Abstract

The purpose of this study was to analyze teachers’ perceptions of their ability to instruct students with disabilities. A statewide survey was administered in Ohio to pre-service and in-service teachers regarding their perceptions of their teacher preparation programs and their respective ability to instruct students with special needs. Question and statements from the survey regarding their perceptions, concerns, and beliefs on instructing students with disabilities were disaggregated. Results of the survey indicated that both pre-service and in-service teachers felt adequately prepared to teach students with special needs but ongoing professional development lacked the support teachers desired.

Teacher preparation has profound implications for educators in inclusive settings as they face increased pressure to perform to a wider set of roles than in previous generations (Avramidis, Bayliss, & Burden, 2000; Knight, 1999). Teachers now are expected to rise to the challenge of an increasingly diverse classroom (Peterson & Beloin, 1992), adjust their teaching strategies to accommodate varying learning styles (Kortman, 2001), and to be psychologically and practically prepared to take on the dynamic role of an inclusive educator (Mullen, 2001). Since teachers are the primary agents in the implementation of curriculum in inclusive classrooms their perceptions about their preparation must be considered as it is likely that these perceptions may influence their behavior toward and their acceptance of students with disabilities (Hammond & Ingalls, 2003). Further, the attitudes of instructing students with disabilities may have some bearing on the success of inclusive educational programs (Van Reusen, Shoho, & Barker, 2001).

The federal No Child Left Behind (NCLB) Act of 2001 and the Individuals with Disabilities Education Improve Act 2004 (IDEA) are mandates that hold states and schools accountable for the academic progress of all students. At the heart of these two federal laws is the requirement that teachers be qualified to instruct all students within their licensure area. The inclusion of students with disabilities in the general education classroom has diversified the classroom more than ever. One of the pillars of NCLB is based on stronger accountability for all students’ achievement (U.S. Department of Education, n.d.). Students are now expected to achieve academic proficiency for their grade level on state testing regardless of their academic ability. Although inclusion is becoming more and more common, some researchers are still skeptical of the effectiveness of inclusion (Jordan, Schwartz, & McGhie-Richmond, 2009). Teachers have reported feeling unprepared to work with students with disabilities within the general education classroom (Burstein et al., 2004). They also report that they have little time to collaborate with other teachers or make accommodations for students with special needs (Burstein et al., 2004).
However, there is evidence that students with disabilities can succeed in the general education setting as long as teachers use specific teaching strategies (Gibb, Tunbridge, Chua, & Frederickson, 2007).

In a review of the literature, it was found that there is no one characteristic or formula for a successful inclusive classroom (Burstein et al., 2004). Rather it is a combination of many different factors that must come together in order for a successful inclusive classroom to exist (Worell, 2008). Among some of the many factors that are associated with successful inclusion are positive teacher attitudes, ongoing professional development regarding special education, and a strong instructional background (Worell, 2008).

Positive Attitudes
In order for inclusion to be successful, both the general and special education teacher must have a positive attitude toward inclusion (Smith & Leonard, 2005). One study by Monsen and Fredrickson (2004) found that students taught by teachers who have positive attitudes towards inclusion were found to have higher levels of classroom satisfaction and lower levels of conflict compared to teachers with negative attitudes (Gibb et al., 2007). Bender, Vail, and, Scott (1995) found that negative teacher attitudes towards inclusion can ultimately cause the school to fail in implementing successful inclusive programs.

Professional Development
In order for inclusion to be successful, all teachers must have a strong knowledge base about their students’ disabilities, educational needs, and what accommodations or modifications should be provided (Worrell, 2008). However, general education teachers often feel unprepared to include students with special needs within their classrooms (Burstein et al., 2004). Teacher preparation programs and professional development that focus on preparing teachers to work with students with disabilities are critical for student success. In a study which included 56 middle school general educators in a southeastern school district, 41.5% of teachers that had been teaching for an average of 13 years reported that they had not taken any courses focusing primarily on how to teach students with disabilities (deBettencourt, 1999). This same study found that the more special education classes a teacher had taken, the more frequently they used different types of instructional strategies that helped their students with special needs learn in their inclusive classroom (deBettencourt, 1999).

