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Pre-Service Teachers' Perceptions of Inclusive Education at a University of Technology in South Africa

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Pre-Service Teachers' Perceptions of Inclusive Education at a University of Technology in South Africa

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Abstract- Currently inclusive education is one of the contemporary issues in education in both developed and developing countries, though some countries are struggling to effectively implement it. Research has demonstrated that inclusive education can only be firmly implemented if there is a proper curriculum, appropriate resources and good teacher pedagogical and knowledge skills. It is therefore imperative for teacher education to empower pre-service teachers with necessary knowledge and pedagogical skills to teach inclusively. The article focused on Bachelor of Education (B.Ed.) 3rd year student teachers' perceptions and views regarding inclusive education curriculum implementation at a University of Technology in South Africa (UoT). A qualitative research approach was employed with a case study design. Purposive sampling was used to select 120 participants from 3rd year Bachelor of Education students from a University of technology in South Africa. Structured focus group interviews were used to collect data and data was analysed using thematic analysis. Engestrom's (1987) Activity Theory was used to understand the implementation of inclusive education. It was revealed that student teachers are aware of inclusive education and they are willing to teach inclusively provided the institution equips them with appropriate techniques. The recommendation was that all Bachelor of Education programs should emphasise inclusive education strategies.

Keywords: *inclusive, inclusive education, pre-service teachers, perception, teaching strategies, purposive sampling.*

1. INTRODUCTION

Research has demonstrated that inclusive education can only be firmly implemented if both teachers and student teachers are exposed to proper curriculum, good teacher pedagogical and knowledge skills as well positive attitude (Florian & Spratt 2013 and Schwab 2018). "Next to attitudes, teaching practices, as well as the available resources, can be listed as crucial key factors of successful inclusion" (Paseka, & Schwab 2020, p. 257). Teacher education then should integrate these factors in the course programmes of the mainstream curriculum (Beyene & Tizazu 2010 and Schwab 2018). Beyene and Tizazu (2010) further indicated that inclusive education does not segregate children who have different abilities

or needs. The knowledge of inclusive education, therefore, enables educators to embrace all learners regardless of their learning challenges. In broad terms, "inclusion is the response to the human rights movement that requested equal rights for all people, independent of their gender, race, socio-economic background and/or disability in all areas of (public) life" (Paseka, & Schwab 2020, p. 254). "Inclusive education is therefore, a continuous process of educational transformation, and a clear set of equity indicators" (UNESCO 2017, p. 2).

Suffice to say that "inclusive education cannot be effectively implemented without the involvement of teacher education and pedagogical concepts" (Loreman 2017; UNESCO 2017; Watkins 2017; Schwab 2019, quoted in Paseka, & Schwab 2020, p. 255). In order to teach effectively in inclusive classrooms, an inclusive "education system and inclusive methods of teaching and learning should be established" (Paseka, & Schwab 2020, p.255). This is one of the main reasons why it is imperative to equip student teachers with pedagogical skills and knowledge to teach inclusively in diverse mainstream classrooms. Teacher knowledge and good attitude is vital in the implementation of any given curriculum. The premise is that positive teacher attitudes and sound knowledge are considered an important prerequisite for the successful inclusion of students with special educational needs in the mainstream classrooms (Saloviita, 2015; Saloviita 2016; Saloviita & Tolvanen, 2017). Teachers should be able to embrace every child in the learning environment irrespective of their disabilities. No learner should be left behind. Saloviita (2020) who also researched about inclusive education in Finland found out that, teachers are strong advocates of inclusive education. It is, therefore, imperative that higher education institutions should address teachers' concerns to promote inclusive education in schools.

The main question for this paper is, "What are the perceptions of 3rd year B.Ed. students on the implementation of inclusive education in South Africa?" Inclusive education emphasises that all learners are capable to learn irrespective of their different abilities and disabilities (Hayes and Bulat 2017). However, it concerns that despite the call and efforts to ensure that

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everyone has the right to be educated in inclusive classrooms, learners with disabilities are still faced with challenges (ACFP, 2011). To achieve this, Dalton, McKenzie, and Kahonde (2012) prosed that the rules prescribed in the Universal Design for Learning (UDL) should be implemented to accommodate all learners in the learning activity.

