

Research Article

A Qualitative Insight into Pre-Service Teachers' Level of Readiness and Self-Efficacy to Teach Children with Special Educational Needs

Rockson Ebenezer Nsiah¹, Victoria Baidoo², Jacob Setorglo^{3,*}

¹Department of Education and Psychology, University of Cape Coast, Cape Coast, Ghana

²Department of Basic Education, University of Cape Coast, Cape Coast, Ghana

³Department of Medical Biochemistry, University of Cape Coast, Cape Coast, Ghana

Abstract

Children with special educational needs (SEN) remain underserved in many systems, and teacher preparation is pivotal for inclusive education. This study explored the readiness and self-efficacy of pre-service teachers (PSTs) at the University of Cape Coast to teach children with SEN. Guided by an interpretivist paradigm, we conducted a qualitative case study with PSTs who had completed a special education practicum. Using purposive sampling, ten PSTs (six females, four males) participated in semi-structured interviews. Interviews lasted 15–20 minutes and followed a 17-item guide piloted with a comparable cohort; participation continued until thematic saturation was achieved. Data were analysed with reflexive thematic analysis, progressing through familiarisation, coding, theme development, review, and definition; trustworthiness was ensured through member checking, audit trail, rich description, and peer debrief. Ethical approval was obtained from the University's IRB. Two overarching domains were developed: readiness to teach children with SEN and self-efficacy for inclusive practice. Under readiness, participants reported (i) high perceived readiness grounded in practicum-derived mastery experiences; (ii) developed skill sets for adapting instruction; (iii) growing knowledge for identifying SEN via observation, performance, and assessment; and (iv) positive, empathic attitudes anchored in a sense of duty and care. Under self-efficacy, participants described (i) confidence built through authentic teaching encounters (e.g., supporting learners with autism); (ii) instructional approaches centred on needs-based differentiation and the use of varied teaching-learning materials, visuals, and structured scaffolds; (iii) strategies for impact such as breaking tasks into manageable steps and cultivating belonging; (iv) classroom management anchored in thorough lesson preparation and active engagement; and (v) professionalism that respects individual differences and promotes equitable participation. Practicum exposure, coupled with targeted coursework, appears to be the critical lever shaping PSTs' readiness and self-efficacy for inclusive education in this setting. Strengthening practicum design (e.g., longer placements, structured mentoring, explicit assessment of adaptive instruction), resourcing schools with appropriate materials, and embedding continuous professional development can consolidate these gains and support system-level inclusion goals. While the single-institution, small sample limits transferability, the findings provide actionable insight for programme leaders and policymakers seeking to align teacher education with Ghana's inclusive education agenda. Future studies should triangulate perspectives across institutions and employ longitudinal or mixed-methods designs to track how perceived readiness and efficacy translate into classroom practice and learner outcomes.

*Corresponding author: jacob.setorglo@ucc.edu.gh (Jacob Setorglo)

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Keywords

Pre-Service Teachers, Special Educational Needs, Self-Efficacy, Readiness, Inclusive Education

1. Introduction

Special Educational Needs (SEN) can have slightly different meanings in different parts of the world and covers a wide range of students [1]. The concept of SEN has long existed every country appreciates the concept differently and termed it differently [2]. In Ghana, the ministry of Education indicated that learners with SEN transcends those who have a disability and children who are failing tests in school because they experience barriers that prevent them from achieving optimal progress in their learning and development to include those who are from nomadic homes and street children [3]. Despite widespread agreement on the importance of education, children with SEN are still left behind when it comes to education [4]. Globally, these children face persistent barriers to education stemming from discrimination, stigma, and the routine failure of decision makers to effectively incorporate disability policies in school services and do target teacher training. In some countries, only 13% of children with SEN receive education [5]. In Bangladesh, 30% of people with disabilities have completed primary school, compared to 48% of those without disabilities [6]. Missing out on education affects the quality of life of individuals and their families and has a negative economic impact on the country at large. Quality education is one of the numerous obstacles that these individuals face [7]. The role of the SEN teacher has also been emphasised by international documents such as United Nations Standard Rules on the Equalization of Opportunities for Persons with Disabilities [8], Policy Guidelines on Inclusive Education (IE) [9] and UNESCO Report on Disability [10]. Teachers with a sense of efficacy tend to exhibit greater levels of planning, organisation, and enthusiasm and spend more time teaching in areas where their sense of efficacy is higher. the readiness of a teacher to teach children with SEN is dependent on their knowledge and skills to manage the teaching process. The readiness to teach children with SEN in an inclusive classroom is a demand for pre-service education teachers [11]. In Ghana, more than 700,000 people, including households with disabled members, have disabilities that affect their learning [7]. Nketsia and Saloviita reported that most pre-service teachers from three Ghanaian Colleges of Education were not ready to teach children with SEN [12]. University of Cape Coast trains teachers for these tasks but their readiness and efficacy have not been queried. This study therefore explores pre-service teachers' readiness and self-efficacy levels to teach children with SEN. Our research questions are "what is pre-service teachers' level of readiness to teach children with SEN? and what is pre-service teachers' level of self-efficacy in teaching children with SEN?"

