 was the amount of paperwork, which needed to be completed by special education teachers. Both of these teachers were teaching out of field. Respondent #2 and respondent #3 articulated concerns with the disabilities of the students, and how these disabilities affected their behavior and ultimately their ability to learn.

The final themes emerged around instructional technique. All four of the respondents stressed the need for individual instruction, and differentiation. Respondent #2 spoke specifically of getting to know each individual student before developing an individual plan for teaching each student. All of the respondents except respondent #1 mentioned using small groups and flexible groups to meet instructional needs.

In attempting to answer the question, “How does the way in which a teacher becomes certified to teach special education affect the way that they perceive their ability to teach students with disabilities?,” the researcher found that there was not a big difference in the way teachers perceived their ability to teach students with disabilities. Interestingly all of the teachers described themselves as well as the students in a positive light. Respondent #2 who has a graduate degree in special education, and has the most teaching experience was the only teacher to mention that the students were beyond her control.

Discussion

Teacher efficacy is an important factor as it relates to student achievement. Many schools are currently failing to meet the provisions of NCLB because of the SWD subgroup. The data collected demonstrates that there are frustrations associated with teaching students with disabilities that are directly related to teacher efficacy. SWD are a difficult group of students to teach who require teachers to have specialized pedagogical skills in order to effectively teach them (Mastropieri & Scruggs, 2001). Effective teachers do not blame outside factors as they relate to the student’s ability to learn, however the participants in this research all voiced concerns about factors beyond their control. All of the participants voiced these concerns, not just the teachers who are teaching out-of-field. This is a troubling concern as we continue to work with this special population. Interestingly, only one of the participants complained of the students’ abilities but instead focused on other factors such as family stability and district policies, which they felt negatively impacted their ability to teach the students.

The other important theme, which emerged from the data was the use of instructional techniques. Only one of the four mentioned tailoring the instruction to the individual needs of the student. This was respondent 2 who has been teaching longer than the other teachers and has a Master’s Degree in Special Education. Employing instructional practices to meet the needs of the individual learner is one of the most important aspects
of teaching SWD. As SWD continue to fall behind it is important that we begin to look at how special educators are trained and certified. The teacher shortage in the area of special education has caused the organizations in charge of certifying teachers to allow shortcuts to certification that may not be in the best interest of the children.

**Conclusion**

Teacher efficacy has a direct impact on teacher learning, and nowhere is teacher efficacy more fragile than in the realm of special education teachers. Daily special educators face the task of working with a difficult yet rewarding group of students. It is easy to blame the student and his/her disability for educational shortcomings. Effective teachers avoid placing such blame, and instead focus on their ability to help these unique students. As the number of alternatively and out-of-field special educators continues to increase it is important that proper methods for training special educators are employed to help insure their success. A teachers’ sense of efficacy is likely to decrease if they are unsuccessful. For this reason it is imperative that teacher efficacy is considered as future special educators are employed (Raudenbush, Rowan, & Cheong, 1992).

More research needs to be done to explore the relationships between teaching SWD and teacher efficacy. There is a lot of research linking teacher effectiveness to a high sense of teacher efficacy, however there is little research in the area of teacher efficacy and special education teachers. This research study focused on special education teachers who are teaching out of field, but the current teacher shortage has also lead to a proliferation of alternatively certified teachers. Future research should focus on the teacher efficacy as it relates to method of certification. Alternative certification focuses on content knowledge rather than pedagogy, and thus may effect teacher efficacy. More research of a qualitative nature also needs to be completed. Most of the research in the area of teacher efficacy is quantitative in nature, and does not give insight into the thoughts of the teachers. This research was limited by the nature of the questionnaire, but further research incorporating classroom observations as well as in-depth teacher interviews could prove insightful in learning more about the nature of teacher efficacy as it relates to teaching students with disabilities.

**References**


About the Author

Sean Green is currently a middle school special education teacher in Georgia. He has been teaching for eight years, but has only been teaching special education for three years. He was a high school social studies teacher before he began working in the area of special education. Sean received his Bachelor’s Degree in History at the University of West Georgia, where he also earned his Masters and Specialist Degrees in Secondary Social Studies. Sean is currently pursuing his Ph.D. in Curriculum and Instruction at Mercer University.
APPENDIX A

Survey Instrument

Faculty Questionnaire

1. Male or female?
2. What grade or grades do you teach?
3. What subject or subjects do you teach and are they co-taught classes or resource classes?
4. How many total years of teaching experience do you have?
5. How many years have you been teaching special education?
6. Did you teach any general education classes prior to teaching special education?
   If so what classes, what grades, and for how long
7. Please list all of your areas of certification.
8. Did you graduate from a teacher education program or were alternatively certified? If you graduated from a teacher education program was your degree specific to special education?
9. Describe yourself as a teacher?
10. How would other teachers describe you as a teacher?
11. Describe your relationship with your students?
12. Describe the instructional techniques you employ?
13. Describe the kinds of students you feel best suited to teach?
14. How would you describe teaching special education to a prospective teacher?
15. Describe your beliefs about your students ability to learn?
16. How do outside factors influence a students’ ability to learn the material?
17. How do you attempt to overcome those outside factors that influence a student’s education?