Perception of Pre-service Teachers about their Preparation for Inclusive School in Pakistan

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Abstract

A professional teacher, prepared through an effective teacher education program is the major agent for successful inclusive practices. The study examined the perceptions, skills, and knowledge of pre-service teachers on inclusion and challenges faced during teaching in an inclusive classroom. It was a quantitative study conducted by using a five-point Likert scale containing 31 items under four factors of teacher perception about inclusion that are; concept clarity, preparation, implementation, and challenges. Data was collected from 370 respondents of three universities enrolled in pre-service education programs who participated in the survey. Results indicated the perception of pre-service teachers about their preparation for inclusive school based on gender, age, type of education, and experience have while the respondents agreed about the challenges faced in inclusive education.

Keywords: Pre-service teacher education, inclusion, children with special needs

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Introduction

Educational policies and legislation nourish the idea of special education for special children. In 1950 and 1960 the only educating place for children with special needs were special schools and teaching these students in regular schools consider being an abnormality (Fernandes, 2010). The case of *Brown v. Board of Education of Topeka* (1954) in the US is a benchmark towards inclusiveness of education as Supreme Court ruled that segregation of black children based on race is a violation of their right to equality in education. This landmark decision of court urged the parents of special children to raise their voice against the discrimination in education for their children. They asked for better learning opportunities for their kids in general schools (Frazier & Lewis, 2019).

Developed countries like; UK, USA, and Canada have passed many legislations towards the inclusion of children with disabilities. Many studies have shown that in developing countries ninety percent of special children are out of school and are underprivileged. Only 3 percent of these children get the education and in some countries out of which girls are only 1 percent (Khan, Ahmed, & Ghaznavi, 2012). The journey of inclusive education in developing countries like Pakistan is very slow as compared to developed countries (Sharma, Shaukat, & Furlonger, 2015).

Education for All, documents pointed out teacher education as a sign of 'teacher effectiveness because it is the core element for quality education for all. While in Salamanca Statement there is a strong urge for pre-service education and in-service teacher training for enabling the teacher to educate the diverse community of learners in regular school. Moreover, it's emphasized that organizational support should be provided to the professionals for the improvement and effectiveness of inclusive education. To prepare well-trained quality teachers (Naz & Murad, 2017) for inclusive schools, teacher education programs are one of the most important areas to be improved. Millennium Development Goals' second target of universal primary education also recommended effective teacher training to achieve effective results. Teacher education has also been mentioned as a major tool for the achievement of the Sustainable Development Goal as it aims to

confirm inclusive and quality education and encourage lifetime learning for all (Kalsoom & Qureshi, 2019).

Differentteacher education programs are being offered in Pakistan at various levels of education but these are segregated into general and special education. None of them are focusing on inclusion rather a contradiction has been created in the concept of inclusion. Teachers coming out of these programs have a divided mindset about inclusion (Hussain, 2012). General educators have are luctant attitude towards inclusive classrooms due to extra work, lack of skill and knowledge, whereas special education teachers show a rigid attitude considering inclusion as their sole ownership and specialization (Behlol, 2011).

Pasha (2012), investigated in her study on seventy-five ordinary schools that teachers' behavior, knowledge, skills, infrastructure, and insufficient funds are the barriers to including the learner with diversity. Teachers were not trained professionally to deal with exceptionalities in the classroom. Haider (2008), reported in a similar study that seventy percent of teachers are not well prepared and skilled for the adaptation of curriculum and instructions for children with special needs. Negative attitudes of teachers and inadequate support systems for teaching are key issues in implementing inclusive education.There is a lack of clear policies and guiding principles for the execution of inclusive education at the national level as a result of no modification in teacher education programs. There are massive differences in offering educational programs at the provincial, rural and urban areas that affect professional development for teachers (Naz & Murad, 2019). The challenges the education system is facing throughout the world, diversity of learners is the most critical issue among them. Classrooms are becoming more heterogeneous as the movement of including children with special educational needs in general schools is getting stronger day by day (Hettiarachchi & Das, 2014). Earlier it was conceived that inclusion is only the placement of special needs students in a regular classroom but many recent pieces of research have stressed its importance more than placement (Winter, 2006). It's about participation, achievement, and the learning experience of school life. The country lacks any effective teacher education program for the

implementation of inclusion of children with disabilities. Education policies, administration, materials, and funds are some elements for the success of the inclusive movement. But the main soldiers of the field of inclusive education are the teachers. Effective teaching in an inclusive classroom merely depends upon teacher response towards learner's diversity. Pre-service teacher education is meant to prepare teachers to teach in inclusive settings (Lancaster & Bain, 2019).

