

The Effects of Inclusive-Classroom Experience on Early Childhood Preservice Teachers' Self-Efficacy

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Abstract

This study examined preservice teachers' self-efficacy in teaching children with disabilities to determine whether firsthand field experience in an inclusive setting influences preservice teachers' self-efficacy. A total of 146 preservice teachers enrolled in an early childhood teacher education program in a suburban area in the U.S. Midwest participated in this study. The results revealed that the preservice teachers with firsthand field experience (attendance) in an inclusive classroom perceived themselves to be more efficacious than their counterparts. However, there were no significant effects of time spent at the inclusive setting and courses taken. The present study discusses educational implementation of firsthand experience into teacher preparation programs to enhance teacher effectiveness.

Keywords : early childhood, firsthand field experience, teacher efficacy, general education, inclusion

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In many cases, in the United States and overseas, preschool children with disabilities are educated within the general education classroom. These children may need special guidance and instruction from their teachers, as they sometimes show difficulty in interactions with teachers or caregivers (Kasari & Sigman, 1996; Nam, 2010). The presence of children with special needs brings many challenges for teachers, as well as teacher educators, requiring training in discrete teachers' practices for children with and without disabilities.

The National Association for the Education of Young Children (NAEYC, 2009) recommends that teachers should address their self-competence for serving the growing numbers of children with disabilities and other special learning needs who are present in our early childhood programs. It is clearly stated in the NAEYC (2009) standards for early childhood professional preparation that early childhood teacher preparation programs must ready future teachers with knowledge, skills, and dispositions to meet the needs of the young children in today's classrooms. The National Council for the Accreditation of Teacher Education (NCATE) also endorses that preservice teachers should develop proficiency in guiding students regardless of their cultural backgrounds and exceptionalities to ensure that all students have the opportunity to learn (NCATE, 2001, p. 12). A commitment to inclusion, as a component of diversity, is a requisite professional value that preservice teachers should develop during their teacher preparation, especially in the early childhood education.

In teaching children with disabilities, teachers' sense of self-efficacy is an essential component of teacher preparedness that influences their attitude toward inclusion (Avramidis & Norwich, 2002; Soodak, Podell, & Lehman, 1998). It is imperative that general teacher education programs provide preservice teachers with adequate field experience in inclusive settings in order to prepare them to better teach children with disabilities.

Despite the increasing social need for teachers who are ready to work with children with disabilities, accompanied by rising concern about preservice teachers' perceptions of their own unpreparedness (a problem with their sense of efficacy) (Darling-Hammond, 2006; Goodlad & Field, 1993), few studies have examined early childhood preservice teachers' self-efficacy regarding teaching children with disabilities and the association of perceived efficacy with firsthand experience. The paucity of research in these areas implies that there is a significant gap in our knowledge about how preservice teachers' firsthand experience in inclusive classrooms may influence their sense of efficacy as they anticipate teaching children

with disabilities.

This study was designed with two objectives, one building upon the other: (1) to examine preservice teachers' self-efficacy regarding teaching children with disabilities, and (2) to examine whether firsthand field experience in an inclusive setting in a general teacher preparation program influences preservice teachers' self-efficacy regarding teaching children with disabilities. Specifically, this study examined preservice teachers' firsthand experience with children with disabilities during their field experience as part of their course work, including overall time spent in an inclusive setting, in order to determine the impact of preservice teachers' firsthand experience on their self-efficacy. The present study discusses the educational implementation of firsthand experience into teacher preparation programs to enhance early childhood teacher effectiveness.