The South African "government thus recognised both the need for the rights of disabled people to be protected as well as their involvement and participation in matters affecting their lives" (Mutanga 2017, p.136). However, despite these numerous policies and rules (UDL, calls for the accommodation of all learners in the teaching and learning activity Majoko and Phasha (2018) found that universities do not educate student teachers with relevant theories of inclusive education. They further found that practicing teachers lack the skills and knowledge to understand that inclusive education means education for all. Eloff and Kgwele (2007) who had also conducted a similar research found out that teachers still discriminate and label learners as 'physical disabled,' or 'deaf' or 'blind' learners, rather than diverse learners. The labelling of learners by teachers is a big issue and shows the discrepancy in the training of teachers for inclusive classrooms. Therefore, universities must mediate and use relevant tools and prepare student teachers to teach in an inclusive environment. Educators who teach inclusively are supposed to be adequately trained to handle children with different disabilities in mainstream classes. Hence, teachers in inclusive classes are expected to be more qualified in recognising strengths and weaknesses of their learners and are therefore able to support the needs of individual students (Paseka & Schwab, 2020, p. 258). This can easily be achieved if teacher education has a good knowledge-based didactic concept and/or by using various methods to motivate learners in different ways (Florian and Spratt 2013; Tjernberg and Mattson 2014). This research paper was written to find out pre-service teachers' perceptions towards inclusive education.

II. RESEARCH PROBLEM

Currently inclusive education is one of the contemporary issues in education in both developed and developing countries, though some countries are struggling to effectively implement it. Inclusive education should be implemented with uttermost care because children need to be taught inclusively in the same learning space. Additionally, inclusive education gives every child the fundamental right to access education in mainstream classrooms and not be excluded. This is the reason why it has become one of the contemporary issues in education globally. However, the vision of full inclusion is unachievable because teachers and lecturers lack the knowhow of how to teach inclusively.

Many researchers demonstrated that inclusive education can only be firmly implemented if there is a proper curriculum, appropriate resources, and good teacher pedagogical and knowledge skills (Monico et al 2018; Paseka & Schwab, 2020). For effective implementation, this research article advocates for the integration of inclusion education into teacher education programmes. The integration of inclusion education programmes will empower pre-service teachers with knowledge and good pedagogical skills. Teacher education can ensure the effective implementation of inclusive education. This can easily be done through the curriculum and policies. It is therefore," considered that what is needed is a new theory that integrates theory and research to provide effective education for all children" (Hornby, 2015, p. 237).

a) Research Focus

The focus of this research article was to find out pre-service teachers' perspectives on the implementation of inclusive education. Engestrom's Activity Theory was used as lens to evaluate the interrelationship between pre-service teachers and their learners in an inclusive classroom.

b) Research Aim

The aim of this research was to understand the perceptions of student teachers towards the implementation of inclusive education in South Africa.

c) Research Questions

The research was informed by the following research questions:

1. Do student teachers understand inclusive education?
2. Do student teachers possess inclusive education teaching strategies?
3. Are student teachers aware of the South African inclusive education policies?

III. THEORETICAL FRAMEWORK

This study is underpinned by Engestrom's Activity Theory. According to the Activity Theory human development is as a result of human activities and social interaction in any given environment. The theory stresses the importance of collaboration in organisations and also in learning institutions. Research has widely acknowledged that this collaboration can have a positive impact on learning performance (Fulford, 2014). In this research article Engestrom's Activity Theory was used as lens to evaluate the interrelationship between pre-service teachers and their learners in an inclusive classroom. This interrelationship in the Activity Theory involves, subjects, objects, and mediating tools. The subject or an agent of an action, in this context are the B.Ed. students (pre-service teachers) as future teachers expected to teach inclusively in their classrooms. The subjects (B.Ed. student teachers) are

expected to use tools (inclusive education policies, pedagogical concepts, and knowledge from university modules) to teach effectively in midstream schools.

The Activity Theory is relevant for this article because it unveils the core importance of inclusive

education. The theory also assists the researchers to acknowledge different angles of inclusive education. This then will enable the researchers to find out how B.Ed. students (pre-service teachers) perceive inclusive education.