Literature Review

Literature shows extensive discussion on teachers' education role in the preparation of prospective teachers for inclusion (Allday et al., 2012). Universities are offering various programs that support teacher preparation but the effectiveness of these programs for inclusion and dealing with the diverse learning needs, is a great concern both internationally and nationally (Forlin, Kawai, & Higuchi, 2015; Husebo, 2012; Snyder, 2012). The reviews of different studies have highlighted the importance of pre-service teacher's education and proposed that different instructional approaches can be used to support teachers and teaching in inclusive schools. The researchers have suggested that to cater to the learning needs of diverse learners positively, an inclusion-driven curriculum and application of that knowledge are essential in any pre-service teacher's education program. Literature also discussed that teacher education play a crucial role to foster the views, knowledge, and capacity of prospective teachers towards inclusion (Massouti, 2019). Other studies showed different concerns in teacher education regarding perception, preparation, implementation, and assessment challenges for effective inclusive practices in different areas. After analyzing these studies on pre-service teacher education major themes that emerged were; concept clarity, preparation, implementation, and challenges (Symeonidou, 2017).

Different studies explored the concept and meaning of inclusion according to prospective teachers. Implementation of inclusive practices is considered best when teachers can apply different pedagogy techniques and believe that all students can learn in an inclusive classroom (Specht, 2016). She also found that

teacher education has a vital and challenging role to develop capacity and competence in teachers for teaching in a heterogeneous classroom. She said that pre-service teachers had doubts "in their ability, in the concept of inclusion, and whether or not all students are capable of being included".

Teacher education programs help teachers in the preparation and implementation of their experience in a practical way. These developmental programs also help them in making positive and sustainable perceptions about inclusion by fostering their learning process (Flores, Santos, Fernandes, & Pereira, 2014). In a study of Australia Dempsey and Dally (2014) proposed professional standards for special education teachers in different areas. The core areas described were knowledge about learners and content, preparation, implementation of pedagogical techniques, learning environment, responding and engaging the learner, assessment, professional skill, and collaboration. An other research by Di Gennaro, Pace, Zollo, and Aiello (2014) recommended that pre-service teachers must learn how to address value and respond to diverse learners in an inclusive classroom. They need to learn skills, knowledge, instructional techniques, and collaboration with other professional classrooms (Tiwari, Das, & Sharma, 2015). Therefore, before attending schools, they must be well acquainted with the policy characteristics of diverse learners in a heterogeneous classroom. Teacher educations can effectively modify their concepts about inclusive education and provide them a firm base of skill and its implementation in a practical field successfully.

According to Cochran-Smith (2005), four dimensions must be covered while preparing the pre-service teachers; differentiated instruction and development of professional learning of content, understanding of diversity, different assessment strategies, classroom management of diverse students (p. 36). In other words, teacher education programs for inclusion need "structural or systemic strategies, widely communicated policy, flexible curriculum, and accessibility of quality material and constant support for teachers" (p. 113).

The crucial role of teachers in promoting inclusion has been recognized internationally. Research has reflected that clarity of

concept for educational organizations and policymakers has remained a challenge. Therefore, proper planning and preparation of teachers' education are necessary to improve the concepts, knowledge, and skills of teachers so that they can apply them effectively and address the diverse needs of learners. The findings of various studies have shown that such preparation is still to be identified (Carrington et al., 2012). About inclusive education, there is a rhetorical commitment in Pakistan. Inclusive education is merely tailoring in the country especially with regards to children with special needs. Many projects on inclusive education in collaboration with other international universities have been signed up by the Government of Pakistan but in practice the situation is chaotic and discrimination prevails based on a social, economic, cultural, and geopolitical position which is the major hindrance in the implementation of the inclusive education (Azad, 2016). We need to research in the field of teacher education to emphasize skill, content-based pedagogy, and practice (Pijl, 2010). Keeping this in view the study has been conducted to examine the concepts of prospective teachers about awareness, skill, and knowledge regarding an inclusive setup. The study has also examined the challenges of prospective teachers which they may face during a teaching in an inclusive classroom and to make practice recommendations to enhance the quality of inclusive education within the Pakistani education system.