Ongoing professional development that focuses on inclusive practices is critical for student success (Worell, 2008). In a 2004 study of two southern California school districts that followed a model of change to promote inclusive practices, researchers found that districts which provided extensive professional development activities to general and special education teachers had positive outcomes (Burstein et al., 2004). In this study, a three year professional development training that met three to five days per week to focus on how to implement inclusive practices resulted in participants reporting that the staff development was imperative to their preparation for inclusion because it gave them the knowledge and skills for implementation.

Strong Instructional Background
In order for students with disabilities to have access to the general education curriculum, it is critical that teachers use effective teaching strategies (Fox, Farrell, & Davis, 2004). Corbett’s (2001) found that teachers in an inclusive primary school used multiple teaching strategies at
various levels in order to assure active participation by all the students. Stockall and Gartin’s (2002) study of an award winning Blue Ribbon inclusive school, found that teachers facilitated active student participation by forming cooperative groupings that included mixed ability levels and individual responsibilities within the group. Students in the groups were cooperative and encouraging to students with disabilities and often included them in social situations. Teachers in this study frequently modified the curriculum and the amount of work required so that students with disabilities could be successfully included.

As noted in the literature, positive teacher attitudes, ongoing professional development regarding special education, and a strong instructional background are critical for the success of students within inclusive classrooms. If students with disabilities are to have access to the general education curriculum and be successful in inclusive settings, it is critical that general education teachers have the skills to work with struggling students (Smith, Robb, West & Tyler, 2010). Legislation such as NCLB and IDEA hold teachers accountable for the success of all students. Therefore, teacher preparation programs must rise to the challenge of assuring that all teacher candidates graduate with the knowledge, skills and disposition to meet the increasingly diverse classroom.

Method

This study explored teachers’ perceptions on their preparation to instruct students with disabilities. The study was driven by the following research questions:

1. Do pre-service and newly hired teachers perceive their teacher preparation program provided a strong foundation for meeting the needs of children with disabilities?

2. Do newly hired teachers perceive that professional development on inclusive practices was useful in instructing students with disabilities?

Data compiled by Ohio’s teacher training Institutions of Higher Education that participated in a statewide survey know as Teacher Quality Partnership (TQP) in 2006-2007 was analyzed for this study. TQP was a comprehensive, longitudinal study of the effectiveness of teacher preparation for pre-service and in-service teachers for the State of Ohio (TQP, 2008). “All of Ohio’s 50 colleges and universities that provide teacher preparation programs have formed a consortium to identify how the preparation and development of new teachers effect the success of the students they serve” (Rosas & West 2009, p. 4).

Participants

Participants for this study represent two populations: pre-service undergraduate students and in-service teachers. The pre-service teachers consisted of individuals who were seeking their first general or special education teaching license at the elementary, middle and/or high school level in an Ohio institute of higher education. In-service teacher participants were novice teachers who graduated from an Ohio Institutions of Higher Education within the past two years and were teaching general or special education at the elementary, middle and/or high school level. All participants included in this study volunteered to participate in the Ohio statewide Teacher Quality Partnership (TQP) Study. Pre-service teachers completed the survey during their final semester of their teacher preparation program during the academic year of 2006-2007. The in-
service teacher were recruited by letter and asked to participate in the statewide TQP study during the academic year of 2006 - 2007.

