

Elementary School Teachers' Preparation and Comfort Level to Teach Students with Diverse Needs

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Abstract

The study was carried out to investigate the elementary school level prospective teachers' preparation towards inclusive practices and comfort level to teach students with diverse needs at elementary level. The study was followed by ultimate objective of measuring the impact of demographic variables in prospective teachers' preparation and comfort level to teach students with diverse needs. The sample was comprised of 216 participants (Male, N=19 Female, N= 197) enrolled in final semester of their teacher education program from one public university. Data were collected by using two already established instruments by Crane (2007) that measured the preparation and comfort level of prospective teachers to teach in inclusive classrooms. A statistically positive moderate relationship Pearson's $r(216) = .461, p < .00$ was found between preparation and comfort level of prospective teachers towards inclusive teaching practices. Descriptive statistics showed that a main source of inclusive awareness was restricted to a friend or acquaintance disability and lectures, curriculum adaptation and team teaching were the main strategies used to teach students with diverse needs. Results of the study also indicated that prospective teachers enrolled in the secondary education program held significantly higher level of preparation and comfort to teach students with diverse needs. They also showed very good level of knowledge and confidence levels for inclusive preparation and comfort levels to teach inclusive classroom. Results of the study with possible implications to policy makers and educators are discussed in the paper.

Keywords: Prospective teachers, inclusive education, preparation, comfort level, diverse needs.

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Introduction

Inclusion can be usually explained as a system that where children with and without disabilities are taught in the same setting, generally, in classrooms (Odom & Diamond, 1998). Four types of inclusive practices are used to teach children in inclusive settings. These are such as (i) making possible the active participation of all children, (ii) providing services for children support, (iii) the engagement of professionals from different fields, and (iv) the assessment of children learning and progress (Odom, Peck, Hanson, Beckman, Kaiser, Lieber, Schwartz, 2004). It is widely known that inclusion training has a positive effect on prospective teachers' attitudes toward inclusion. Savolainen (2009) stated that teachers play an important role in quality education and that teacher effectiveness contributes more to learner achievement rather than other factors, together with class size, class arrangement, or students' background. The requirement for 'high quality' teachers prepared to meet the needs of all learners becomes essential to provide not only equivalent chances for all, but also education for an inclusive society. Teachers' beliefs, attitudes and knowledge contribute significantly to bring about change in the learning of students' with disabilities (Reynolds, 2001).

Sze (2009) reported that teacher education develops an awareness of exceptionalities, which shaped positive attitudes in pre-service teachers toward inclusion. Many other research studies support these findings such as Sharma, Forlin, and Loreman (2008), who conducted a large sample study with respondents from five teacher education institutions located in Australia, Canada, Singapore and Hong Kong. The results showed that practicum supported inclusive approaches for adopting positive changes in attitudes to teach children with disabilities. Lambe & Bones (2006) examined the changes in prospective teachers' attitudes after finishing a post-graduate qualification in education in combination with a field experience and found that course work play an significant role in developing prospective teachers' positive attitudes towards inclusion. Similarly, Swain, Nordness, and Leader- Janssen's (2012) study reported that a special education course significantly influenced positive attitude changes in pre-service teachers. Likewise, Kim's (2011) study also confirmed increases in positive attitudes for inclusive teaching.

The teachers' attitudes are influenced by teacher variables (training, direct contact, confidence, knowledge and previous experience with children with disabilities diverse needs) (Lamorey & Bricker, 1993; Wisniewski & Alper, 1994). Teachers with high level of knowledge and experience demonstrate more positive attitudes regarding inclusion, while teachers with limited knowledge and experience of children with disabilities can cause negative attitudes (Burke & Sutherland, 2004). Teachers who have

more preparation and a high comfort level demonstrate more confidence about working in inclusive classrooms setting (Huang & Diamond, 2009). Additionally, teachers with more training in the area of inclusive education have more positive attitudes (Crane-Mitchell & Hedge, 2007). Teachers indicate a requirement for knowledge and understanding with inclusion (Sadler, 2005), especially to handle children with diverse needs (Bruns & Mogharberran, 2009; Varlier & Vuran, 2006). Further, teachers also need the knowledge about the inclusive practices, principals, discussions with experts, preparation in their schedules, and access to essential resources to manage students with disabilities (Werts, Wolery, Snyder, & Caldwell, 1996; Odom, 2002) though, it is believed that increasing their knowledge and training improves the excellence of inclusion in the classroom (Bredekamp & Copple, 1997).