Objective of Study

The objective of the study was to find out the perception of pre-service teachers about their preparation for inclusive school in Pakistan.

Research Questions

Based on the above view this study endeavored to address the following research questions:
1. Is there any clarity of concept regarding inclusion in pre-service education?

2. Do pre-service teacher programs provide teachers with sufficient knowledge and skill to teach in an inclusive classroom?
3. Does the inclusive teaching skills acquire during pre-service training useful and applicable in a classroom?
4. What challenges are being faced by teachers in an inclusive classroom?

Methodology

This was quantitative research conducted by using a descriptive survey. A survey was conducted and a questionnaire was designed while using a five-point Likert scale: Quantitative research is based on numerical data collection and analysis, which identifies, illustrates forecasts, or monitors variables and interest phenomena.

Population and Sample

The population is the group of people whose focus is on research and who the researcher is interested in determining certain features. The population for the study included 55 universities of Lahore district in the Punjab province of Pakistan. The techniques used in selecting the sample for the research were the random sampling technique. When a random sample is taken, the probability of selecting a Member of the population will be equal for each member of the study population. Pre-service teachers enrolled in the special and regular teacher education programs at three universities of Lahore were participated in the study. The survey was obtained from 400 pre-service teachers but 370 samples were selected as 30 questionnaires were incomplete or not filled properly. The techniques used in selecting the sample for the research were the random sampling technique.

Development of Instrument

The questionnaire is designed by the researcher under the supervision of the supervisor based on objective, theoretical framework, and literature review as there was not a standardized

tool available. The instrument was validated by experts in the fields. It was designed in the English language and has 31 statements, fewer than four factors: concept clarity, preparation, implementation, and challenges. A questionnaire was designed while using a five-point Likert scale: Some Likert-scale items in the survey were drawn from sources: the Concerns about Inclusive Education Scale (CIES) (Sharma & Desai, 2002), Teachers' attitudes toward inclusion scale (TATIS) (Bailey, 2004), and Teachers' efficacy in implementing inclusive practices (TEIP)(Sharma, Loreman, & Forlin, 2012). The characteristic of the demographic data contained variables like gender, age, academic qualification, professional qualification, experience. The reliability of the instrument was tested using Cronbach's alpha. The alpha values for the questionnaire were 0 .995.

Data Collection and Analyses

The questionnaire was self-administered by the researcher to the respondents. A permission letter from the university was presented to the Head of relevant universities to get permission for gathering data. The researcher then introduced herself, described the purpose of the study to the respondents. the researcher still assures the respondents that the information they provide would be given the confidentiality it deserved as such respondents were advised not to write their names anywhere in the questionnaire in data analysis, the responses of pre-service teachers were reported and inferential statics were run through SPSS after coding it.

Results

Demographical Data of the Participant

19% (n=69) of the pre-service teachers were male and the majority 81% (n=301) were female. 9%(n=35) of the pre-service teachers were B.A, 62%(n=228) were BS, and 23% (n=84) were M.A and 6%(n=23) were M.Phil.62 %(n=230) of the pre-service teachers were from general education and 38% (n=140) were from special education.83 %(n=308) of the pre-service teachers were

less than 25 years and 17% (n=62) of age was more than 25 years.34 %(n=126) of the pre-service teachers had no experience, 9 %(n=35) had experience of fewer than 5 years and 57 %(n=209) had more than years' experience.

