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ABSTRACT

This study defined teacher efficacy beliefs, discussed teacher attitudes toward inclusion, and investigated the impact of preservice experiences. It hypothesized that there would be a significant mean difference in teachers' efficacy scores and the number of preservice courses addressing inclusion and that there would be a mean difference between teaching field (general or special education). Each hypothesis was examined on two levels: personal efficacy and teaching efficacy. A group of 48 Florida general and special education teachers completed the Teacher Efficacy Scale and provided demographic data which included educational background and teaching assignment. Data analysis indicated that there were significant differences in both personal efficacy scores and teaching efficacy scores when teaching field was the main effect. Special education teachers had higher levels of general teaching efficacy and personal teaching efficacy than did general education teachers. Number of inclusion courses taken in undergraduate teacher training programs did not have a significant impact on mean teacher efficacy scores. (Contains 16 references.) (SM)

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Teacher Efficacy and Inclusion: The Impact of Preservice Experiences on Beliefs

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Abstract

General educators are becoming more directly responsible for the instruction of special needs students in typical classrooms. With this obligation comes uncertainty on the part of many teachers who feel unprepared to meet the specific needs of this population. In the present study, teacher efficacy beliefs were defined, attitudes toward inclusion were discussed, and the impact of preservice experiences was investigated. Forty-eight general and exceptional education teachers were surveyed using the Teacher Efficacy Scale (Gibson & Dembo, 1984). Analyses of variance yielded significant differences in both personal efficacy scores ($F_{(1,33)} = 4.291$, $p = .046$, $\text{Eta}^2 = .115$) and teaching efficacy scores ($F_{(1,34)} = 6.635$, $p = .015$, $\text{Eta}^2 = .163$) when teaching field was the main effect. Number of inclusion courses in undergraduate teacher training programs did not have a significant impact on mean teacher efficacy scores.

Teacher Efficacy and Inclusion: The Impact of Preservice Experiences on Beliefs

Inclusion is an educational reality in America today. As the Individuals with Disabilities Education Act (IDEA) (PL 105-17) continues to be amended, general education teachers are becoming more directly responsible for instructing special needs students within the typical classroom (IDEA, 1997). Historically, general educators have not participated in the same types of preservice training programs as special educators and, as a result, they often feel less confident in their ability to meet the unique demands of exceptional students in inclusionary settings (Buell, Hallam, Gamel-McCormick & Scheer, 1999). Furthermore, teacher efficacy has been identified as a principal factor impacting classroom effectiveness (e.g., Allinder, 1994; Ashton & Webb, 1986; Brownell & Pajares, 1999; Gibson & Dembo, 1984; Pajares, 1992). Thus, the present study seeks to investigate the following hypotheses:

1) There is a significant mean difference in teachers' efficacy scores and the number of preservice courses addressing inclusion.
2) There is a significant mean difference between teaching field (general education or exceptional education).

Each of the hypotheses will be examined on two levels: personal efficacy and teaching efficacy. For each analysis the Teacher Efficacy Scale (Gibson & Dembo, 1984) will be the measure used to assess efficacy.

With these assumptions in mind, the goals of the present study are to evaluate and synthesize research findings in the areas of teacher efficacy and attitudes toward inclusion, to identify the role of preservice experiences on teacher efficacy beliefs and to propose new avenues of research in these areas. For the purposes of this study, teacher

efficacy shall be defined as, "teachers' situation-specific expectation that they can help students learn" (Ashton & Webb, 1986, p.3). Inclusion shall be referred to as the education of individuals with disabilities within the typical classroom, and preservice experiences will be defined as all course work and internships preceding employment as a professional educator.

Literature Review

Teacher Efficacy

The concept of teacher efficacy stems from self-efficacy, a key construct of Bandura's (1986) social learning theory. Bandura has defined self-efficacy as, "beliefs in one's capability to organize and execute the courses of action required to manage prospective situations" (1997, p.2). He maintains that efficacy beliefs largely determine outcome expectations. Similarly, repeated patterns of expected behaviors serve to reinforce or diminish an individual's perceived level of self-efficacy.

Teacher efficacy has been divided into two sub-constructs, teaching efficacy (TE) and personal teaching efficacy (PE). Teaching efficacy is the global belief that educators, in general, can impact student learning, while personal teaching efficacy (hereafter, personal efficacy) refers to individual teachers' confidence in their own teaching ability (Ashton & Webb, 1986; Gibson & Dembo, 1984).