Literature Review

Preservice Teachers' Teaching Efficacy in Inclusive Settings

This study is theoretically grounded in the self-efficacy theory of Bandura (1986), which argues that people construct their capacity to perform at a given level of attainment. Teachers' self-efficacy is a self-perception arising from their expectation of personal success, based on prior knowledge, skills, experiences, and observations regarding their students' learning and accomplishments. Research has shown that teachers who stay committed to their profession have strong motivation for, dedication to, and enjoyment of teaching (Day, 2004). Researchers studying the external determiners of teaching efficacy have reported that teachers' expectations about their ability to teach a class are shaped in several ways by the contexts in which they teach (Raudenbush, Rowan, & Cheong, 1992; Ross, Cousins, & Gadalla, 1996). Constructs of teaching efficacy, as theorized by Bandura (1997), involve all teaching-related responsibilities, such as engagement with children, instructional strategies, and classroom management. Given the importance of contextualized teaching experience in shaping teacher attitudes, preservice teachers should explore a full range of experience in teaching-related responsibilities.

In the literature, teachers' self-efficacy has shown a strong association with types of course taken in the teacher education program (Avramidis, Bayliss, & Burden, 2000; Campbell, Gilmore, & Cuskelly, 2003; Martinez, 2003; Shade & Stewart, 2001; Shippen, Crites, Houchins, Ramsey, & Simon, 2005). Prior to entrance into the teaching profession, preservice teachers should expand their capacities by experiencing a full range of teaching-related responsibilities, such as motivating students, presenting lessons, organizing the learning space, and managing a group, with students who are diverse in their abilities.

Preservice teachers' self-efficacy in teaching children with disabilities is often determined by sufficient firsthand experience in inclusive settings. Research has found that "general education teachers often find themselves lacking in knowledge and competencies deemed necessary for teaching in an inclusive classroom as compared with their counterparts in special education" (Buell, Hallam, Gamel-McCormick, & Scheer, 1999; Pace, 2003; Schumm & Vaughn, 1995). Studies have also shown that the preservice teachers in general teacher preparation programs perceive themselves as less effectively trained to develop strategies for teaching children with disabilities than their counterparts in special education teacher preparation programs (Lopes, Monteiro, Sil, & Quinn, 2004; Minke, Bear, Deemer, & Griffin, 1996).

According to Brouwers and Tomic (2000), teachers' self-efficacy in classroom management can be enhanced through a psychological condition that occurs among teachers who work with colleagues in some capacity. Presumably, veteran teachers in an inclusive setting function as models for preservice teachers, showing how to maintain self-efficacy regarding classroom management under difficult conditions, such as emotional exhaustion, feelings of depersonalization, and reduced horizons for efficacy in teaching children with disabilities. It is conceivable that firsthand field experience in a well equipped inclusive setting, where preservice teachers can learn from veteran teachers, will provide the preservice teachers with hands-on experience and enhance their efficacy in teaching children with disabilities in inclusive settings.

Firsthand Field Experience

Regardless of one's philosophical and political beliefs regarding issues of inclusion, research has reported that efficacious teachers of children with disabilities are indeed needed

in general education classrooms, as increasing numbers of children enter school with identifiable and comparatively severe disabilities (e.g., Gettinger, Stoiber, Goetz, & Caspe, 1999). With a majority of general education teachers feeling unprepared to effectively teach and address the needs of children with disabilities (Early & Winton, 2001), and in the face of high attrition and teacher shortages in special education (Brownell, Ross, Colon, & McCallum, 2005; Connelly & Graham, 2009), the question of how best to prepare teachers to meet the needs of children with disabilities presents a complex challenge to the field of teacher education. Clearly, however, educating well-prepared teachers for children with disabilities is a critically important responsibility of teacher education programs.

It has been well documented that firsthand field experience is an integral and primary component of educating teacher candidates. Through firsthand field experience, teacher candidates have practical opportunities to engage in authentic learning (Clifford, Macy, Albi, Bricker, & Rahn, 2005), gain experience in collaboration (Fox & Williams, 1992), inquire about curriculum and practices (Recchia, Beck, Esposito, & Tarrant, 2009), and witness the reality of the teaching profession (Lava, Recchia, & Giovacco-Johnson, 2004).

In sum, field experience provides preservice teachers with professional experience and is effective in enhancing their professionalism (Fry & McKinney, 1997; Smith, 1997). Emotional arousal through personal experience in an inclusive teaching environment enables preservice teachers to develop positive expectations about their teaching experience (Tschannen-Moran, Hoy, & Hoy, 1998).

