Teacher Candidates' Knowledge of Special Education Law

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Abstract

This study sought to assess teacher candidates' knowledge of special education policies and procedures as mandated by the federal government. It also examines factors associated with accurate knowledge. A sample of 111 teacher candidates, drawn from a Missouri private university, completed a survey. Overall, teacher candidates lacked accurate knowledge and misperceived their lack of knowledge. The most significant predictors of accurate knowledge were completing more special education courses and having positive attitudes toward inclusion. Additionally, this study revealed no differences in knowledge between regular education teacher candidates versus special education teacher candidates.

Teacher Candidates' Knowledge of Special Education Law

In 1975, Congress passed the Education of All Handicapped Children Act (EAHCA). It later changed to the Individuals with Disabilities Education Act (IDEA) in 1990. Prior to the passage of IDEA schools limited access for students with disabilities to educational opportunities by excluding them from public schools and by not providing an education appropriate to their needs; however, IDEA gave students with disabilities an enforceable substantive right to a free, appropriate public education in the least restrictive environment (Katsiyannis, Yell, & Bradley, 2001). Therefore, students with disabilities had a legal right for education in the least restrictive environment.

In the end, the legal rights of IDEA led to inclusion or the push for educating students with disabilities in regular education classrooms to the greatest extent possible. For example, from 1995 to 2005 the percentage of students with disabilities in the regular education classroom for more than 80% of the school day increased from 45.3% to 52.1% (National Center for Education Statistics, 2009). Moreover, since the passage of IDEA, subsequent amendments and court cases increasingly pushed for more inclusion of students with disabilities in the regular education classroom (Yell, Katsiyannis, & Hazelkorn, 2007). Much prior research focuses on determining factors associated with the successful implementation of inclusion of students with disabilities such as teachers' attitudes, severity of student disability, teacher training, administrative support, classroom structure, and student and teacher perceptions (Avramidis & Norwich, 2002; Elliot, 2008; Leatherman, 2007); however, little research explores educators knowledge of special education policies, procedures, and laws.

Literature Review

Although several laws impact the education of individuals with disabilities, IDEA greatly increased the educational responsibility placed on states to fully educate students with disabilities by combining a bill of rights for children with disabilities with federal funding (Murdick, Gartin, & Crabtree, 2007). IDEA contains six basic principles: zero reject, nondiscriminatory assessment, procedural due process, parental participation, least restrictive environment (LRE), and individualized education program (IEP). The principle of zero reject holds that all students with a disability are entitled to a free and appropriate public education (FAPE). Nondiscriminatory assessment is the principle that testing procedures be racially or culturally nondiscriminatory.

The third principle, procedural due process, guarantees the rights of all persons involved in the provision of educational services for children with disabilities. The principle of parental participation mandates that parents be provided an opportunity to participate in issues pertaining to their child's evaluation, placement, and IEP development. The fifth principle, LRE, focuses on the assumption that the preferred placement for students with disabilities is the regular classroom. Lastly, the IEP is a collaboratively developed document designating the individualized educational program for a student with a disability.

Due to the variety of inclusive practices, the complexity of IDEA, and the continuous changes and updates made to the laws by federal and state agencies, many administrators and teachers lack complete knowledge of the policies, procedures, and issues related to special education (Brookshire & Klotz, 2002; Mitello, Schimmel, & Eberwein, 2009; Salisbury, 2006; Valesky & Hirth, 1992). Nevertheless, laws require they implement the policies and procedures. Educators are frequently confronted with situations involving students with disabilities requiring proper action and documentation in order to provide a legally compliant education and to avoid litigation (Etscheidt, 2006; Militello et al., 2009; Zirkel & Scala, 2010). Thus, having adequate knowledge of special education law is pertinent for regular and special education teachers because they are held accountable for proper implementation of that law.

In a random sample of secondary school principals, Mitello et al. (2009) conducted a survey on legal knowledge and practices. They found that principals reported special education as an area where they received frequent threats of a lawsuit. Principals also indicated special education as a law category they advised their teachers on and claimed they wanted their teachers knowledgeable about it. Hence, administrators not only express special education law as vital knowledge for teachers, they also indicate it as an area of insufficient knowledge for teachers.