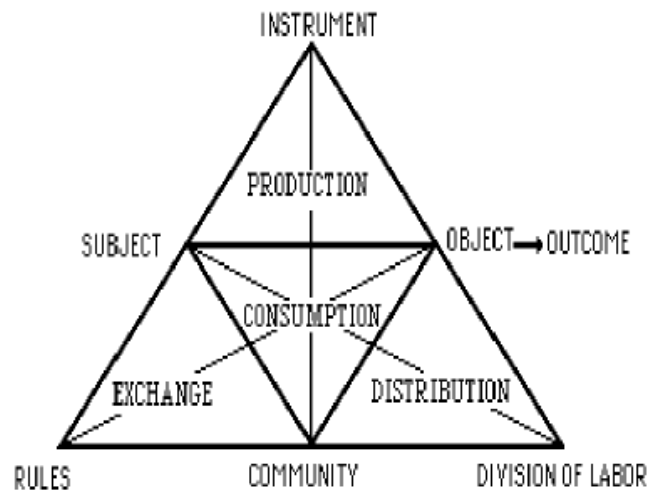


Figure 1: Engeström's Activity Theory (Adopted from Engeström, 1987, p.78)

The fundamental learning activities take place in the centre of the triangle labelled consumption. In the centre that's where learning takes place. The teacher uses different activities, strategies to get to each learner regardless of their disabilities. Within this framework evaluation is conducted from the point of view of the subject forming the focus of the action (Engeström 1987). The subject uses mediated tools to reach the object. Kessler (2020) emphasised that a tool can be anything used in the transformation process. In this context, the tool are inclusive education documents which teachers are familiar with in South Africa which include White Paper 6 and National Strategy on Screening, Identification, Assessment and Support (SIAS). Meditation is the preparation teachers do in order to disseminate knowledge to the objects (learners). This can also help educators respond to individual variability and address adversity.

The learner (the object in the diagram) is the focal point where all the learning activities are directed. The learning outcomes are then observed to find out if there will be any change of behaviour because of the activity. This according to the Activity should take place in the mainstream classrooms. Engeström (1987) highlighted that the rules components should be directed to the explicit and implicit regulations, norms and conversations that constrain actions and interactions within the activity system. In this context, rules refer to policy and course content that guide how inclusive education must be carried out. The whole Activity Triangle reflects the notion that learning activity should take place in a social learning environment. Furthermore, the learner who is referred to as an object

learns better in a community. This can be explained from a view that, learners get encouraged when they see their peers performing a task. Therefore, when the Activity Theory is allied in an inclusive classroom all learners get involved in the given task regardless of their disabilities.

In this regard, the community refers to the teachers, parents, society, and prospective teachers (B.Ed. students) who can be referred to as the community of practice. The distribution of learning activities describes how the learner and the activity relate to the whole Activity Triangle which is referred to the community. Division of labour refers to the government, teachers, parents, and learners. Outcomes refer to the expected results after the implementation of inclusive education in schools.

Within the triangle is where the production and consumption of knowledge takes place, in other words, that is where learning takes place. The Activity Triangle (AT) therefore explains the expansive learning which can be used in an inclusive education environment. Vygotsky calls it a zone of proximal development (ZPD) (Vygotsky, 1986). In this zone teachers should encourage and accept student autonomy and initiative. If student teachers are trained this way, teaching in an inclusive class will not such a challenge. It is therefore of fundamental importance that curricula and course programmes be designed with the Activity Theory in mind. This will equip pre-service teachers with the necessary tools to teach in inclusive classes.

Bearing in mind that one of the key objectives of higher education is to encourage fundamental changes in learners' understanding of what learning constitutes

and the effects it has on them and teachers as well (Harrison, 2007, Ohajunwa, et al 2014)). Researchers argue instead for learning approaches which will change teacher education curriculum in order to produce educators who are able to teach inclusively. The utilization of the Activity theory (AT) enhances the interpretation of human interaction, in learning systems (Naismith, et al, 2004, Owen 2014). The Activity Theory explicitly points out that learners develop high order functions when they interact with the external world (Zhou & Brown 2017). HEIs should therefore concentrate more on empowering student teachers with the ability to contextualise their teaching so that learners will be able to apply their knowledge in real life situations (Owen 2014). AT assists in providing a way of teaching learners with different disabilities in the same learning environment. The teacher is however, encouraged to vary teaching strategies and activities. This is done through the division of labour and the distribution of tasks as illustrated in the Activity Theory. Continuous development is very crucial in any learning environment (Owen 2014). This statement is agreeing with Chunk, (2012) and Owen, (2014) who are of the opinion that learners who are exposed to this type of teaching learn better and understand learning materials better. This is to say learners are actively involved in learning activities in social setting and knowledge is actively constructed through interaction and interpersonal exchanges. This is strengthened by Owen (2014) who encouraged the utilisation of scaffolding in an inclusive classroom. In this regard social interaction enhances active participation and collaboration with gifted peers or a teacher, a concept known as 'scaffolding' (Owen 2014).