The Present Study

Unlike research on the positive effects of firsthand experience on teaching efficacy, research on the optimal amount of time preservice teachers should spend in an inclusive setting working with children with disabilities, as well as typically developing children, is rare. Little information on time and experience in the inclusive classroom is available for teacher education programs to consider as they design the field experience component of their curriculum. This study preliminarily examined the relevance of a self-efficacy scale to gauge early childhood preservice teachers' self-efficacy in dealing with children with disabilities.

Secondly, this study examined preservice teachers' self-efficacy in teaching children with disabilities, their firsthand field experience with children with disabilities, and their overall time spent in an inclusive setting, in order to identify the impact of preservice teachers' firsthand experience on their teaching efficacy. Specific study questions were as follows:

- (1) How does the self-efficacy of preservice teachers differ by their program level, their firsthand experience, and the time that they have spent in an inclusive setting?
- (2) To what extent do firsthand field experience and time spent in an inclusive setting predict preservice teachers' efficacy in student engagement, instructional strategies, and classroom management?
- (3) What are the implications of firsthand experience in early childhood education for general teacher education?

Method

Participants

The present study included a total of 146 preservice teachers enrolled in an Early Childhood Education (ECE) undergraduate program in a suburban area in the U.S. Midwest. All participants were female and ranged in age from 19 to 29 years old ($M = 20.89$, $SD = 1.50$). The racial and ethnic identity of the sample as reported by the participants was predominantly White (87.6%), with approximately 6.9% Native American, and less than 5.5% of the sample reporting as Latino, Asian, Biracial, or Other. Approximately 90% of the participants were single.

Procedure

Preservice teachers enrolled in undergraduate ECE courses were invited to participate in the study via their course instructors. Self-report survey questionnaires were provided to the preservice teachers who elected to participate in this study. The survey questionnaire included some items pertaining to demographic information, firsthand field experience at the Sunshine

Lab School, and teachers' self-efficacy; along with these items, the survey also included open-ended questions pertaining to participants' experience with children with disabilities outside of the teacher education program. Through the survey, participants were identified according to their experience at the Sunshine Lab School, and their responses were then sorted into two groups: those with firsthand experience and those without firsthand experience at the Sunshine Lab School during their field experience course. Specifically, the participants who responded that they attended the Sunshine Lab School, where preservice teachers were required to have firsthand experience with children with developmental disabilities, were identified as "with firsthand experience." Participants who responded otherwise were identified as "without firsthand experience." Sunshine Lab School is a pseudonym for the inclusive lab school at the university. It is professionally well equipped and systematically managed according to NAEYC and NCATE's standards. It is a unique setting where about the same numbers of children with and without disabilities are learning together.

Measures

Self-efficacy scale for teaching children with disabilities. This study used the *Teachers' Sense of Efficacy Scale-Long Form* (TSES; Tschannen-Moran & Hoy, 2001) to gauge preservice teachers' self-efficacy in teaching children with disabilities. The TSES was selected for this study because it has been widely used in research with both preservice teachers and teachers in the field (e.g., Ciyer, Nagasawa, Swadener, & Patet, 2010) with adequate construct validity and reliability (Tschannen-Moran & Hoy, 2001). To adapt the TSES to suit the purposes of the present study, all 24 items were reworded to represent preservice teachers' efficacy in dealing with children with disabilities, in the specific areas of student engagement, instructional strategies, and classroom management. The word "students" was replaced with the phrase "students with developmental delays/disabilities" throughout the measure. One question item, for example, states, "I can help students with developmental delays/disabilities to value learning." All items used a 9-point Likert scale, from "Not at All (1)" to "A Great Deal (9)".

The survey also included an open-ended question asking preservice teachers whether they have had any non-course-related experience with children with developmental delays or

disabilities (e.g., a family member, volunteer or work experience, etc.). The survey took approximately 20 minutes to complete.