In another study, Brookshire and Klotz (2002) surveyed regular education and special education teachers on their knowledge of special education laws. They found that although special education teachers scored higher on their knowledge of special education law than regular education teachers, they both lacked knowledge on the topic. Brookshire and Klotz also found that while regular education teachers held accurate

perceptions of their insufficient knowledge of special education law, special education teachers held an inaccurate perception of their insufficient knowledge. Although these findings offer insight into educators' knowledge of special education law, the survey contained questions involving situations in which teachers chose whether it met compliance or violated compliance. This format offers participants a 50 percent chance of guessing an answer correctly. In addition, the situation-based questions may cause confusion in comparison to more direct questions on the laws.

In order to improve educators' knowledge of special education issues, recent legislation, researchers, and government officials emphasize the importance of teacher preparation as a means to achieve the goals of federal policy (President's Commission on Excellence in Special Education, 2002). In a qualitative study of special education teacher candidates' understanding of instructional strategies for students with disabilities, Wasburn-Moses (2008) found that many candidates lacked understanding that aligned with IDEA and the No Child Left Behind Act (NCLB) of 2001. Since most teachers receive their preparation through a college teaching program (National Center for Alternative Certification, 2010), it is essential that those programs train teachers in special education. The purpose of the present study is to identify teacher candidates' knowledge of special education policies and procedures and explore some of the factors associated with that knowledge. While some research suggests teachers and teacher candidates lack accurate knowledge of special education policies and procedures, these findings require additional support. In addition, since a multitude of factors may associate with having accurate knowledge of special education policies and procedures, this study explores possible predictors of knowledge. This study aims to answer the following research questions:

- Do teacher candidates have accurate knowledge of special education policies and procedures?
- Is there a significant difference in the knowledge of special education policies and procedures of regular education teacher candidates versus special education teacher candidates?
- Do teacher candidates have accurate perceptions of their knowledge of special education policies and procedures?
- Does a positive correlation exist between teacher candidates' knowledge of special education policies and procedures and the number of special education courses they completed?
- Do teacher candidates' attitudes toward including students with disabilities in the regular education classroom, the number of special education courses they completed, and perception of their knowledge predict their actual knowledge of special education policies and procedures?

Method

Study Design

The present study employed a cross-sectional design with administration of a questionnaire to participants. The researcher recruited participants from the Department of Educational Studies at Saint Louis University. After receiving permission from

professors, the researcher visited nine classes at an agreed upon date and time. The researcher, then, invited students to complete a questionnaire during their class and collected them upon completion. Of the 195 students in the department of educational studies, 111 completed the survey. The remaining 84 students did not complete the survey due to absenteeism, a current internship, or a lack of agreement from their professor to administer the survey during class.

Survey Instrument

Each participant completed the survey of special education perceptions and knowledge; a survey developed by the researcher for the present study. The survey assessed perceptions with three questions regarding attitudes toward inclusion of students with disabilities in the regular education classroom and two questions regarding participants' perception of their knowledge of special education policies and procedures. Participants answered all of these questions on a five point Likert scale (strongly agree, agree, uncertain, disagree, and strongly disagree).

The survey instrument assessed knowledge of special education policies and procedures with accurate and inaccurate statements addressing the six principles of IDEA. Three statements addressed each principle. Participants responded to the statements on a four point Likert scale (yes, it is accurate; it is probably accurate; it is probably not accurate; no, it is not accurate). The researcher employed this design in order to reduce the likelihood of guessing correct answers. Lastly, the survey asked participants demographic questions including their major, academic year, number of completed special education courses, semester planning to student teach, GPA, and sex.

Data Analysis

For questions regarding attitude toward inclusion and perception of knowledge, numbers ranging from one to five were assigned to each Likert scale option. The numbers were totaled from the three questions regarding attitudes to provide an inclusion attitude composite score for each participant such that higher scores indicated positive attitudes. Similarly, numbers from the two questions regarding perception were totaled providing a knowledge perception composite score for each participant in which higher numbers indicated perceiving accurate knowledge. For knowledge of IDEA, numbers ranging from one to four were assigned to each Likert scale option. The total from all the questions provided a knowledge score for each participant. However, following a content validity test in which professionals in the field of special education reviewed the questions, the researcher removed two questions from the analysis due to possible confusion. One of the questions assessed procedural due process and the other assessed zero reject. Therefore, the special education knowledge component totaled to 16 questions with eight containing accurate information and eight containing false information. Participants had the possibility of scoring between 16 and 64 points with higher scores indicating accurate knowledge. The researcher also calculated total scores for each of the six principles.