Pre-service teacher education must, thus, be concerned with the development of the prospective teachers' attitudes towards inclusion (Andrews, 2002). Pearson (2009) states that teacher education is a setting in which changes in prospective teachers' attitudes and beliefs do occur. Atkinson (2004) and Forlin, Loreman, Sharma & Earle, (2009) reported that if the negative attitudes of prospective teachers are not addressed during the early period of teacher education, they may remain to obstruct the development of inclusive education efforts in schools. So, it appears that, to develop progressive inclusive practices, it is important to develop prospective teachers' positive attitudes by providing effective training programs that include adequate information, skills and capabilities (Shaukat, Vishnumolakala, Bustami, 2018).

Objectives of the study

- To investigate the awareness sources of prospective teachers to teach students with diver needs at elementary level.
- To assess the inclusive strategies of prospective teachers to teach students with diverse needs at elementary level.
- To identify the impact of demographic variables in the preparation and comfort levels of prospective teachers to teach students with disabilities at elementary level.
- To identify the relationship between preparation and comfort level of prospective teachers to teach students with disabilities.

Methodology

Sample

A quantitative survey-type descriptive study was used for empirical data collection and analyses (Creswell, 2007). Followed by random sampling technique data were collected from 216 prospective teachers from a public university of Lahore district. Respondents were asked to fill up the demographic information in first section of the questionnaire. A summary of collected demographic variables is given in Table 1.

Table 1

Summary of demographic variables

Variables		<i>n</i>	%
Gender	Male	19	8.8
	Female	197	91.2
Age	19-25	105	48.6
	26-30	101	46.8
	31-35	10	4.6
My highest level of education	Secondary Education	4	1.9
	Bachelor degree	92	42.6
	Masters' degree	116	53.6
	Others	4	1.9
Interaction with a disable person	Yes	80	37.0
	No	136	63.0
Training to teach children with disability	None	142	65.7
	Some	72	33.4
	High	2	.9
Knowledge of inclusion policy or legislation	None	62	28.7
	Poor	40	18.5
	Average	78	36.1
	Good	32	14.8
Confidence level to teach students with disability	Very good	4	1.9
	Very low	37	17.1
	Low	43	19.9
	Average	104	48.2
	High	17	7.9
Level of experience teaching students with disability	Very high	15	6.9
	Nil	139	64.4
	Some	59	27.3
	High	18	8.3

Instrument

To determine the prospective teachers' preparation and comfort levels to teach students with diverse needs, two already established scales 'Preparation and 'Comfort' levels towards inclusive education' designed by Crane (2007) were used in this study to collect data from prospective teachers. The Cronbach Alphas of the scales was reported as 0.763 and 0.785 respectively.

Data collection procedure

Researcher contacted the head of the institution (Education) of a public university and requested to invite the prospective teachers for taking part in this research through formally consent forms. Data were collected from prospective teachers who were trained to teach at elementary level, who were informed about the nature of the study by the researcher who also described the instructions to fill up the questionnaire. Participants were given half an hour to complete the questionnaire. They were also entrusted that their name will be anonymous and the data will keep confidential and will not share with any agency. Once the research gets published, results will be shared with them upon their request.

Data analysis

Descriptive and inferential statistics were used to analyze the data. Descriptive statistics were used to identify the prospective teachers' response level regarding inclusive practices and strategies to prepare teachers for the inclusive classroom. Analysis of variance (ANOVA, SPSS-IBM software) was used to determine the impact of demographic variables on prospective teachers' preparation and comfort to teach students with diverse needs. Pearson correlation was used to determine the relationship between preparation and comfort levels of prospective teachers to teach students with diverse needs.

Table 2

Prospective teachers' sources of awareness of inclusive practices

Variables	<i>n</i>	<i>%</i>
Summer camp experience	12	5.6
Practicum experience in college	2	.9
Volunteer work	11	5.0
Paid employment position	4	1.9
Family member has a disability	18	8.3
Friend or acquaintance has a disability	19	8.8
No experience in this area	147	68.1
Other	3	1.4

Table 2 shows results about prospective teachers' sources of awareness about inclusive education. Majority of prospective teachers (68.1%) had no experience regarding inclusive practices. However, some (8.8%) had a source of interaction with a friend or acquaintance with a disability and few (8.3%) revealed a family member disability as their source of awareness. Only few prospective teachers reflected summer camp (5.6%) and volunteer work (5%) was a source of their awareness about teaching students with diverse needs. However, practicum and paid employment position remained insignificant sources of inclusive education awareness.