Two Likert-scale prompts, known as the Rand items, have laid the groundwork for studies in teacher efficacy:

1. When it comes right down to it, a teacher really can't do much because most of a student's motivation and performance depends on his or her home environment.

2. If I try really hard, I can get through to even the most difficult or unmotivated students. (Berman, McLaughlin, Bass, Pauly & Zellman, 1977, pp.136-137)

The first Rand item is reflective of TE, while the second is an indicator of PE. When Ashton, Olejnik, Crocker and McAulliffe (cited in Ashton & Webb, 1986) first investigated teacher efficacy using the Rand items, they did not find them to be significantly correlated, suggesting that teachers might exhibit high (or low) efficacy in one domain, but not the other. Thus, it is plausible that general educators might possess high degrees of TE while exhibiting low levels of PE when it comes to meeting the needs of exceptional learners in their classrooms.

One recent study (Buell et al., 1999) found that special education teachers exhibit greater confidence and preparedness in meeting the needs of exceptional students in inclusionary settings than do their general education counterparts. However, another study with notably different results found that high efficacy teachers in typical classrooms can effectively meet the needs of special learners with or without the benefit of training or support in special education (Jordan, Stanovich & Roach, 1997).

Researchers (Allinder, 1994; Soodak, Podell & Lehman, 1998) have found that as teachers' personal efficacy increases, they become less anxious about including students with disabilities in their classrooms. Additionally, high efficacy teachers are more likely to motivate their disabled students to learn by incorporating effective teaching strategies (Bender & Ukeje, 1989), while low efficacy teachers tend to be less strategic and more controlling (Woolfolk & Hoy, 1990). Such studies suggest that augmenting teachers' repertoire of instructional methodologies designed to meet the needs of special students

will increase their feelings of personal efficacy and foster more positive perceptions about inclusion.

Attitudes Toward Inclusion

Having compiled the findings of 28 studies, spanning nearly 40 years, Scruggs and Mastropieri (1996) noted several trends relating to teacher perceptions of inclusion. On average, two-thirds of general education teachers surveyed responded favorably to the idea of inclusion. However, a lesser majority of the same respondents were receptive to the notion of including special needs students in their own classrooms. Teacher responsiveness seemed to directly covary with the level of inclusion and the severity of students' disabilities. Interestingly, teacher attitudes did not appear to differ greatly over time, suggesting that much work remains to be done to further facilitate effective inclusion.

The Role of Preservice Training

Preservice training has been identified as a major component impacting overall teacher efficacy beliefs. Studies (e.g. Bender & Ukeje, 1989; Buell et al., 1999; Soodak, Podell & Lehman, 1998) have shown that general education teachers feel they lack the necessary, specific training to deal with the needs of exceptional individuals. In the majority of studies reviewed by Scruggs and Mastropieri (1996), less than 30 percent of general educators felt equipped to meet the needs of special learners, whereas a substantial majority felt they could sufficiently meet these unique needs with the provision of appropriate preservice and inservice experiences.

Method

Participants

A convenience sample was used for this study. Packets containing 15 surveys each were distributed to 10 public schools in a large, metropolitan district in central Florida. Volunteer coordinators at each school were asked to distribute surveys to beginning teachers (0-4 years experience) who were willing to participate. Forty-eight teachers (grades pre-K through 12) returned completed surveys. Of these respondents, 36 (75%) were general educators and 12 (25%) were exceptional education (ESE) teachers.

Instrument

The primary survey instrument employed in this descriptive study was the Teacher Efficacy Scale (Gibson & Dembo, 1984). This 30-item, Likert scale has been used in prior teacher efficacy studies (e.g. Allinder, 1994; Bender & Ukeje, 1989; Soodak, Podell & Lehman, 1998; Woolfolk & Hoy, 1990), and has been found to have both convergent and discriminant validity (Gibson & Dembo, 1984). Bender and Ukeje (1989) noted internal consistency for personal efficacy (.78) and teaching efficacy (.75). Respondents rated their personal and teaching efficacy beliefs by responding to each of the 30 statements using a six-point scale ranging from strongly disagree (1) to strongly agree (6).

In addition to completing the efficacy instrument, subjects were also asked to respond to eight demographic questions, which included items pertaining to educational background and teaching assignment. Each survey contained a cover letter from the researcher that briefly explained the nature of the study and the time frame and procedures for completing and returning the questionnaires.