Table 1

Independent sample t-test comparing factors of pre-service teacher education by gender

Factors	Gender	N	M	SD	t	p
Concept Clarity	Male	69	3.75	.74	.59	.56
	Female	301	3.68	.91		
Preparation	Male	69	3.89	.99	-.36	.71
	Female	301	3.66	.84		
Implementation	Male	69	3.66	.84	-.72	.46
	Female	301	3.74	.88		
Challenges	Male	69	3.63	.78	-.81	.41
	Female	301	3.72	.78		

Table 1 illustrates that there is no significant difference in the concept clarity, preparation, implementation, and challenges of pre-service teachers for inclusive education based on their gender. There was no significant difference between concept clarity for inclusive education in male (M=3.7, SD=.74) and female (M=3.6, SD=0.91) conditions; t (368) =.59, p = 0.51. There was no significant difference between preparation for inclusive education in male (M=3.8, SD=.99) and female (M=3.6, SD=0.84) conditions; t (368) =-.36, p = 0.71. There was no significant difference between implementation of inclusive education in male (M=3.6, SD=.84) and female (M=3.6, SD=0.88) conditions; t (368) =-.72, p = 0.46. There was no significant difference between challenges for inclusive education in male (M=3.6, SD=.78) and female (M=3.7, SD=0.78) conditions; t (368) =-.81, p = 0.41.

Table 2

Independent sample t-test comparing factors of pre-service teacher education by education type

Factors	Education Type	N	M	SD	t	p
Concept Clarity	Sp. Edu	140	3.78	.91	1.45	.14
	Gen. Edu	230	3.64	.86		
Preparation	Sp. Edu	140	3.99	.99	1.89	.07
	Gen. Edu	230	3.81	.96		
Implementation	Sp. Edu	140	3.79	.92	1.14	.25
	Gen. Edu	230	3.69	.84		
Challenges	Sp. Edu	140	3.75	.75	.84	.39
	Gen. Edu	230	3.68	.79		

Table 2 illustrates that there is no significant difference in the concept clarity, preparation, implementation, and challenges of pre-service teachers for inclusive education based on their education type. There was no significant difference between concept clarity and Special Education (M=3.7, SD=.91) and General education (M=3.6, SD=.86) conditions; t (368) =1.457, p = 0.1. There was no significant difference between preparation and Special Education (M=3.9, SD=.99) and General education (M=3.8, SD=.96) conditions; t (368) =1.89, p = 0.7 There was no significant difference between implementation and Special Education (M=3.7, SD=.92) and General education (M=3.6, SD=.84) conditions; t (368) =1.14, p = 0.25 There was no significant difference between challenges and Special Education (M=3.7, SD=.75) and General education (M=3.6, SD=.79) conditions; t (368) =.84, p = 0.39**.**

Table 3

Independent sample t-test comparing factors of pre-service teacher education by age

Factors	Age	N	M	SD	t	p
Concept Clarity	< 25	308	3.68	.86	-.62	.53
	>25	62	3.76	.95		
Preparation	< 25	308	3.84	.97	-1.61	.10
	>25	62	4.06	.98		
Implementation	< 25	308	3.72	.85	-.57	.56
	>25	62	3.79	1.00		
Challenges	< 25	308	3.68	.77	-.94	.34
	>25	62	3.79	.82		

There was no significant difference in ages<25 and concept clarity (M=3.6, SD=.86) and>25(M=3.7, SD=.95conditions; t (368) =-.623, p = 0.533There was no significant difference in ages<25 and preparation(M=3.8, SD=.97) and >25 (M=4.0, SD=.98) conditions; t (368) =-1.617, p = 0.107.There was no significant difference in ages<25 and implementation(M=3.7, SD=.85) and >25 (M=3.7, SD=1.0) conditions; t (368) =-.572, p = 0.568There was no significant difference in ages<25 and challenges(M=3.6, SD=.77) and >25 (M=3.7, SD=.82) conditions; t (368) =-.945, p = 0.34.