2. Methods

2.1. Study Area and Period

The study was conducted at the University of Cape Coast, a public university in the Central region of Ghana. The institution was established in 1962 and given the mandate of training graduate professional teachers. The University now has five colleges and offers a wide range of academic and research programs. This study targeted students at the faculty of Educational Foundations of the College of Education Studies. The faculty comprises of the Centre for Child Development Research and Referral (CCDRR); the Counselling Centre; the Department of Basic Education; the Department of Education and Psychology; and the Department of Guidance and Counselling.

2.2. Study Design

We based the study on the interpretivist paradigm and used a qualitative case study to investigate pre-service teachers' readiness and self-efficacy levels to teach children with SEN.

2.3. Study Population

The target population of the study was pre-service teachers in the Department of Basic Education. This was pre-service teachers who have been exposed to the practicum exercise in special education. The total number of pre-service teachers who were exposed to practicum in Special Education were 82.

2.4. Sample Size and Sampling Technique

Twenty PSTs who were willing to participate in the study were sampled purposefully and interviewed until saturation was attained when 10 PSTs were interviewed [15, 16]. Six females and four males took part in the interview.

2.5. Data Collection Technique and Procedures

A semi-structured interview guide with 17 questions were broken down into two sections: A, and B. Section A elicited information on pre-service teachers' self-efficacy levels and consisted of nine questions. Section B elicited information on teacher readiness levels and it consisted of seven questions. The interview schedule was pilot tested on 20 pre-service teachers who have been exposed to practicum exercises at the University of Education, Winneba in the Central Region of

Ghana. The University of Education, Winneba which has the same characteristics as the University of Cape Coast. This University also trains teachers in special education.

2.6. Trustworthiness of the Instrument

To ensure trustworthiness of the qualitative instrument, the credibility, transferability, dependability, and confirmability were ascertained. We ensured credibility of the qualitative data through member checking and triangulation [13]. We also provided a rich description of the study's setting, individuals who provided them as well as the criteria used in obtaining them to ensure data transferability. Additionally, we stated the theoretical factors that were used to guide data collection, analysis, and interpretation. Regarding dependability, in this study, the study's procedures were described in detail, making it possible for a subsequent researcher to reproduce the work. An audit trail was used by the researchers to ensure that the findings are not influenced by the researchers' personal ideologies. The interview transcripts were reviewed by experts to ensure if the study's conclusions are supported by the data [14].

Ethical issues and data analysis

Ethical clearance for the study was granted by the University of Cape Coast Institutional Review Board and permission was granted for data collection by the coordinator of the Centre for Child Development Research and Referral, the researchers elicited informed consent from the participants. Between 15 to 20 minutes was used for each session. [17] thematic analysis which has six phases were used to analyse the data. The first phase involves transcription of interviews and extensive reading of the transcripts after that we establish the preliminary list of codes with the broad subjects under examination serving as a guide for this procedure. We then searched for themes after the coding. We then developed subthemes when themes did not represent the full data set collected. We then defined and named the subthemes. Once themes and their interrelationships are completely defined, a research report was drafted.