Results

Demographic Characteristics

The sample for the present study included 111 undergraduate students; however, 12 respondents were removed from analyses because they did not indicate having a major in the field of education. Table 1 displays demographic characteristic of the sample. All potential respondents completed the survey yielding a 100% response rate with female participants accounting for 80.8% of the sample and males accounting for 19.2% of the sample. The majority of the participants indicated their current academic standing as junior (36.4%) or senior (32.3%). Of the participants, 85% indicated a major in the field of regular education, while 14% indicated a major in the field of special education. Lastly, most of the individuals declared their major as either elementary education (38.4%) or secondary education (23.2%).

Table 1
Teacher Candidate Characteristics

Descriptive characteristic	Reponses (N = 99)
Number of completed Special education courses	0 – 15 (M = 1.86)
GPA	2.10 – 4.00 (M = 3.47)
Academic year	
Freshman	24.2%
Sophomore	36.4%
Junior	36.4%
Senior	32.3%
Certification only	4%
Major	
Early childhood	10.1%
Early childhood special education	4%
Elementary	38.4%
Middle school	12.1%
Secondary	23.2%
Special education mild-moderate	11.1%
Foreign language	1%
Sex	
Male	19.2%
Female	80.8%

Responses to Questions

Table 2 presents participants responses to attitude and perception questions. Overall, participants indicated a high level of agreement with the statement that students with disabilities should be included in the regular education classroom to the greatest extent possible. They indicated a slightly lower level of agreement with the statements that inclusion has a positive impact on the learning of students with disabilities and that inclusion has a positive impact on the learning of students without disabilities. These three survey questions formed an inclusion attitude composite score (M = 13.12, SD = 1.82) which resulted in a slightly negative skewness of -0.76 with a range of 8 to 15.

Table 2
Means, Standard Deviations, and Percentages for Attitudes and Perceptions

Statement	*M*	*SD*	Percentage strongly agree or agree (%)
Inclusion of students with disabilities positively affects their learning.	4.43	0.67	89.9
Inclusion of students with disabilities positively affects the learning of students without disabilities.	4.22	0.74	81.8
Students with disabilities should be included in the regular education classroom to the greatest extent possible.	4.47	0.71	89.7
I have sufficient knowledge of special education policies and procedures as mandated under IDEA.	3.70	0.92	65.7
I am receiving adequate preparation through my coursework at Saint Louis University on special education policies and procedures.	3.98	0.80	82.8

Participants indicated an average level of agreement with having sufficient knowledge of IDEA and with having adequate preparation on special education policies and procedures from their education program at Saint Louis University. The answers to these two questions formed a knowledge perception composite score (M = 7.68, SD = 1.48) which resulted in a slightly negative skewness of -0.80 with a range of 2 to 10.

For ease of interpretation, Table 3 displays participants' composite scores for each IDEA principle and participants' overall knowledge composite score. Knowledge composite scores ranged from 35 to 52 with a mean of 43.74 and a standard deviation of 3.30 (see Figure 1). The composite score also resulted in a slightly positive skewness of 0.15. Overall, students scored more accurately on questions regarding LRE (M = 8.98, SD = 1.41) and procedural due process (one question removed, M = 6.41, SD = 1.02).

Conversely, students scored the least accurate on questions regarding parental participation (M = 6.41, SD = 1.09).

Table 3
Means and Standard Deviations for IDEA Principles

IDEA component	*M*	*SD*
Nondiscriminatory assessment composite score	8.07	1.35
IEP composite score	8.42	1.22
LRE composite score	8.98	1.41
Parent participation composite score	6.41	1.09
Zero reject composite score (one question removed from analysis)	5.43	0.99
Procedural due process composite score (one question removed from analysis)	6.41	1.02
Knowledge composite score	43.74	3.30