This is also supported by social learning approaches which place great significance on learning with other people, through interpersonal interactions, either face-to-face or in a team as a means of enhancing participation (Owen 2014). Furthermore, it must be noted that inclusion education needs various players to be actively involved to implement it effectively (Paseka & Schwab 2020). This is strongly emphasised in the AT, looking at how all the activities are interwoven in the triangle. Teachers then should migrate from the old way of teaching to new strategies which are learner centred as emphasised by the Activity Theory. Bagarukayo et al (2016) also encouraged active learning and practice for successful academic engagement and development of creativity in the classroom. This is agreeing with Vygotsky's model of learning which encourages mediation where a student is assisted by a More Knowledgeable Other (MKO) to get to the Zone of Proximal Development (ZPD) for effective learning to take place (Hardman & Amory, 2014).

It is of great importance to teach integrated programmes to develop multiple representations in learners (Blömeke et al 2014). The same authors went further urging that, the integration of content will assist

learners to engage effectively in class activities that need the application of concepts and skills. This theoretical framework provides relevant lenses through which student teachers will be assisted on the implementation of inclusive education.

The design of curricula and courses must therefore encourage engagement with tasks, peers, teachers, and the community. This paper advocates that student teachers should be equipped with teaching tools that will enable them to impart knowledge in an inclusive classroom. Mainstream-school teachers are the most important assets for learners with special educational needs (or diverse conditions) if we hope to achieve real inclusion (Monico et al 2018). The same source went further saying, teaching experience, attitudes, and knowledge can either promote or hinder efforts towards inclusion. We, however, argue that with proper training and guidance student teachers will be able to implement inclusive education in their mainstream classrooms.

IV. LITERATURE REVIEW

The dawn of democracy in South Africa brought many anti-discriminatory legislative provisions one of them is inclusive education. Inclusion and inclusive education enjoy worldwide prominence through the advocacy they receive from the United Nations (UN). As a result of initiatives spearheaded by the UN, education is recognised as a fundamental human right. The 1994 United Nations' education for all deliberations that took place in Salamanca 1994 compelled member states to produce policies acknowledging the importance of inclusive education Majoko & Phasha (2018). With the promulgation of the 2014 White Paper, the government of South Africa (through the Department of Higher Education and Training), is now eager to accommodate learners with disabilities in tertiary institutions Mutanga (2017). Grimes (2020) also noted that those few people with disabilities who managed to access higher are facing numerous challenges. There should a difference from what was happening and now because during the apartheid era, learners with disabilities were separated from the mainstream education system. Those who managed to get access to education, were enrolled into 'special schools', and were not given an opportunity to be in the same classes with the non-disabled students Mutanga (2017). This viewpoint is strengthened by Ohajunwa et al (2014) who said that South African higher education does not take the issues as issues of social injustice.

Conversely in Scotland inclusive education is being taken seriously because students with disabilities can access mainstream education easily (Brownell, Smith, Crockett & Griffin (2012). This is recommended because students with disabilities can access the common curriculum framework and they are also

receiving the appropriate and targeted support (Brownell, Smith, Crockett & Griffin (2012). Austria is another country which is also integrating students with disabilities into higher education learning programmes (Bešić 2020).

It is then imperative to train and equip teachers and lecturers with the knowledge of how to deal with students with significant disabilities when access the core curriculum with appropriate accommodations and modification. This is the reason why student teachers were chosen for this research since they are going to teach in mainstream classes inclusively. Additionally, they were also chosen because they are more responsive better than those in service. Furthermore, teachers as the most important stakeholders in the implementation of inclusive education so their views and attitudes towards learners with disabilities matter. Effective teaching in inclusive classes depends on teachers' capabilities about how to handle learners with disabilities. A positive attitude towards learners with disabilities will make the implementation of inclusive education an easy task (Thompson et al 2020).