Table 4

One-way analysis of variance of pre-service teacher education by experience

Source		SS	df	MS	F	p
Concept Clarity	Between Groups	.586	2	.293	.375	.688
	Within Groups	287.064	367	.782		
	Total	287.651	369			
Preparation	Between Groups	.769	2	.384	.401	.670
	Within Groups	351.400	367	.957		
	Total	352.169	369			
Implementation	Between Groups	.174	2	.087	.112	.894
	Within Groups	284.485	367	.775		
	Total	284.659	369			
Challenges	Between Groups	.195	2	.098	.159	.853
	Within Groups	225.764	367	.615		
	Total	225.960	369			

Analysis of variance showed no statistically significant difference at the $p < .05$ level in concept clarity, preparation, implementation and challenges scores by experience $F(2, 367) = .293$, $p = .688$, $F(2, 367) = .384$, $p = .670$, $F(2, 367) = .087$, $p = .894$, $F(2, 367) = .098$ $p = .853$. Although the factor of challenges was reported in all analyses earlier but examined the challenges of prospective teachers is very important to know their perception for the inclusion of children with special in Regular Schools. The majority (69%) of prospective teachers thought that special needs teachers and regular teachers need to work together to teach students with special needs and co-teaching could help them grow professionally as a teacher. Respectively (64%) prospective teachers were agreed to teach students of special needs in an inclusive setting since it is more cost-effective than special education. Meanwhile (60% to 62%) were agreed that lack of resources and large numbers of students in the classroom are a barrier to the implementation of inclusion. may make inclusive teaching impossible. More than half (59%) prospective teachers thought that inclusive teaching is a challenge as it demands more time. Almost half (51%) prospective teachers thought that inclusive teaching sounds good in theory but does not work effectively.

Discussion

Understanding how teacher educators deal with the notion of inclusion is important to strengthen teacher education initiatives, not only because new teachers complain that they're not prepared in diverse classrooms but because teacher educators also express an impression that they have not been trained. One special education course was shown to change participant perceptions of disabled people. Nonetheless, it was observed that one course was ineffective for teachers to fully develop the knowledge and ability required to individualize teaching with meaningful field experience. Teachers of pre-service special education also report

that they feel poorly prepared for the challenges of disabled students (McCray & McHatton, 2011).

Results indicated that gender, age, experience, and different education system do not affect pre-service teachers' concepts about inclusion and their preparation to implement the skill and knowledge for inclusion, and the challenges which will be faced by the teacher in an inclusive classroom. Analyses of the data have shown that general and special education teachers are trained on two different courses, apart from each other, and regular pre-service teachers are not trained to theory and in practice to address the needs of disabled students. Many pre-service education programs included one or two separate inclusive education courses for pre-service special education teachers. But, findings have shown that these separate inclusive courses are not sufficient to provide educators with comprehensive concepts of inclusive education but the damaging core idea of inclusion that teachers are all specialists and that their diverse perspectives and comprehensions are important in addressing the complex learning demands of children in an inclusive classroom.

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The distinction between theoretical planning and practical implementation stresses the teacher education courses, which do not discuss the abstract constructions of inclusion but as well as not build the understanding and skills needed to meet the demands

of students in an inclusive environment effectively. The study of Gehrke, Cocchiarella, Harris, and Puckett (2014) also verified the supposed deterioration in pedagogical know-how and action. Pre-service teachers also note that their involvement in field placements was not completely operationalized as a justification for their lack of readiness to participate(Stites, Rakes, Noggle, & Shah, 2018).

Finding regarding challenges showed that the majority of prospective teachers were strongly agreed with challenges to inclusion. Wang and Fitch (2010), said that training for successful co-teaching in inclusive classrooms allows both regular and special teachers to grow and improve together, thereby improving the quality of the education for all learners. Proper awareness, teaching, preparation, and program modifications lead to increased confidence and constructive outcomes and behaviors in the area of inclusive education (Wright, 2016)

Conclusion

Although intense discussions are taking place at various international levels on what teachers need to learn and how the ethnic, linguistic, and developmental complexity in schools across the world should be replied. The questions like; diversity challenge, belief, abilities, skills, teacher preparation, practice, performance, training/placement query, consistency issues are valuable when developing the knowledge and understanding on which teacher education is based. The matter of grave concern was that many teachers were not trained inclusively and related their instructional knowledge and training methods to the practical field. Such questions need researches to understand the complexity of teaching and learning with changes in teacher education that are designed to promote more inclusive approaches to teaching (Florian, 2012).