3. Results

Ten participants (pre-service teachers) were interviewed and six females and four males (Table 1).

Table 1. Gender of participants.

Participants ID	Gender
1	Female
2	Male
3	Female
4	Male

Participants ID	Gender
5	Male
6	Female
7	Male
8	Female
9	Female
10	Female

3.1. Themes

Four sub-themes were also defined under “pre-service teachers’ readiness levels to teach children with SEN” and five sub-themes emerged under pre-service teachers’ efficacy levels to teach children with SEN.

Theme 1: “pre-service teachers’ readiness levels to teach children with SEN”

3.1.1. Sub-Theme 1: Readiness Levels of Pre-Service Teachers to Teach Children with SEN

They feel highly ready because of the knowledge they have gained from studies and their mastery gained from the practicum exercise.

“I have higher readiness, although I am a regular education teacher though, but I have knowledge about children with SEN” (Participant 2).

“I have a higher readiness level in teaching children with SEN, this is so because I have been exposed to some of them at the centre” (Participant 9).

“On a scale of 1-3, I will say 3, because my experience with teaching one of the special education child, the outcome or result was positive and with the speech difficulties and sound she was able to pronounce some words that at first she was not able to so I think I will say 3” (Participant 10).

3.1.2. Sub-Theme 2: Skill Level of Pre-Service Teachers in Teaching Children with SEN

The pre-service teachers indicated that they have a high readiness skill level through practicum exposure to teach children with SEN.

“Higher because although not a special education teacher but a regular education yet have gone through practicum in special education” (Participant 2).

“I have a higher skill level in teaching children with SEN because of my experience from practicum” (Participant 3).

3.1.3. Sub-Theme 3: Knowledge Level of Pre-Service Teachers About Identification of Children with SEN

They could identify children with SEN through observation, performance and through assessment.

"Their behaviour, the way they do their things will help you to identify them" (Participant 5).

"Children with SEN can be hyperactive. They don't pay attention in class...". *"some of them are easily irritated"* (Participant 7).

"For example, if am in the general classroom and I ask a question like 1+1 and the child says 11, then I will know that the person has SEN, because he sees things in a different way other than the normal so therefore is either I recommend the child to a special teacher or a Centre that they can help him or her" (Participant 3).

"Sometimes doctor or health personnel can refer that this person is having SEN, or parents' health history of the person" (Participant 8).

3.1.4. Sub-Theme 4: Attitudes of Pre-Service Teachers Towards Children with SEN

They have a positive attitude towards children with SEN because of the love and also see the human in them and also support them.

"I have these children in heart, so I have some love for them" (Participant 1).

"I am very friendly with them; my attitude is a feeling for them; I see them as me". (Participant 3).

"My attitude towards them is one of ... an embracing one; I feel they are part of us" (Participant 9).

"Sometimes their dressing, or they are going out to ease themselves, I can help them" (Participant 6).

3.2. Theme 2

3.2.1. Sub-Theme 1: Efficacy Levels of Pre-Service Teachers in Teaching Children with SEN

This theme emerged to explain how efficacious due to experience and accumulation of knowledge pre-service teachers feel they are in teaching children with SEN.

"Am very efficacious because I have taught some at the Centre; the child was suffering from autism, as at the time the exercise was over, I witnessed a great improvement" (Participant 3).

"Am very efficacious. Because of the learning am expert in school from level hundred to four hundred, I think am equipped with that very necessary skills to deal with children with SEN. So am very confident" (Participant 5).

3.2.2. Sub-Theme 2: How to Teach Children with SEN

Pre-service teachers indicated that they could teach children with SEN by using appropriate teaching and learning materials and identify their appropriate needs. They can also used trips and observation.

"I think erm... through putting them in the centre of teaching and learning, expose them to the TLMs, I think that is the way to teach them" (Participant 5).

"So in teaching children with SEN, so maybe for instance, I can make use of TLMs. I can use visuals for children who have problem with their sight. I can use some materials that can help them in my teaching process. So, we charts, visuals, logo, sand box" (Participant 8).

"So firstly, I will have to observe them to identify the particular need that child has and go about it based on the TLMs available" (Participant 9).