Table 3

Strategies to prepare prospective teachers to teach students with diverse needs.

Variables	<i>n</i>	%
Guest speakers	8	3.7
Discussions / lectures	48	22.2
Visitations to programs	13	6.0
Discussion of intervention strategies	18	8.3
Activities relating to curriculum adaptation	29	13.4
Team-teaching with special education	22	10.2
Reading / videos	16	7.4
other	4	1.9
None	58	26.9

Respondents were asked about the use of strategies to prepare prospective teachers to teach students with diverse needs (Table 3). Majority of prospective teachers (N=58) were not taught suitable strategies to teach students with diverse needs. However, lectures (22.2%), Curriculum adaptation (13.4%) and team teaching (10.2%) were the significant strategies in terms of teaching prospective teachers for inclusive classroom. Moreover, guest speakers (3.7%), visitation to programs (6%), intervention strategies (8.3%) readings/videos (7.4%) were least used strategies to prepare students to teach the classroom with diverse needs.

Table 4

Analysis of Variance for variables significantly related to the 'Preparation to teach students with diverse needs' mean scores.

Demographic Variables	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>P</i>
<i>Nature of programs</i>					
Early childhood	6	23.00	(3.58)	19.19	.000***
Primary/elementary	125	22.94	(4.02)		
Secondary	85	26.92	(5.41)		
<i>Knowledge of inclusion policy to teach children with diverse needs</i>					
None	4	21.50	(3.87)	3.03	.019**
Poor	40	22.07	(5.09)		
Average	78	23.91	(3.81)		
Good	32	24.50	(3.84)		
Very good	62	26.24	(6.30)		
<i>Confidence level to teach children with special needs</i>					
Very low	15	21.13	(3.60)	3.46	.009**
Low	43	22.91	(6.03)		
Average	104	23.77	(3.93)		
High	17	25.24	(3.48)		
Very high	37	26.14	(6.50)		

*** $p < .001$, ** $p < 0.001$

Table 4 shows results that prospective teachers who were being trained to teach at secondary level they had significantly more levels of preparation ($M=26.92$, $SD= 5.41$) to teach students with diverse needs as compared to other prospective teachers who were being trained to teach at the early childhood ($M=23.00$, $SD= 3.58$) and elementary level ($M=22.94$, $SD= 4.02$). Prospective teachers with very good level of knowledge had significantly higher scores ($M=26.24$, $SD= 6.30$) than did those with good ($M= 24.50$, $SD= 3.84$), average ($M= 23.91$, $SD= 3.81$), poor ($M= 22.07$, $SD= 5.09$) and none ($M= 21.50$, $SD 3.87$). Followed by the same pattern, prospective teachers with very high levels of confidence ($M=26.14$, $SD= 6.50$) had significantly higher scores than high ($M= 25.24$, $SD= 3.48$), average ($M= 23.77$, $SD= 3.93$), low ($M=22.91$, $SD= 6.03$) and those with low ($M= 21.13$, $SD= 3.60$) confidence levels.

Table 5

Analysis of Variance for variables significantly related to 'Comfort levels to teach students with diverse needs' mean scores.

Demographic Variables	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>P</i>
<i>Nature of programs</i>					
Early childhood	6	12.67	(2.50)	12.91	.000***
Primary/elementary	125	11.67	(2.45)		
Secondary	85	14.05	(4.34)		
<i>Age</i>					
19-25	105	12.52	(3.19)	5.04	.007**
26-30	101	12.42	(3.54)		
31-35	10	16.00	(4.9)		
<i>Knowledge of inclusion policy to teach children with diverse needs</i>					
None	4	7.25	(0.95)	4.96	.001**
Poor	40	11.83	(3.78)		
Average	78	12.41	(3.18)		
Good	32	12.53	(2.24)		
Very good	62	13.06	(3.87)		
<i>Confidence level to teach children with special needs</i>					
Very low	15	11.33	(1.99)	3.40	.010**
Low	43	12.05	(3.85)		
Average	104	13.14	(3.26)		
High	17	12.94	(2.36)		
Very high	37	14.00	(4.16)		