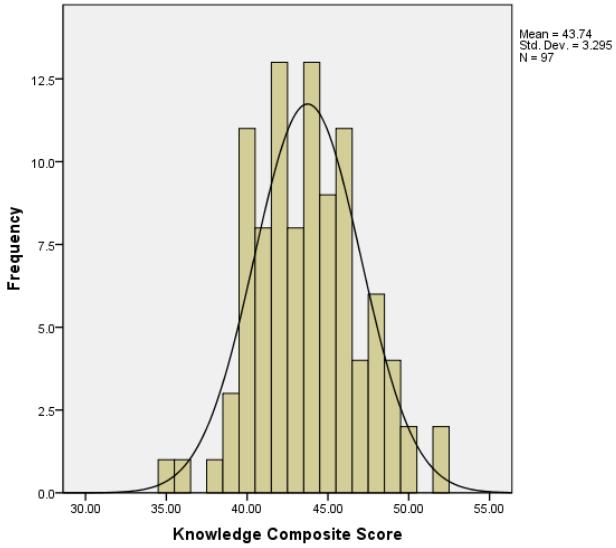

Figure 1. Histogram of knowledge composite score

Analysis of Responses

The first research question asks if teacher candidates have accurate knowledge of special education policies and procedures. In order to assess teacher candidates' knowledge, the researcher performed a test of one population mean using a test value of 50 on the knowledge composite score. The test value of 50 was chosen because a score of 50 demonstrates 70% accuracy on the assessment. Therefore, statistically significant results indicate that the group performed significantly different from the test value of 50. The t-test revealed statistically significant difference between knowledge composite scores and the test value, t (96) = -18.70, $p < .001$ (two tailed). Thus, teacher candidates performed significantly lower than a score of 50 indicating they lack accurate knowledge of special education policies and procedures.

The second research question addresses whether or not there is a significant difference between the knowledge of special education policies and procedures of regular education teacher candidates versus special education teacher candidates. An independent samples t-test was conducted to evaluate the mean difference between teacher candidates majoring in special education versus teacher candidates majoring in regular education on their knowledge, knowledge perception, and inclusion attitude. No statistically significant differences were determined for knowledge composite scores between the two groups, t (95) = .86, p = .39 (two tailed). In addition, no significant differences were determined for knowledge perception composite scores, t (97) = -1.11, p = .27 (two tailed), or the inclusion attitude composite scores, t (95) = .13, p = .90 (two tailed), between the two groups. Thus, teacher candidates have similar knowledge of special education policies and procedures, similar perceptions of their knowledge, and similar attitudes toward inclusion despite their major.

The third research question asks if teacher candidates have accurate perceptions of their knowledge of special education policies and procedures. In order to answer this question, the researcher conducted an ANOVA to explore the difference in knowledge composite scores among different levels of agreement with having sufficient knowledge of special education policies and procedures as mandated under IDEA. Level of agreement was recoded into three categories (agree, uncertain, and disagree) due to the few responses in the strongly disagree category. No statistical difference was found for knowledge between the groups, $F_{2, 94} = 85$, p = .43, indicating that teacher candidates lack an accurate perception of their knowledge.

Another ANOVA was conducted to explore the difference in knowledge composite scores among different levels of agreement with receiving adequate preparation through coursework at Saint Louis University on special education policies and procedures. Level of agreement was again recoded into three categories (agree, uncertain, and disagree) due to the few responses in the strongly disagree category. No statistical difference was found for knowledge between the groups, $F_{2, 94} = .92$, p = .40, indicating that teacher candidates lack an accurate perception of their preparation from coursework on special education policies and procedures.

The fourth research question inquires if a positive correlation exists between teacher candidates' knowledge of special education policies and procedures and the number of courses they have completed. The researcher explored the relationship between the two variables using the Pearson correlation coefficient. There was a significant, positive correlation between the two variables, $r = .18$, $n = 96$, $p < .05$ (one tailed), with higher knowledge composite scores associated with higher number of special education courses completed.

The last research question asks if teacher candidates' attitudes toward including students with disabilities in the regular education classroom, the number of special education courses they completed, and their perception of their knowledge predict their actual knowledge of special education policies and procedures. In order to answer this question, the researcher conducted a hierarchical regression analysis using knowledge composite scores as a dependent variable (see Table 3). The analysis used inclusion attitude composite scores, knowledge perception composite scores, and number of courses completed as independent variables after controlling for GPA, sex, anticipated semester to student teach, and regular education versus special education major. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity.

Model 1 included GPA, sex, anticipated semester to student teach, and regular education versus special education major as predictor variables. The model failed to indicate a good model fit ($F_{4, 78} = .31$, $p = .87$), suggesting that none of the variables significantly predict knowledge of special education policies and procedures. Model 2 utilized inclusion attitude composite scores, knowledge perception composite scores, and number of courses completed as independent variables. Model 2 demonstrated a good model fit ($F_{7,75} = 2.19$, $p < .05$), explaining 9.2% (adjusted $R^2 = .092$) of the variance in knowledge composite scores. In this model, inclusion attitude composite scores ($\beta = .618$, $p < .01$) and number of special education courses completed ($\beta = .369$, $p < .05$) explained the largest amount of variation of knowledge with attitude toward inclusion (beta = .326, $p < .01$) making the greatest unique contribution to knowledge when controlling for the other variables. It was unexpected that perception of knowledge would not have an impact on actual knowledge ($\beta = -.048$, $p = .848$). These findings indicate that having positive attitudes toward inclusion and completing more special education courses predict accurate knowledge of special education policies and procedures; however, an individual's perception of their knowledge failed to predict their actual knowledge.