Data Analysis

When all the data had been received, it was entered into a database using the SPSS Student Version 9-software package (1999). Certain items from the Teacher Efficacy Scale (Gibson & Dembo, 1984) were recoded so that all statements were unidirectional. (For all items, a score of 1 corresponded with low efficacy and a score of 6 corresponded with high efficacy). Composite scores were obtained for personal efficacy, teaching efficacy and total efficacy. Descriptive statistics were generated and factorial ANOVAs were conducted to examine data for mean differences.

Results

Personal Efficacy

A factorial ANOVA revealed no statistically significant difference between mean personal efficacy scores and number of courses taken that addressed inclusion ($F_{(4,33)}$ = .139, p= .97), however; a statistically significant difference in personal efficacy scores between teaching fields (general education /ESE) was found ($F_{(1,33)}$ = 4.291, p= .046, Eta^2 = .115). More than 11% of the variance in mean personal efficacy scores can be attributed to teaching field. Exceptional education teachers (mean = 4.82, SD = .49) have significantly higher personal efficacy when it comes to meeting the needs of diverse student populations than do general educators (mean = 4.26, SD = .46). There was no significant interaction effect between number of courses addressing inclusion and teaching field ($F_{(2,33)}$ = .320, p= .73). (See Table 1).

Teaching Efficacy

A second factorial ANOVA was conducted to examine differences between mean teaching efficacy scores and number of inclusion courses and teaching field. No

statistically significant difference was found between mean TE score and number of inclusion courses ($F_{(4,34)} = 1.111, p = .37$), but a significant difference was found between mean TE scores and teaching field ($F_{(1,34)} = 6.635, p = .015$, $Eta^2 = .163$). More than 16% of the variance in mean TE scores can be explained by teaching field. Exceptional education teachers yielded significantly higher teaching efficacy scores (mean = 4.14, SD = .29) than did their general education counterparts (mean = 3.78, SD = .34). There was no significant interaction effect between number of inclusion courses and teaching field in the teaching efficacy domain ($F_{(2,34)} = 1.99, p = .15$). (See Table 2).

Discussion

Results of this study failed to support the first research hypothesis that teacher efficacy scores are significantly impacted by the number of preservice courses a teacher completes that address inclusionary best practices. Findings of the study did indicate that teachers in the field of exceptional education tend to have higher levels of general teaching efficacy and personal teaching efficacy than do general educators.

While courses that specifically address inclusion did not have a particular impact on teacher efficacy scores in this study, results of the survey affirmed that exceptional educators typically have a greater sense of overall teacher efficacy than their counterparts in the mainstream. Does preservice training in any way affect this sense of confidence, or is there some innate quality that draws high-efficacy individuals into careers in exceptional education? This question merits further research.

If elements of preservice teacher education programs do influence teacher efficacy beliefs (as previous research suggests, e.g. Brownell & Pajares, 1999), then a revised approach is warranted. It has been noted that the training which general

educators feel they lack is routinely covered in special education teacher preparation curricula (Buell et al., 1999). Fortunately, current trends are moving in a positive direction. Many recently-trained teachers have received instruction in cognitive learning strategies, which serve to better meet the needs of atypical learners as well as increase feelings of teacher efficacy (Bender & Ukeje, 1989; Soodak, Podell & Lehman, 1998).

This researcher is in agreement with Brownell and Pajares (1999), who assert that preservice preparation programs should be revised to include coursework and experiences in exceptional education. In so doing, teachers will enter the field better equipped to meet the unique needs of differently-abled learners, and they will experience a greater sense of professional and personal teaching efficacy.

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Table 1

Tests of Between-Subjects Effects

Dependent Variable: MEANPE

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared
Corrected Model	2.565[a]	7	.366	1.474	.210	.238
Intercept	370.807	1	370.807	1492.334	.000	.978
GENESE	1.066	1	1.066	4.291	.046	.115
COURSES	.138	4	3.447E-02	.139	.967	.017
GENESE * COURSES	.159	2	7.961E-02	.320	.728	.019
Error	8.200	33	.248			
Total	798.571	41				
Corrected Total	10.764	40				

a. R Squared = .238 (Adjusted R Squared = .077)

Table 2

Tests of Between-Subjects Effects

Dependent Variable: MEANTE

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared
Corrected Model	1.905[a]	7	.272	2.696	.025	.357
Intercept	295.780	1	295.780	2930.228	.000	.989
GENESE	.670	1	.670	6.635	.015	.163
COURSES	.449	4	.112	1.111	.367	.116
GENESE * COURSES	.402	2	.201	1.990	.152	.105
Error	3.432	34	.101			
Total	630.194	42				
Corrected Total	5.337	41				

a. R Squared = .357 (Adjusted R Squared = .225)

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