a) *Higher Education in South Africa and Inclusive Education*

A report on the state of inclusive education in South Africa and its implications for teacher training programmes by Majoko & Phasha (2018), demonstrated that inclusive education programmes do not educate student teachers on relevant theories on inclusive education. The report further indicated that pre-service teacher training (PRESET) experience challenges including diverse learners in their teaching because they lack training which result in their inefficiency and low classroom skills and performance. The literature indicates that many in-service trainings of teachers (INSET) do not understand inclusive education as an education for all (Eloff & Kgwete; 2015; Mitchell 2015; Majoko & Phasha (2018). This was also echoed by Paseka & Schwab (2020) when they said that there is still work to be done for teacher education in developing inclusive education strategies practices to go beyond traditional ways of instruction. Another challenge was noted by Eloff & Kgwete (2015) who said that in-service teachers associate inclusive education with display, when they refer to learners as 'physical disabled', or 'deaf' or 'blind' learners, rather than all diverse learners. Learners with disabilities are still stigmatised by both educators and their peers. The use of language is also still a big issue, but language is beyond the scope of this research. It is however, very important to stress that teachers are very important and their roles should not be taken for granted, they need to be acknowledged and properly trained in order to make the implementation of inclusive education a success.

b) *Capacity within the Higher Education Institutions in South Africa*

Research studies indicate that pre-service teachers expressed doubts about inclusive education Majoko & Phasha (2018). However, the British Council has taken an initiative to train and equip university lecturers with inclusive education knowledge in some institutions in South Africa. The implementation of inclusive education needs teamwork where all stakeholders work closely together. Institutions should, therefore, integrate learning programmes to accommodate learners with disabilities and work towards a common goal for a sustainable future (Mphemelang, Ntha & Kgosietsile 2019). Pre-service teachers need to be empowered so that they will be able to teach inclusively without many challenges. Inclusive education cannot be ignored anymore. Teacher education should be on the forefront so that inclusive education will be implemented effectively. Most countries are embracing inclusive education so that no learner will be left out. The main goal is to build a common understanding of inclusive education since it is perceived differently. This is also echoed by Mitchell (2015) who strongly believe that inclusive education is a multifaceted concept that requires educators at all levels of their systems to attend to vision, placement, curriculum, assessment, teaching, acceptance, access, support, resources, and leadership. It is highly recommended that higher education institutions should make sure that lecturers and students when they "classroom teachers have the responsibility to provide all students with well-paced, research-based instruction". Pre-service teachers must therefore be equipped with scientifically valid methods to teach effectively and confidently. They must be taught not to leave any child behind. Furthermore, Mastropieri & Scruggs, (2010) suggested that teacher with inclusive education understanding teach holistically and give encouragement to learners with disabilities.

c) *The Importance of Inclusive Education*

The importance of inclusive education cannot be over emphasised, in every classroom there is diversity, and this must be accepted and celebrated, hence teaching and learning must be directed towards inclusiveness. When children are taught inclusively, they are motivated, encouraged and this also builds their self-efficacy, their participation and engagement level increases as well. During the previous decades special needs learners were recognised through special schools, which can be considered as a segregation policy because they were taught separately. Currently inclusive education is advocating for all children to be taught in the same environment. This agrees with the social justice theory which says that justice must be demonstrated, and the welfare of the needy and the

oppressed be protected with no stigmatization and separation (Bešić, 2020).

In the US, for instance, Individuals with Disabilities Education Act (IDEA) 1997, IDEA 2004 advocated that children should be taught in the same environment no one should be discriminated in terms of disabilities. It is therefore stressed that all learners must be given the same opportunity to participate and progress in the general curriculum. Hence the focus should be directed towards teacher education since education plays a pivotal role in this regard. Inclusive education should therefore focus towards the accommodation of all learners into the mainstream curriculum (Pit-ten Cate, Markova, Krischler & Krolak-Schwerdt, 2018). The focus should also be on using different teaching strategies so that learners will be actively engaged in learning activities. Mutual relationships and respect in the learning environment should be encouraged and reinforced. Teachers are expected to teach an increasingly heterogeneous population without sufficient knowledge of inclusive education (Pit-ten Cate, Markova, Krischler & Krolak-Schwerdt, 2018). Hence this paper concerns factors associated with the understanding of a successful implementation of inclusive education in higher education, paying special attention on pre-service teachers. For a successful implementation of inclusive education in every learning environment teacher empowerment is very essential. The successful implementation of inclusive practice is largely dependent on teachers, (Pit-ten Cate et al 2018).