Recommendations

More effective, comprehensive, and structured pre-service teacher-education programs should be designed by a shared vision, philosophy, and evidence-based practice of inclusion which provide opportunities to special educators as well as general educators to work collaboratively in these programs for teaching special needs students in regular schools. Such incentives must be maintained by sufficient resources (time, energy, employees, etc.) and should form part of an integrated program, strategically and functionally supported by all teacher and educational stakeholders. Such a setup of the teacher education system will enhance teacher education to a level where teachers will be equipped to teach effectively in an inclusive environment and to address the need of every student.

References

Allday, R. A., Hinkson-Lee, K., Hudson, T., Neilsen-Gatti, S., Kleinke, A., & Russel, C. S. (2012). Training general educators to increase behavior-specific praise: Effects on students with EBD. *Behavioral Disorders, 37*(2), 87-98.

Azad, T. (2016). *Exploring inclusive practice: the beliefs and practices of classroom teachers in two mainstream primary schools in Karachi, Pakistan, in relation to children with special needs.* King's College London.

Bailey, J. (2004). The validation of a scale to measure school principals' attitudes toward the inclusion of students with disabilities in regular schools. *Australian Psychologist, 39*(1), 76-87.

Behlol, M. G. (2011). Inclusive education: Preparation of teachers, challenges in classroom and future prospects. *Pakistan Journal of Education, 28*(2), 63-73.

Carrington, S. B., MacArthur, J., Kearney, A., Kimber, M., Mercer, L., Morton, M., & Rutherford, G. (2012). Towards an inclusive education for all *Teaching in inclusive school communities* (pp. 3-38): John Wiley & Sons Inc.

Cline, T. L. (2016). *The influence of concerns-based training on teachers' perceptions of inclusion.* Cambridge College.

Cochran-Smith, M. (2005). Studying teacher education: What we know and need to know: Sage Publications Sage CA: Thousand Oaks, CA.

Dempsey, I., & Dally, K. (2014). Professional standards for Australian special education teachers. *Australasian Journal of Special Education, 38*(1), 1-13.

Di Gennaro, D. C., Pace, E. M., Zollo, I., & Aiello, P. (2014). TEacher Capacity Building Through Critical Reflective Practice For The Promotion Of Inclusive Education. *Problems of Education in the 21st Century, 60*.

Fernandes, A. C. (2010). *A critical study of inclusive education in the state of Goa.* (Ph.D.), Shivaji University Kolhapur.

Flores, M. A., Santos, P., Fernandes, S., & Pereira, D. (2014). Pre-service teachers' views of their training: Key issues to sustain quality teacher education. *Journal of Teacher Education for Sustainability, 16*(2), 39-53.

Florian, L. (2012). Preparing teachers to work in inclusive classrooms: Key lessons for the professional development of teacher educators from Scotland's inclusive practice project. *Journal of teacher education, 63*(4), 275-285.

Forlin, C., Kawai, N., & Higuchi, S. (2015). Educational reform in Japan towards inclusion: Are we training teachers for success? *International Journal of Inclusive Education, 19*(3), 314-331.

Frazier, M. D., & Lewis, A. D. (2019). Court Cases Preceding Brown v. Board of Education of Topeka *Unsung Legacies of Educators and Events in African American Education* (pp. 91-96): Springer.

Gehrke, R. S., Cocchiarella, M., Harris, P., & Puckett, K. (2014). Field Experiences and Perceptions of Inclusion: Varying Contexts, Structures, and Interpretations. *Journal of the International Association of Special Education, 15*(2).

Haider, S. I. (2008). Pakistani teachers' attitudes towards inclusion of students with special educational needs. *Pak J Med Sci, 24*(4), 632-636.

Hameed, A. (2003). *Inclusive education: an emerging trend in Pakistan.* Paper presented at the Proceeding of the International Conference on Inclusive Education Hong Kong.

Hettiarachchi, S., & Das, A. (2014). Perceptions of 'inclusion'and perceived preparedness among school teachers in Sri Lanka. *Teaching and Teacher Education, 43*, 143-153.