"I will have to identify the needs of that child; it can be behavioural, visual, or any other. So, if you get to know what the child is suffering from, then you think of how to teach. Let's take its behavioural, if you get to know how the child acts then you think of how to help the child" (Participant 4).

"I can use field trips and observation. That is the approach I used on my child. I used it once and it worked" (Participant 10).

3.2.3. Sub-Theme 3: Ways by Which Pre-Service Teachers Can Impact Children with SEN

The pre-service teachers believe their teaching can impact children with SEN in their classrooms. This can be done through adopting best strategies.

"I believe I will be able to impact them. If I use the best strategies, I will be able to achieve my learning objectives" (Participant 2).

"I take time in teaching and don't teach them in a rush. I break the task into bits, I believe I can impact them" (Participant 3).

"I believe I will be able to teach them to create in them a sense of belongingness so they will know that they are not abnormal as people term them. They are also important and count in everything we do. I will create an atmosphere that they need, it's about their welfare" (Participant 9).

3.2.4. Sub-Theme 4: Ways of Controlling Children with SEN

They have efficacy through adequate teacher preparation, before lesson delivery is critical and helps to boost the confidence of the teacher as indicated by participant. They also involved the children during teaching.

"I prepare before I come to class" (Participant 3).

"As a teacher in general, in teaching you need if you don't have lesson notes and prepare yourself very well, you will find yourself fumbling. I prepare myself before I."

"If maybe am teaching a particular subject and some of the children are disturbing, I can draw their attention to what am doing by asking them questions or to come to the board to write something. If I must give them punishment, I can do so, so that they can realize the presence of a teacher in the classroom" (Participant 8).

3.2.5. Sub-Theme 5: Professionalism Towards Children with SEN and Stakeholders

They recognize the individual differences and modifica-

tions and adjustment to ensure children involvement.

"I can make the students understand that everyone is equal no matter deficiency, that no matter anyone's deficiency we are all equal and there should be respect for each other" (Participant 4).

"For example, you are in the class with children with learning disability, you need to have in mind that their adaptation to teaching and learning is different than the normal children" (Participant 5).

4. Discussion

Pre-service teachers' readiness levels to teach children with SEN

We set out to answer two questions on the efficacy and readiness levels of pre-service teachers in teaching children with special education needs (SEN). The participants provided answers to our questions in that they: felt highly ready to teach children with SEN because; they had experience with children with SEN through the practicum exercise; they have the children at heart and think they equally deserve to be taught; and they have knowledge about children with SEN. Practicum appears to prepare pre-service teachers for teaching children with special education. This finding corroborates that of Shippen et al. who studied pre-service teachers' perceptions of including students with disabilities in the general classroom and reported that pre-service teachers significantly decreased their level of anxiety and hostility toward serving students with disabilities in general education settings [18]. In our case the targets are children and not adults. Sharma et al. found that pre-service teachers have more positive attitudes towards people with disabilities and inclusion and more confidence in implementing inclusive practices when they have had additional training and/or experience with people with disabilities [19]. The pre-service teachers felt highly ready to teach children with SEN because of their exposure to practicum in special education.

Our findings contradict those of Hemmings and Woodcock who indicated that pre-service teachers felt poorly prepared to teach students with SEN [20]. The disparity may be due to the fact that the respondents were not taken through practicum. This applies to the findings of Nketsia and Saloviita that only one-third of the pre-service teachers from three Colleges of Education in Ghana felt somewhat prepared to teach children with SEN [12]. The exposure to practicum in special education may be the distinguishing factor in the disparity in the finding of previous studies and that of the current study. The findings of the study strongly show that practicum makes the pre-service teachers have high skill level in teaching children with SEN. This translates to high readiness bearing in mind that high skill level in teaching children with SEN is one of the sub-scales of readiness to teach children with SEN.