Data Analysis

Descriptive analysis, exploratory factor analysis, a t-test, univariate analyses of variance, and multiple regression were conducted for basic information, group differences in total teacher self-efficacy and three sub-efficacies (e.g., student engagement, instructional strategies, and classroom management), and variability in predicting teacher efficacy. To detect violation of multicollinearity, tolerance and the Variance Inflation Factor were examined using two collinearity diagnostic factors, an individual R-square value and a Variance Inflation Factor (VIF). Correlations among the key variables and regression coefficients were also examined. In most cases, values of VIF that exceed 10 are considered to be a signal of multicollinearity, but in weaker models values above 2.5 may be a cause for concern. At the last step in the preliminary analysis, the internal item consistencies were measured by Cronbach's alpha. Pearson correlation was performed to check the relationship among items.

A t-test and univariate analyses of variance were performed to examine group differences in preservice teachers' self-efficacy. In order to predict the power of the independent variables on the dependent variable, teaching efficacy, this study employed hierarchical multiple regression. We performed multiple regression with two variables (firsthand experience and hours spent in an inclusive setting).

Results

Descriptive Statistics

Approximately 36.3% had field experience at the Sunshine Lab School while 63.7% had no field experience at the inclusive school. The average number of inclusive courses taken was 2.4 ($SD = .81$).

Table 1. *Items, Subcategories, Factor Loading, and Internal Consistencies*

Items in Three Categories ($\alpha = .98$, 24 items)	<i>FL</i>
<u>Student Engagement (S: $\alpha = .94$, 8 items)</u>	
S1. Get through to the most difficult students with developmental delays/disabilities	.73
S2. Help your students with developmental delays/disabilities think critically	.79
S3. Motivate students with developmental delays/disabilities who show low interest in school work	.76
S4. Get students with developmental delays/disabilities to believe they can do well in school work	.74
S5. Help your students with developmental delays/disabilities value learning	.76
S6. Foster student with developmental delays/disabilities creativity	.68
S7. Improve the understanding of a student with developmental delays/disabilities who is failing	.75
S8. Assist families in helping their children with developmental delays/disabilities do well in school	.74
<u>Instructional Strategies (I: $\alpha = .94$, 8 items)</u>	
I1. Respond to difficult questions from your students with developmental delays/disabilities	.70
I2. Gauge students with developmental delays/disabilities comprehension of what you have taught	.72
I3. Craft good questions for your students with developmental delays/disabilities	.70
I4. Adjust your lessons to the proper level for individual students with developmental delays/disabilities	.78
I5. Use a variety of assessment strategies	.79
I6. Provide an alternative explanation/example when students with developmental delays/disabilities are confused	.79
I7. Implement alternative strategies in your classroom	.83
I8. Provide appropriate challenges for very capable students with developmental delays/disabilities	.82
<u>Classroom Management (C: $\alpha = .93$, 8 items)</u>	
C1. Control disruptive behavior of students with developmental delays/disabilities in the classroom	.73
C2. Make your expectations clear about student behavior	.76
C3. Establish routines to keep activities running smoothly	.70
C4. Get children with developmental delays/disabilities to follow classroom rules	.78
C5. Calm a student with developmental delays/disabilities who is disruptive or noisy	.77
C6. Establish a classroom management system with each group of students	.79
C7. Keep a few problem students with developmental delays/disabilities from ruining an entire lesson	.84
C8. Respond to defiant students with developmental delays/disabilities	.72

Note. α = Cronbach's alpha; *FL* = factor loading

Preliminary Evaluation of Preservice Teachers' Efficacy Scale

Internal consistencies among items and factor loading were examined (see Table 1). A

Cronbach's alpha of .70 was used as a cutoff value to demonstrate good internal consistency. Cronbach's alphas for student engagement, instructional strategies, and classroom management were .94, .94, and .93, respectively, and showed very good internal consistency for the total teaching efficacy, with a Cronbach's alpha value of .98. All three categories showed good internal consistency. To examine the validity of the existing measure, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was examined. The KMO value was .98, greater than .90, which suggested great adequacy. All items also showed high factor loadings above .70, except two items with .67 and .68, explaining the instrument equally well (see Table 1).