Husebo, D. (2012). Bridging theory and practice in Norwegian teacher education through action research. *Educational action research, 20*(3), 455-471.

Hussain, K. (2012). *Fostering inclusive education in Pakistan: Access and quality in primary education through community school networks*: Center for Universal Education at Brookings.

Kalsoom, Q., & Qureshi, N. (2019). Teacher Education for Sustainable Development in Pakistan: Content Analysis of Teacher Education Curriculum and Standards. *Available at SSRN 3388457*.

Khan, I., Ahmed, L., & Ghaznavi, A. (2012). Child friendly inclusive education in Pakistan. *Insight Plus, 5*, 18-20.

Lancaster, J., & Bain, A. (2019). Designing University Courses to Improve Pre-Service Teachers' Pedagogical Content Knowledge of Evidence-Based Inclusive Practice. *Australian Journal of Teacher Education, 44*(2), 4.

Massouti, A. (2019). Rethinking Teacher Education for Inclusion: A Literature Review. *Canadian Journal for New Scholars in Education/Revue canadienne des jeunes chercheures et chercheurs en éducation, 10*(1).

McCray, E. D., & McHatton, P. A. (2011). " Less afraid to have them in my classroom": understanding pre-service general educators' preceptions about inclusion. *Teacher Education Quarterly, 38*(4), 135-155.

Naz, F., & Murad, H. S. (2017). Innovative teaching has a positive impact on the performance of diverse students. *SAGE Open, 7*(4), 2158244017734022.

Naz, F., & Murad, H. S. (2019). Innovative Teaching: An Effective Ingredient for Educational Change at University Level. *Pakistan Journal of Education, 36*(2), 115-135.

Pasha, S. (2012). Readiness of Urban Primary Schools for Inclusive Education in Pakistan. *Journal of Research & Reflections in Education (JRRE), 6*(2).

Pijl, S. J. (2010). Preparing teachers for inclusive education: some reflections from the Netherlands. *Journal of Research in Special Educational Needs, 10*, 197-201.

Sharma, U., & Desai, I. (2002). Measuring concerns about integrated education in India. *Asia and Pacific Journal on Disability, 5*(1), 2-14.

Sharma, U., Loreman, T., & Forlin, C. (2012). Measuring teacher efficacy to implement inclusive practices. *Journal of Research in Special Educational Needs, 12*(1), 12-21.

Sharma, U., Shaukat, S., & Furlonger, B. (2015). Attitudes and self-efficacy of pre-service teachers towards inclusion in P akistan. *Journal of Research in Special Educational Needs, 15*(2), 97-105.

Snyder, C. (2012). Finding the" royal road" to learning to teach: Listening to novice teacher voices in order to improve the effectiveness of teacher education. *Teacher Education Quarterly, 39*(4), 33-53.

Specht, J. (2016). 1. PRE-SERVICE TEACHERS AND THE MEANING OF INCLUSION. *Journal of Research in Special Educational Needs, 16*, 894-895.

Stites, M. L., Rakes, C. R., Noggle, A. K., & Shah, S. (2018). Preservice teacher perceptions of preparedness to teach in inclusive settings as an indicator of teacher preparation program effectiveness. *Discourse and Communication for Sustainable Education, 9*(2), 21-39.

Symeonidou, S. (2017). Initial teacher education for inclusion: a review of the literature. *Disability & society, 32*(3), 401-422.

Tiwari, A., Das, A., & Sharma, M. (2015). Inclusive education a "rhetoric" or "reality"? Teachers' perspectives and beliefs. *Teaching and Teacher Education, 52*, 128-136.

Wang, M., & Fitch, P. (2010). Preparing pre-service teachers for effective co-teaching in inclusive classrooms *Teacher Education for Inclusion* (pp. 138-145): Routledge.

Winter, E. C. (2006). Preparing new teachers for inclusive schools and classrooms. *Support for learning, 21*(2), 85-91.

Wright, C. M. (2016). Teacher Perceived Barriers to Inclusive Instructional Delivery Approaches.