V. RESEARCH METHODOLOGY

a) Research Design

This research adopted a qualitative approach. The aim of this qualitative study was to understand the pre-service students' perspectives towards inclusive education. In support of qualitative approach de Villiers, Dumay and Maroun, (2019) said that this approach is highly recommended especially when the researcher is studying complex interconnections. This assists the researcher not to reduce the complexity to simple numbers or variables which quantitative approach focus on. Qualitative approach was also utilised because the approach enables the researcher to focus on the individual experience, rather than conclusions that can be drawn from large groups. Focus groups with ten participants were employed to collect the data from 120 participants. These 120 participants were chosen because they were the ones who were introduced to inclusive education. Participants were interviewed in small focus groups because participants knew each this also enabled the students to speak freely. Focus groups on the other hand favour a good rapport and facilitate that students can openly share their experiences (Braun and Clarke 2013). All the 12 focus groups were

facilitated by the same researcher, using the same interview questions. A structured interview schedule was opted for to keep the conversation focused. Another factor why structured questions were used is that solemnly for uniformity and easy to generalise. Additionally, structured interview questions were also easy comparability. Furthermore, structured interviews are more consistent, fair and effective.

Qualitative approach was also employed to move to a deeper understanding of student teachers' perception of inclusive education because qualitative research seeks to develop an understanding of individuals and events in their natural state, considering the relevant context (Leedy and Ormrod 2018). Researchers were also trying to get a better understanding through first-hand experience, truthful reporting, and quotations of actual conversations. In qualitative research, the interpretation of data is achieved by means of a set criterion to determine the depth of quality of the understanding of findings (Leedy and Ormrod 2018). Procedures are not strictly formalized, the scope is more likely to be undefined, and a more philosophical mode is adopted (De Vos, Strydom & Delpoit 2013:23). This study aimed to understand the perceptions of students on the implementation of inclusive education as eluded earlier. The researchers distanced themselves from judgements and preconceptions about their own understanding of inclusive education to come up with reliable and valid results and conclusions.

b) Population and Sampling

The population consisted of 350 students from a university of technology in South Africa. Purposive sampling was used to select 120 students from a university of technology on their perceptions on the implementation of inclusive education. The selection of 120 participations was reached on the premise that they were introduced to inclusive education. The common criterion of these participants is that they were all third level students were all introduced to inclusive education.

c) Ethical Consideration

Tshwane University of education granted permission for the research to be undertaken through the research committee. The purpose of the research was explained to the participants before the signing of the consent letter. Confidentiality was assured and the participation then signed the consent form agreeing to be interviewed.

d) Research Instrument

The researchers developed the instrument which was used to collect data. The instrument consisted of six questions. Questions were verified for validity and to check if they were of good quality and if they were able to capture relevant data.

e) *Data Collection*

The purpose of this paper was to review the perceptions of student teachers towards inclusive education. To collect data, 120 students were interviewed on their perceptions regarding implementation of inclusive education. Interview sessions were all done in the same classroom. All the students were familiar with the venue. Each participation was asked to sign a consent form before questions were asked. They also chose the time which was convenient to them. The interviewer was one of the lecturers who was also part of the research team. All the responses were recorded and kept by the researchers in a safe place.

f) *Data Analysis*

Data analysis can be referred to as the breaking down of collected data into manageable chunks into to come up with specific themes from each research

The profile of the students

Qualification	Area of specialisation
B.Ed.	Economic and Management Sciences
B.Ed	Foundation Phase
B.Ed	Senior Phase

Theme 1: The definition of inclusive education

Participants knew the meaning of inclusive education. They agree that inclusive education does not discriminate learners in any form. Below is a sample of how one of participants defined inclusive education.

R2 = I would say inclusive education basically is having learners put together say learners with disabilities and those are not also whether, black, white etc.

Theme 2: Knowledge of inclusive education

The responses given by the participants revealed that they were introduced to inclusive education in year two, but no teaching strategies learnt to assist them teach in inclusive classroom. (See the response given below).

R2 = Yeah, we did learn something in 2nd year.

Theme 3: Teaching strategies

The responses to question three indicated that student teachers were not empowered to inclusive classrooms. The response is just a teaching strategy not specifically an inclusive education one. See the explanation given below.

R1 = Yes, there is a technique that our lecturer showed us before we went for teaching practice, it is a form of inclusive education because it is a robot where you give learners cards. Three colours, green, red, and yellow. Then you give each learner all the three cards, each learner should put their cards on the table. If they do not understand, they will put on the red card, so there will be no learner who will be shy to say I do not understand

question (Sauron, 2015). In this article interview responses are reported in six themes identified in the focus group interview, the definition inclusive education, the knowledge of inclusive education, teaching strategies, the knowledge of South African inclusive education policies, the implementation of inclusive education and teaching in an inclusive environment. The following section illustrates how participants conceptualised inclusive education. The actual words used by the student teachers were used in most cases, to keep the actual meaning of their arguments. The participants were drawn from students who were studying towards a Bachelor of Education degree. All the participants were going to teach in secondary schools and at this institution there are three areas of specialisation, Economic and Management Sciences, Mathematics and Science and Technology Education.

because of certain reasons. So, when you see that red card, it means you must stop and maybe start all over again or ask where the problem is. Then the yellow represents that they are not sure or not getting what you are saying, then you need to re-explain or they have another way of showing you something. When there's more greens it means you are on the right track, you understand, you need to make sure that in your lesson you have more green so that you know that you are on the right track, and everyone is getting the content you are teaching.