Survey Instrument
The survey used in this study was developed by the TQP research group. This research group consisted of faculty representing Ohio’s Institutions of Higher Education that offered teacher preparation programs. The survey was comprehensive and consisted of statements regarding perceptions and beliefs about teaching; the quality of their teacher preparation; teaching concerns; and for in-service teachers their perceptions of professional development and mentoring. Using a 5-Point Likert scale, each participant was asked to rank statements ranging from 1 to 5. Pre-service teachers were asked to complete the 11 page survey with approximately 167 questions/statements during the final semester of their program of studies. Most pre-service participants completed the survey during their student teaching seminar meeting. The in-service teachers were contacted through a letter requesting their participation in the survey and asked to complete a 21 page survey with approximately 361 questions. The TQP survey has been administered to Ohio’s pre-service teachers since 2004 and to in-service teachers since 2005. Since 2007, there has been three distribution of the survey with approximately 7,000 teachers completing the survey. While specific reliability data was not available, the researchers from the TQP study (Loadman, 2007) have assured that the survey is a reliable instrument and that mean scores across the three years of administration have been very similar. An analysis of variance, assessing statistical differences from the previous groups were completed and revealed that the survey had a high reliability for all previous groups that took the survey.

For the purpose of this study, only questions and/or statements on teachers’ perceptions of their teacher preparation programs regarding skills and knowledge to instruct students with disabilities, and staff development perceptions followed by the participants’ ratings were disaggregated from the data set. Questions and/or statements were grouped into three areas. The first area consisted of six questions or statements pertaining to the teacher participants’ perception of their readiness to teach students with disabilities, that is how they perceived their teacher training institute prepared them to work with special education populations. The second area consisted of four questions pertaining to staff development that the in-service teacher received regarding special education. Descriptive statistics were used to analyze the data.

Results

Demographics
The participants for this study consisted of two populations, pre-service and in-service teachers. All 50 Institutes of Higher Education in Ohio that prepare teachers participated in the pre-service survey during the 2006-2007 academic year. Demographic information obtained from the survey revealed that the pre-service teacher participants were primarily white, not of Hispanic origin (91%, n=5,306) and female (76%, n = 5168). These participants were teacher candidates seeking initial Ohio licensure in one or more of the following major Ohio teaching licensure areas: Early Childhood (Pre-K – 3rd grade), Middle Childhood (4th-9th grade), Adolescent Young Adult (7th-12th grade), and special education (K-12 grade).

The second population in this study consisted of in-service teachers who graduated within two years from an Ohio Institution of Higher Education that offered a teacher training program. The
in-service teachers were contacted via a letter requesting their participation in the TQP study. Demographic data from the completed survey indicated that the participants were primarily white, not of Hispanic origin (95%, n=1,159) and female (81%, n= 1,146). These teacher participants held one or more of the following major Ohio licensure areas: Early Childhood (Pre-K – 3rd grade), Middle Childhood (4th-9th grade), Adolescent Young Adult (7th-12th grade), and special education (K-12 grade).

Instructional Foundation for Teaching Students with Disabilities

In an effort to determine teacher participants’ perceptions of how well they believe their teacher licensure program prepared them to instruct students with disabilities, six survey statements were disaggregated from the data. Using a 5-Point Likert scale, each participant was asked to rank statements ranging from (1) “Not at All” to (5) “Very Well. The first statement asked the teacher participants to rate how well their teacher preparation institute prepared them to address special learning needs and/or difficulties. Both pre-service (M=3.80, S.D. = 0.96) and in-service (M=3.66, S.D. = 0.99) teacher participants indicated that they felt their teacher preparation institute prepared them adequately to address special learning needs and/or difficulties. The second question, asked participants to rate how well they felt their teacher preparation program prepared them to tailor teaching and curriculum to individual students’ needs. Both pre-service (M=3.98, S.D. = 0.89) and in-service (M=3.72, S.D. =0.92) teacher participants felt that their professional preparation institute adequately prepared them to tailor teaching and curriculum to individual students’ needs. The third statement in the survey revealed that both the pre-service (M=4.14, S.D. = 0.82) and in-service (M=4.01, S.D. = 0.89) teacher participant felt that their teacher preparation program prepared them well to choose differentiated teaching strategies to meet the needs of different levels of students. The fourth statement selected for analysis from the survey revealed that both pre-service (M=3.61, S.D. 1.05) and in-service (M= 3.44, S.D. 1.09) teacher participants felt adequately prepared to refer students for special assistance when appropriate. The fifth statement revealed that both pre-service (M=3.69, S.D. = 1.05) and in-service (M=3.50, S.D. =1.06) participants felt adequately prepared to work with a variety of students with special needs. The last statement selected from the survey indicated that pre-service (M=3.92, S.D. =1.12) and in-service (M=3.71, S.D. =1.25) teachers felt that their licensure program provided them with an adequate foundation for adapting and modifying instruction and curriculum for meeting the needs of children with disabilities. The findings are presented in Table 1.
Table 1