On a scale of 1 to 9, our sample of preservice teachers showed relatively high levels of overall teacher self-efficacy ($M = 6.32$, $SD = 1.40$), student engagement ($M = 6.31$, $SD = 1.47$), instructional strategies ($M = 6.33$, $SD = 1.55$), and classroom management ($M = 6.31$, $SD = 1.38$). Correlations between variables and descriptive statistics are presented in Table 2.

Table 2. *Correlations, Means, and Standard Deviations Between Variables*

Variable	1	2	3	4	5	6	7
1. Teacher Efficacy	1	.96**	.97**	.96**	.16*	.02	.19*
2. Student Engagement		1	.88**	.88**	.15	.01	.18*
3. Instructional Strategies			1	.90**	.17*	.01	.19*
4. Classroom Management				1	.14	.05	.16*
5. Time Spent at the Sunshine Lab School					1	.19*	.81**
6. Number of Inclusive Courses						1	.12
7. Attendance at the Sunshine Lab School							1
<i>N</i>	146	146	146	146	146	146	146
<i>M</i>	6.32	6.31	6.33	6.31	11.92	2.43	0.35
<i>SD</i>	1.40	1.47	1.51	1.38	12.00	0.81	0.48

Note. * $p < .05$ ** $p < .01$ (2-tailed)

Correlations Between the Sunshine Lab School Experience and Teaching Efficacy

This examined whether there were correlations between teaching efficacy, on the one hand, and courses and field experience in inclusive education, on the other. Correlation analysis

revealed that preservice teachers' field experience at the Sunshine Lab School was positively related to teaching efficacy in teaching children with disabilities ($r = .17, p < .05$), student engagement ($r = .19, p < .05$), instructional strategies ($r = .19, p < .05$), and classroom management ($r = .16, p < .05$), while there were no signs of correlation between teaching efficacy and field experience in either typical or inclusive settings other than the Sunshine Lab School. That is, field experience in settings other than the Sunshine Lab School did not correlate with higher levels of teaching efficacy, even when the other settings did provide experience in working with children with disabilities.

Correlations were also examined for the three latent sub-categories of teaching efficacy to see its relations among the categories. All of the three sub-categories equally explained the preservice teachers' sense of teaching efficacy (see Table 2).

Group Mean Differences by Experience at the Sunshine Lab School (Yes or No)

Multiple independent t-tests and ANOVAs were performed to test whether there were significant group mean differences in preservice teachers' total self-efficacy and efficacy in student engagement, instructional strategies, and classroom management by experience at the Sunshine Lab School (no experience = 0, experienced = 1), hours spent at the Sunshine Lab School, the numbers of inclusive courses taken (range 0 - 3), and total time spent in inclusive settings (4 groups). Table 3 presents the mean and standard deviation for each sub-group. The results of the t-tests revealed that there was a significant effect of the Sunshine Lab School experience on pre-service teachers' teaching efficacy and across all of the sub-categories. Other than the effect of the Sunshine Lab School (whether *yes*, indicating experience there, or *no*, indicating no experience there), there were no mean differences by groups that were categorized from the number of inclusive courses, time spent in the program, and overall experience in the inclusive setting in early childhood education.

Preservice teachers with field experience at the Sunshine Lab School ($M = 6.32, SD = 1.40$) showed a stronger teaching efficacy than their counterparts with no experience at the Sunshine Lab School ($M = 6.1, SD = 1.47$), $t(144) = -2.07, p < .05$ (see Table 3). Three sub-categories in teaching efficacy were also examined. The results showed that there were mean differences in student engagement and classroom management, while there was no mean

difference in instructional strategies (see Table 3 for more details). The other variables, including time spent at the Sunshine Lab School and the number of inclusive courses taken, showed no mean differences in teaching efficacy and sub-efficacies.