*** $p < .001$, ** $p < 0.00$

Table 5 shows that teachers who were being trained to teach at secondary level ($M = 14.05$, $SD = 4.34$) had a significantly higher comfort level to teach students with diverse needs as compared to those being trained to teach at early childhood ($M = 12.67$, $SD = 2.50$) and elementary level ($M = 11.67$, $SD = 2.45$). Prospective teachers with different age group also showed significant differences, senior age group of prospective teachers held significantly higher comfort level ($M = 16.00$, $SD = 4.85$) for teaching inclusive classroom as compared to middle younger ($M = 12.42$, $SD = 3.54$) and younger ($M = 12.52$, $SD = 3.19$) group respondents. Prospective teachers with very good levels of knowledge ($M = 13.06$, $SD = 3.87$) held more comfort levels as compared to good ($M = 12.53$, $SD = 2.24$), average ($M = 12.41$, $SD = 3.18$), poor ($M = 11.83$, $SD = 3.78$) and none ($M = 7.25$, $SD = 0.95$) levels of knowledge to teach students with diverse needs. Prospective teachers with higher levels of confidence ($M = 14.00$, $SD = 4.16$) held significantly more comfort level to teach students with diverse needs than high ($M = 12.94$, $SD = 2.36$), average ($M = 13.14$, $SD = 3.26$), low ($M = 12.05$, $SD = 3.85$) and low level ($M = 11.33$, $SD = 1.99$) of confidence.

Table 6

Correlation between prospective teachers' preparation and comfort levels towards inclusive education.

Scales	Mean	SD	Pearson correlation	<i>p</i>
Inclusive Preparation	24.50	4.99	.461**	.00**
Comfort level towards inclusive education	12.63	3.50		

* $p < 0.01$ level (2 tailed)

Table 6 shows results about a moderate significant relationship found between prospective teachers' preparation and comfort level to teach students with diverse needs.

Discussion

This study was carried out to determine the prospective teachers' preparation and comfort level to teach children with diverse needs. It is essential to investigate the prospective teachers' preparedness and comfort levels to teach children with special needs effectively before joining the teaching (Hsien, 2007). Descriptive statistics showed that majority of prospective teachers had no experience regarding inclusive practices. However, some had a source of awareness with a friend or acquaintance family member with a disability. Regarding the use of strategies to prepare prospective teachers to teach students with diverse needs many of prospective teachers were not trained with suitable strategies to manage the needs of students. However, lectures Curriculum adaptation and team teaching were the significant strategies in terms of teaching prospective teachers for inclusive classroom.

Initial findings of the study found that prospective teachers who were being trained to teach at secondary level they had significantly more preparation and comfort levels to teach students with diverse needs as compared with other prospective teachers who were being trained to teach at early childhood and elementary level. Secondary Education is an advanced level of teacher education and has more radical nature of course work. Prospective teachers enrolled in M.A. Secondary Education tended to learn how to plan, assess, and allocate lessons; formulate, manage, and grade tests; attend to oral presentations; and sustain classroom discipline. They learn to observe and assess a student's performance and potential. They were increasingly trained to use new evaluation methods. This may be the cause behind prospective teachers' high level of comfort and preparation to teach students with diverse needs (Shaukat, 2012).

The results of the study also revealed that prospective teachers with senior group held significantly more comfort level to teach students with diverse needs as compared to young age groups category. This finding is also consistent with the previous research studies that reported that teachers with a number of years' experience demonstrated more confidence and persistent behavior to teach students who show low motivation in their studies in inclusive setting (Shaukat, 2012; Forlin, 2010; Hsien, 2007). Furthermore, this study reported that prospective teachers with a very good level of knowledge and confidence had significantly stronger preparation and comfort levels to teach students with diverse needs. This finding supports the previous research that pre-service teachers held generally greater level of knowledge for implementing inclusive education (Ellins & Porter, 2005) and had sympathetic attitudes towards students with a disability (Shaukat, Sharma & Furlonger, 2013).

Conclusion

In order to increase the prospective teachers' attitudes, beliefs and comfort levels, they should employ a variety of teaching experiences during practicum. The teacher education programme should exhibit more concrete work instead of conceptual theory to focus on inclusive teaching strategies. Prospective teachers should be taught by demonstrating real teaching situations, such as exposure to the actual classroom and to teachers' responsibilities and role in teaching students in the classroom. By witnessing the real classroom situation prospective teachers can understand and comprehend the practical teaching situation and can be equipped to model their own role according to it. Additional research needs to be piloted using observational procedure to investigate how closely data on self-reported preparation and comfort levels of prospective teachers reflected in classroom practices employed by survey participants.

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