Teacher Participants Perception on Teacher Preparation to Instruct Students with Disabilities

<table>
<thead>
<tr>
<th>Question/Statement</th>
<th>Pre-service Teacher</th>
<th>In-service Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tabular data is given</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How well did your professional preparation prepare you to address special learning needs and/or difficulties</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How well did your professional preparation prepare you to tailor teaching and curriculum to individual students’ needs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How well did your professional preparation prepare you to choose different teaching strategies to meet the needs of different levels of students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How well did your professional preparation prepare you to refer students for special assistance when appropriate (e.g. speaking, reading).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How well did your professional preparation prepare you to work with students with a variety of special needs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My program gave me an adequate foundation in adapting and modifying instruction and curriculum for meeting the needs of children with disabilities (i.e. special education labels) in general-education classrooms.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Scales are measured on a 5 Point Scale: 1 = Not at all; 5 = Very Well.

Overall the results of the survey indicated that both pre-service and in-service teacher participants felt that their teacher preparation program adequately prepared them to instruct students with special needs. In order to determine if there was a statistical difference between pre-service and in-service teachers’ mean perception score, a t-test was completed. Results from the t-test (α=.05) indicated the mean differences for each question were statistically significant between pre-service and in-service teachers. Looking at the means of the questions, the most significant difference in response for both pre-service and in-service teachers involved the following question, “How well
did your professional instruction prepare you to choose different teaching strategies to meet the needs of different levels of students?” This was the only question that was rated by both pre-service and in-service teacher participants as “well”. Table 2 presents the results of the \( t \)-test.

Table 2

\( t \)-tests of Teacher Participants Perception on Teacher Preparation to Instruct Students with Disabilities

<table>
<thead>
<tr>
<th>Question/Statement</th>
<th>( t )</th>
<th>( df )</th>
<th>( p )</th>
<th>MD</th>
<th>SED</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>How well did your professional preparation prepare you to address special learning needs and/or difficulties</td>
<td>4.3507*</td>
<td>6350</td>
<td>0.0001</td>
<td>0.1400</td>
<td>0.032</td>
<td>0.0768</td>
</tr>
<tr>
<td>How well did your professional preparation prepare you to tailor teaching and curriculum to individual students’ needs.</td>
<td>8.6993*</td>
<td>6331</td>
<td>0.0001</td>
<td>0.2600</td>
<td>0.030</td>
<td>0.2013</td>
</tr>
<tr>
<td>How well did your professional Preparation prepare you to choose different teaching strategies to meet the needs of different levels of students</td>
<td>4.6734*</td>
<td>6335</td>
<td>0.0001</td>
<td>0.1300</td>
<td>0.028</td>
<td>0.0753</td>
</tr>
<tr>
<td>How well did your professional Preparation prepare you to refer students for special assistance when appropriate (e.g. speaking, reading).</td>
<td>4.8103*</td>
<td>6327</td>
<td>0.0001</td>
<td>0.1700</td>
<td>0.035</td>
<td>0.1006</td>
</tr>
<tr>
<td>How well did your professional Preparation prepare you to work with students with a variety of special needs.</td>
<td>5.8899*</td>
<td>53591</td>
<td>0.0001</td>
<td>0.1900</td>
<td>0.032</td>
<td>0.1265</td>
</tr>
<tr>
<td>My program gave me an adequate foundation in adapting and modifying instruction and curriculum for meeting the needs of children with disabilities (i.e. special education labels) in general-education classrooms.</td>
<td>5.6508*</td>
<td>6513</td>
<td>0.0001</td>
<td>0.2100</td>
<td>0.037</td>
<td>0.1370</td>
</tr>
</tbody>
</table>