Table 3. *Group Mean Differences in Teacher Self-efficacy, Student Engagement, Instructional Strategies, and Classroom Management by the Sunshine Lab School Experience*

Outcome Variables	Groups	<i>n</i>	<i>M</i>	<i>SD</i>	
Teacher Efficacy	No Experience	93	6.13	1.41	$t(144) = -2.07, p < .05$
	Experience	53	6.63	1.33	
Student Engagement	No Experience	93	6.12	1.49	$t(144) = -2.02, p < .05$
	Experience	53	6.63	1.38	
Instructional Strategies	No Experience	93	6.13	1.55	$t(144) = -2.12, p > .05$
	Experience	53	6.67	1.39	
Classroom Anagement	No Experience	93	6.16	1.37	$t(144) = -1.82, p < .05$
	Experience	53	6.59	1.36	

Note. The same superscript denotes significant differences as a result of post-hoc analysis ($p < .05$).

Predictors of Preservice Teachers' Self-efficacy

Multiple linear regression analyses were conducted to examine how the preservice teachers' attendance at the Sunshine Lab School and the number of hours spent at the Sunshine Lab School during foundational field experience predict preservice teachers' teacher efficacy and sub-categories in teacher efficacy. As a collinearity issue was found, we entered "attendance at the Sunshine Lab School" and "hours spent at the Sunshine Lab School" into the regression model separately for total teacher efficacy and sub-teacher efficacies.

First, the results of the effects of attendance at the Sunshine Lab School on teacher efficacy indicated that the regression model was significant, $F(1, 144) = 5.44, p < .05, R^2 = .03$, with a significant indication of the effect of attendance at the Sunshine Lab school on overall teacher efficacy. Preservice teachers' attendance at the Sunshine Lab School ($\beta = .19, t = 2.40, p < .05$) was positively related to their overall teaching efficacy (see Table 4).

The results of the effects of attendance at the Sunshine Lab School on three sub-categories in teacher efficacy indicated that the regression models for student engagement ($F(1, 163) = 5.57, p < .05, R^2 = .03$), instructional strategies ($F(1, 144) = 6.40, p < .05, R^2 = .04$), and

classroom management ($F(1, 144) = 4.11, p < .05, R^2 = .04$) were significant. As shown in Table 4, preservice teachers' attendance at the Sunshine Lab School was positively related to their efficacy in student engagement ($\beta = .18, t = 2.34$), instructional strategies ($\beta = .19, t = 2.53$), and classroom management ($\beta = .16, t = 2.03$).

Table 4. *Multiple Regressions of Two Key Factors on Total Teacher Efficacy and Efficacy in Student Engagement, Instructional Strategies, and Classroom Management*

Predictor Variables	Outcome Variables	β	t	R^2	F
Attendance at the Sunshine Lab School	Overall Self-efficacy	.19	2.40	.03	5.44*
	Efficacy in Student Engagement	.18	2.34	.03	5.57*
	Efficacy in Instructional Strategies	.19	2.53	.04	6.40*
	Efficacy in Classroom Management	.16	2.03	.04	4.11*
Hours Spent at the Sunshine Lab School	Overall Self-efficacy	.16	2.04	.03	4.17*
	Efficacy in Student Engagement	.15	1.96	.02	3.86
	Efficacy in Instructional Strategies	.17	2.13	.03	4.55*
	Efficacy in Classroom Management	.14	1.76	.10	3.10*

Note. * $p < .05$.

Secondly, the effects of time spent at the Sunshine Lab School on total teacher efficacy and three sub-teacher efficacies were examined. The results indicated that two regression models for total efficacy ($F(1, 144) = 4.17, p < .05, R^2 = .03$), instructional strategies ($F(1, 144) = 4.55, p < .05, R^2 = .03$), and classroom management ($F(1, 144) = 3.10, p < .05, R^2 = .02$) were significant, while student engagement ($F(1, 144) = 3.86, p > .05, R^2 = .02$) was not significant. As shown in Table 4, preservice teachers' number of hours spent at the Sunshine Lab School was positively related to their overall teacher-efficacy ($\beta = .16, t = 2.04$) and efficacy in instructional strategies engagement ($\beta = .17, t = 2.13$) explaining 3% of the variability for both.