Theme 4: The knowledge of South African inclusive education policies.

The answer to question four indicated that participants were aware of the policies in South Africa which give the learners the right to education and that learners should not be called by their form of disabilities. See the response below:

R2 = Ummmm, the constitution of South Africa, stipulates that, every child has the right to basic education, as a teacher I must ensure that I do my job at the best of my ability to ensure that children are protected. South African Schools Act, stipulates that, the rights of a learner, especially when education is concerned is of paramount importance. So as a teacher I must ensure that within my classroom learners know their rights and responsibilities.

Theme 5: The implementation of inclusive education

Participants knew that they should not discriminate and show respect to the learners. However, no participant really showed any evidence that they were

ready to implement inclusive education in their classrooms.

R1= Yes you must treat each learner equally, you do not have to exclude a learner because they can do certain things in class as the other learners. The teacher must treat the learner with respect and equity. The teacher must see the learner as equals with other children before their abilities or disabilities. They must not see them based on their background but must see them as human first.

Theme 6: Teaching in an inclusive environment

Responses to question six shows that students are not well equipped for inclusive classrooms. However, from the responses student teachers gave they have positive attitude towards inclusive educations. Positive teacher attitude is vital for the implementation of any given curriculum.

R2= As teachers we need proper training more workshops ha, inclusive education a teacher must go into practice knowing how to deal with learners. Sometimes learner performance is going down, but nobody knows why, sometimes as teachers we become careless because we do not know how to handle different learners and different situations and the teacher cannot apply all the different methods. So proper training is required.

VI. DISCUSSION

The focus of the paper was to find out pre-service teachers' perspective on inclusive education. The analysed interview data revealed that most of the student teachers know what inclusive education entails and that it advocates for the embracement of all learners in the same learning environment. Inclusive education embraces all learners regardless of their form of disabilities or race in all areas of life (Paseka, & Schwab, 2020). However, student teachers did not show a sound knowledge of inclusive education. It seems like it was just an acknowledgement that the instructor says something about inclusive education since it has stimulated research on the reorganisation of schools to become more welcoming to diverse student bodies (Saloviita 2020). Participants were aware that learners are not supposed to be labelled by their disabilities. Conversely, Eloff and Kgwete's (2007) found out that teachers still discriminate and label learners as 'physical disabled,' or 'deaf' or 'blind' learners, rather than diverse learners.

The reponses given by student teachers indicate that they are not adequately prepared in teach in an inclusive classroom. Majoko and Phasha (2018) also found that universities do not educate student teachers with relevant theories of inclusive education. This is agreeing with some researchers who argued that that inclusive education can only be firmly implemented if there is a proper curriculum, appropriate resources,

and good teacher pedagogical and knowledge skills, (Florian & Spratt 2013 and Schwab 2018).

VII. CONCLUSION

The study revealed that student teachers are aware of inclusive education, and they are willing to teach inclusively provided the institution equips them with appropriate techniques. Therefore, higher education institutions have a mandate to equip graduates with inclusive methods of teaching and learning in an inclusive environment. It is the duty of higher education institutions to address student teachers' concerns to promote inclusive education in the mainstream classrooms. It cannot be over stressed that higher education programs need to be support lecturers and student teachers so that the inclusive agenda will be realised. Numerous studies have demonstrated the need to promote inclusive education programs though some countries are still facing challenges in terms of teaching resources and personal.

VIII. RECOMMENDATION

The study recommended that student teachers should be exposed to different teaching strategies to teach efficiently and effectively in an inclusive environment. The study further recommends that all Bachelor of Education programmes should emphasise inclusive education awareness and equip student teachers with appropriate skills to embrace all learners without any form of discrimination.