\( \alpha=.05; \) Equal variances not assumed

*significant \( t \) value. Note: Survey Results were composed of a 5 Point Likert Scale ranging from (1) Not at all to (5) Very well.
Professional Development

In-service teacher participants were asked to judge the usefulness of the professional development they received as new teachers. Four questions/statements regarding in-service teachers’ perception were disaggregated from the TQP data and analyzed. Using a 5-Point Likert scale, each participant was asked to rank statements ranging from (1) “Not Useful” to (5) “Very Useful”. The in-service teacher indicated that both the heterogeneous (\(M=3.50; S.D. 0.94\)) and the full inclusion (\(M=3.48; S.D. 0.99\)) training was somewhat useful. However, the in-service teachers indicated that professional development for addressing the needs of students with disabilities was not useful (\(M=0.59; S.D.=0.49\)). In addition, the professional development that focused on the use of teaching strategies designed for diverse learners was also considered not useful (\(M=0.73; S.D.= 0.44\)). Table 3 presents the findings regarding professional development perceptions.

Table 3
In-service Teachers’ Perception of Usefulness of Professional Development Related to Special Education

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Usefulness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N)</td>
</tr>
<tr>
<td>Teaching heterogeneous groups</td>
<td>410</td>
</tr>
<tr>
<td>Full Inclusion</td>
<td>354</td>
</tr>
<tr>
<td>Address the needs of students with disabilities.</td>
<td>951</td>
</tr>
<tr>
<td>Use of teaching strategies designed for diverse learners</td>
<td>950</td>
</tr>
</tbody>
</table>

Note: Scales are measured on a 5 Point Scale: 1= Not Useful; 5=Extremely Useful

Discussion

This study investigated the perception of pre-service and newly hired in-service teachers’ on their preparedness to instruct students with disabilities. While both pre-service and in-service teachers appear that they felt their teacher preparation program adequately prepared them to instruct students with disabilities. A closer examination of the data revealed that in-service teachers within 1-2 years experience felt less prepared then pre-service teachers. In-service teachers consistently ranked each statement/question slightly lower than the pre-service teachers. In addition, the in-service teachers indicated that professional development addressing special education was not useful. Educational planners and administrators should incorporate practical and effective instructional techniques that would be useful to inclusive classroom. This view supports the recommendation by the Meyer Report (2001) in which the need for support, training for general education teachers is needed.
This study needs to serve as a wake-up call to teacher preparation programs to re-examine how they are instructing their preservice teaching candidates. Further initial instruction for teachers needs to be placed on differentiated instruction to meet the needs of diverse learners. It appears as if inservice teachers recognize an unmet need in their education once they leave the protected hall of the institution. In addition the rating of a three on a five point Likert Scale in this study indicates adequate preparation. If teachers are responsible for the academic preparation of others they should at least feel well prepared to meet the academic needs of students with disabilities within the inclusive classroom setting.

A limitation to this study was the lack of experience of in-service teachers; in-service teachers in this study only had two years of teaching experience. Further research would be needed to determine if experienced teachers with more classroom experience perceived their ability to teach students with disabilities beyond an adequate level. An additional limitation was the lack of disaggregated data grouping participants’ licensure area according to their response. Another limitation of the study was the voluntary survey submission for teachers participating in the TQP study. The convenient sample of pre-service teachers completed the survey during their student teaching seminar whereas the in-service teachers were contacted by letter and asked to participate in the study. Thus in-service teachers’ response rates were lower than that of the pre-service teachers. A larger sample of in-service teachers is needed in order to generalize results.

In summary, this study found that both pre-service and in-service teachers perceived they are adequately prepared to teach students with disabilities and in-service teachers believed that their professional development training was not useful in meeting the needs to instruct students with disabilities. Adequate perception of readiness to teach students with disabilities is unacceptable. No one wants to leave a child behind. Institutions of Higher Education must provide more competently prepared teachers to meet the needs of inclusive settings.

References

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