The findings revealed that children with SEN could be identified through observation, assessment, and performance and this ability on the part of respondents comes adequate

knowledge about children with SEN. This finding contradicts the findings of Alkahtani who realised that teachers did not have adequate knowledge on children with SEN and could not identify them through the skills possessed by our cohort [21]. The exposure to practicum in special education alongside the various courses in special education, may have made the difference in this case. The participants may have also been exposed to some courses in the curriculum which in the case of Alkahtani they did not [21]. This was contained in one of the themes. Lack of practicum exposure may have been one of the reasons the teachers who took part in A study by [21] recorded inadequate knowledge about children with SEN. It must be noted that in the current study, pre-service teachers were the participants while in the study conducted by [21] the participants were qualified teachers who were not under training. This means that if the current pre-service teachers complete and are they will likely translate to teachers who adequate knowledge about children with SEN and are highly ready to teach children with SEN. This will help tremendously in response to inclusive education agenda as called by international organizations (UNESCO, 2009; WHO, 2011).

The participants have a positive attitude towards children with SEN because they love them and have their best interests at heart. This finding agrees with a study done by Batsiou in Greece and Cyprus who found that teachers have a positive attitude to teach children with SEN when they have their interest at heart [22]. However, a study found that some teachers have a moderate attitude toward children with SEN [23]. The pre-service teachers could support children with SEN by helping them to perform adaptive skills. This appears novel as to the best of our knowledge no previous literature directly talks about teachers or pre-service teachers' support for children with SEN. The findings revealed that pre-service teachers felt highly ready to teach children with SEN because of the following reasons: they had experience with children with SEN through the practicum exercise, they have the children at heart and think they equally deserve to be taught, and they also have knowledge about children with SEN. The findings revealed Preservice teacher (PSTs) had a high efficacy level in teaching children with SEN because of their experience from the practicum and the knowledge acquired from the various courses in special education they read as part of their programme. This finding supports the work done by [24] that PSTs felt efficacious to teach children with SEN because of their field experience. According to the current study, some of these experiences includes having relatives with SEN, going through practicum in special education, and picking up related courses during their studies. A study equally agree that PSTs with training in special education, knowledge of disability legislations, teaching experience [25], and personal experience with a person with disability have high levels of self-efficacy in teaching within inclusive settings [24].

Pre-service teachers can teach children with SEN using

appropriate teaching and learning materials, by identifying the appropriate needs of the child, by employing multiple teaching strategies, through field trips and observations, and by providing extra attention to children with SEN (instructional efficacy on the teacher self-efficacy scale). This finding corroborates with that of [26] on teachers' instructional practices where different strategies were employed to make sure students understand language [26] and another that agrees with the use of multiple strategies [27].

It was also revealed that PSTs are of the view that teachers can control children with SEN when the teacher had prepared well, and the children are actively involved in the teaching process (classroom management). A study found that effective classroom strategies pave the way for the teacher to impact children positively [28]. This study has shown that PSTs can have an impact on children with SEN by cultivating a loving and harmonious environment. Teacher preparation is also a key factor, which the thematic analysis highlighted as a sure means of controlling children with SEN.

5. Conclusion

The self-efficacy and readiness levels of pre-service teachers to teach children with SEN are hinged on their exposure to practicum in special education. To ensure a successful inclusive education in Ghana, it is therefore critical to improve practicum practice in teacher preparation to teach children with SEN.

Abbreviations

SEN	Special Educational Needs
PST(s)	Pre-Service Teacher(s)
IRB	Institutional Review Board
IE	Inclusive Education
UCC	University of Cape Coast
CCDRR	Centre for Child Development Research and Referral
TLM(s)	Teaching and Learning Material(s)
UNICEF	United Nations Children's Fund
UNESCO	United Nations Educational, Scientific and Cultural Organization
WHO	World Health Organization
HIV	Human Immunodeficiency Virus
AIDS	Acquired Immunodeficiency Syndrome

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Author Contributions

Rockson Ebenezer Nsiah: Conceptualization, Data cura-

tion, Formal Analysis, Funding acquisition, Investigation, Methodology, Resources, Validation, Visualization, Writing – original draft, Writing – review & editing

Victoria Baidoo: Conceptualization, Data curation, Investigation, Methodology, Validation, Writing – original draft

Jacob Setorglo: Data curation, Investigation, Methodology, Validation, Writing – original draft, Writing – review & editing

Conflicts of Interest

The authors declare no conflicts of interest.

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