Table 3
Hierarchical Regression Analysis of Knowledge of Special Education Policies and Procedures (Standardized Coefficient)

	Model 1	Model 2
Major	-.300	-1.082
1=Regular education	(-.029)	(-.104)
2=Special education		
GPA	.148	.562

	(.018)	(.068)
Sex 0=Female 1=Male	1.068 (.125)	.660 (.077)
Semester to student teach	-.042 (-.021)	.221 (.111)
Number of special education courses completed		.369* (.279)
Attitude toward inclusion		.618** (.326)
Perception of knowledge		-.048 (-.022)
Constant	43.658	33.624
Adjusted R^2	-.035	.092
ΔR^2	.016	.154
F-statistic	.314	2.186*
ΔF	.314	4.624**

* $p < 0.05$, ** $p < 0.01$

Discussion

Findings suggest that teacher candidates lack knowledge of special education policies and procedures. Moreover, the candidates perceived they held accurate knowledge despite their poor performance. These findings support an earlier qualitative study by Wasburn-Moses (2008) who found limited knowledge of IDEA among teacher candidates. It also supports the previous finding that special education teachers misperceive their inaccurate knowledge of IDEA (Brookshire and Klotz, 2002); however, the present study suggests that both regular and special education teacher candidates misperceive their inaccurate knowledge. This misperception is troubling because teacher candidates may take incorrect actions in future situations due to their belief of having accurate knowledge of special education policies and procedures.

Of interest is the finding that the number of special education courses an individual completes and holding a positive attitude toward inclusion predict accurate knowledge of

special education policies and procedures. This finding supports previous recommendations that teachers require quality preparation programs with classes addressing special education (Avramidis & Norwich, 2002; Brookshire and Klotz, 2002; President's Commission on Excellence in Special Education, 2002). States may also want to alter their certification requirements. Missouri, for example, requires a minimum of one special education course for certification of elementary school teachers (Missouri Department of Elementary and Secondary Education, 2010). Moreover, since many preparation programs may require few special education courses, teachers may benefit from inservice training in special education policies and procedures.

Positive views toward inclusion also predicted accurate knowledge. In addition, the majority of teacher candidates agreed that inclusion is positive for students with and without disabilities. The majority also agreed that students with disabilities should be included to the greatest extent possible. These positive views reflect the philosophy behind IDEA and court decisions pertaining to the law; however, the factors influencing the positive attitudes are unknown. Surprisingly, no correlation existed between positive attitudes and the number of special education courses completed. Future research should further explore the interaction and the factors influencing positive attitudes. Nevertheless, since past research indicates an association between teachers' attitudes toward inclusion and implementation of inclusion for students with disabilities (Elliot, 2008; McLeskey & Waldron, 2002), this finding suggests that teacher candidates' in this study may exhibit a willingness to implement inclusion when they begin teaching in the classroom.

Several factors failed to yield significant findings. Particularly notable was the lack of difference among teacher candidates' training to be regular education teachers versus those training to be special education teachers. Both groups demonstrated similar knowledge, perceptions of their knowledge, and attitudes toward inclusion. These similar findings may have occurred because the majority of participants from both groups completed between zero and three special education courses or because of the low representation of special education teacher candidates in the sample. Nonetheless, differences between the two groups may occur once they complete their teacher preparation program or once they experience implementing inclusion in the classroom. Since past research on inclusion suggests that previous experience with inclusion influences positive attitudes toward inclusion (Horrocks, White, & Roberts, 2008; Leatherman & Niemeyer, 2005), teacher preparation programs may benefit from incorporating internship experiences with inclusion.

There are several limitations to this study. First, due to the relatively little published research on the issue of knowledge of special education policies and procedures, a replication of this survey with a larger sample is warranted. Second, it is unknown if teacher candidates will apply their knowledge to real-life situations in the classroom. Thus, future research should assess knowledge of current regular and special education teachers and their actions in real-life situations. Lastly, although the present study suggests that taking more special education courses predicts knowledge, it is unknown which specific courses have the greatest impact and what teaching strategies best impact

knowledge. Future research should examine best methods for instructing teacher candidates and teachers on special education policies and procedures.

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