Discussion

Using a modified self-efficacy scale, this study examined whether teacher efficacy is

affected by firsthand field experience with children with disabilities in an inclusive setting and by overall time spent in an inclusive setting. A total of 146 preservice teachers, recruited from a typical early childhood teacher education program, were included in the study. To achieve the major purpose of the study, the reworded instrument was evaluated. The result of exploratory factor analysis with maximum likelihood option showed that the instrument was good for representing preservice teachers' teaching efficacy in student engagement, instructional strategies, and classroom management in an inclusive setting.

Correlation analysis revealed that preservice teachers' field experience at the Sunshine Lab School was positively related to teacher efficacy in teaching children with disabilities, in student engagement, in instructional strategies, and in classroom management, while there were no signs of correlations between teacher efficacy and field experience in either typical or inclusive settings other than the Sunshine Lab School. The results of t-tests revealed that there was a significant effect of the Sunshine Lab School experience on preservice teachers' teaching efficacy and across all of the sub-categories. Other than the Sunshine Lab School effect (yes or no), there were no mean differences by groups that were categorized from the number of inclusive courses, time spent in the program, and overall experience in the inclusive setting in early childhood education. This result was congruent with previous studies: the most productive way to prepare teachers with knowledge and skills for teaching children with disabilities is to provide preservice teachers with firsthand experience in an inclusive setting where the curriculum and program are professionally established according to disciplinary knowledge of best practices specific to inclusion (Fuchs, Fuchs, Hamlett, Phillips, & Karns, 1995; Pugach & Seidl, 1995).

The results of multiple linear regression showed that preservice teachers' attendance at the Sunshine Lab School was positively related to their overall teaching efficacy and all three sub-efficacies in student engagement, instructional strategies, and classroom management. Two regression models for total efficacy, instructional strategies, and classroom management were significant, while student engagement was not significant. The number of hours preservice teachers spent at the Sunshine Lab School was positively related to their overall teaching efficacy and efficacy in instructional strategies only.

This study suggests that teacher educators should consider the ratio of children with developmental delays/disabilities to typically developing children in current field study

classrooms, rotating teacher candidates accordingly when organizing field placements. Field experience should be designed to provide preservice teachers with practical contexts in which they encounter and respond to individual differences among students, including typically developing students and students with disabilities.

This study also suggests that teacher education programs should consider inclusive settings for field placement for all teacher candidates. These inclusive settings should be fully and professionally equipped according to NAEYC and NCATE's standards. As the extant literature suggests (e.g., Minke, Bear, Deemer, & Griffin, 1996; Nam, 2007; Nougaret, Scruggs, & Mastropieri, 2005; Smith & Smith, 2000), the completion of field experience in an inclusive setting should be included in any general education licensure program, especially in early childhood teacher education programs, in which early experience with experienced mentor teachers is of utmost importance in shaping new teachers' perceptions about learning and emotional development. It is clear that teacher educators have a high probability of promoting preservice teachers' development of strong self-efficacy, which goes hand in hand with the commitment to diversity and inclusion that our field values in early childhood professionals (Romi & Leyser, 2006; Bae-Suh, 2007).

Professionally well-prepared teachers are the most important factor influencing the wellbeing of children with disabilities and children in culturally and linguistically marginalized groups in U.S. schools; this wellbeing includes the development of healthy attitudes toward learning. "The best way for the US teacher education to move forward is to shift the centre of gravity from the university to the field and from preparing teachers for "generic" children to preparing them well for the most diverse and challenging contexts" (Sleeter, 2008, p. 1954). In order to provide teacher candidates with diverse and context-specific teaching experience, teacher education programs are encouraged to collaborate, not only with university lab schools, but also with diverse and community-based education settings where disciplinary standards are upheld and experienced teachers are modeling best practices. Such collaboration can further our field's goal of fully preparing teachers to extend social justice and equity in education.

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