REFERENCES RÉFÉRENCES REFERENCIAS

1. ACFP. (2011) the lives of children with disabilities in Africa: A glimpse into a hidden world, Addis Ababa: The African Child Policy Forum.
2. Bešić, E. (2020). Intersectionality: A pathway towards inclusive education? Prospects <https://doi.org/10.1007/s11125-020-09461-6>
3. Beyene, G. & Tizazu, Y. (2010). Attitudes of Teachers towards Inclusive Education in Ethiopia. Ethiopian Journal of Education and Science, 6 (1), 89-96.
4. Blömeke, S., Buchholtz, N., Suhl, U., & Kaiser, G. (2014). Resolving the chicken-or-egg causality dilemma: The longitudinal interplay of teacher knowledge and teacher beliefs. Teaching and Teacher Education, 37(2014), 130-139
5. Brownell, M. T., Smith, S. J., Crockett, J. B., & Griffin, C. C. (2012). Inclusive instruction: Evidence based practices for teaching students with disabilities. New York, NY: The Guilford Press.
6. Creswell, J.W. & Poth, C, N. (2018). *Qualitative inquiry and research design choosing among five approaches*. 4th ed. Los Angeles: Sage.
7. Dalton, E, McKenzie, J & Kahonde, C. (2012). The implementation of inclusive education in South

- Africa: Reflections arising from a workshop for teachers and therapists to introduce Universal Design for Learning. *African Journal of Disability* 1(1), 7-13.
8. Department of Education. (2008). National Strategy on Screening, Identification, Assessment and Support (SIAS). Pretoria South Africa: Department of Education.
 9. Department of Education. (2001). Education White Paper 6 Special Needs Education. Building on inclusive education and training system. Pretoria South Africa: Department of Education.
 10. De Villiers, C. Dumay, J. & Maroun, W. (2019). Qualitative accounting research: dispelling myths and developing a new research agenda. <https://doi.org/10.1111/acfi.12487>
 11. Eloff, I., & Kgwete, L.K. (2007). South African Teachers' Voices on Support in Inclusive Education. *Childhood Education*, 83(6), 351–355.
 12. Florian, L., and J. Spratt. (2013). "Enacting Inclusion: A Framework for Interrogating Inclusive Practice." *European Journal of Special Needs Education* 28 (2), 119–135. doi:10.1080/08856257.2013.778111
 13. Fulford, H., Bailey, M., Stephen, G. & Mcwhirr, S.M. (2014). Building online learner communities: an activity theory perspective. Presented at the Professional practice education and learning conference (ProPEL), 25-27 June 2014, Stirling, UK.
 14. Grimes, S. (2020). Student Suggestions for Improving Learning at University for Those with Learning Challenges/Disability. In G. Crimmins, (Ed). *Strategies for Supporting Inclusion and Diversity in the Academy* (pp 329-352). Palgrave Macmillan.
 15. Hayes, A.M. & Bulat, J. (2017). *Disabilities Inclusive Education Systems and Policies Guide for Low- and Middle-Income Countries*. RTI Press Publication No. OP-0043-1707. Research Triangle Park, NC: RTI Press. <https://doi.org/10.3768/rtipress.2017.op.0043.1707>
 16. Kessler, M. (2020). Technology-Mediated Writing: Exploring Incoming Graduate Students' L2 Writing Strategies with Activity Theory. *Computers and Composition* 55 (2020) 102542.
 17. Leedy P.D. Ormrod, J.E. (2018). *Practical Research: Planning and Design* (12th Edition) ISBN-13: 978-0134775654
 18. Loreman, T. (2017). "Pedagogy for Inclusive Education." *Oxford Research Encyclopedia of Education*. doi:10.1093/acrefore/9780190264093.001.0001.
 19. Majoko, T., & Phasha, N. (2018). *The state of inclusive education in South Africa and the implications for teacher education programmes*. Teaching for all. British Council South Africa Addis Ababa: The African Child Policy Forum.
 20. Mphemelang, J.K. Ntha, S. & Kgosietsile, V. (2019). Enhancing the Roles and Responsibilities of Higher Education Institutions in Implementing the Sustainable Development Goals. *Sustainable Development Goals and Institutions of Higher Education* pp 121-130. https://link.springer.com/chapter/10.1007/978-3-030-26157-3_10
 21. Mastropieri M.A. & Scruggs, T.E. (2010). Do Special Education Interventions Improve Learning of Secondary Content? A Meta-Analysis. *Remedial and Special Education* 31(6) 437–449.
 22. Ohajunwa, C., J. McKenzie, A. Hardy and T. Lorenzo. (2014). Inclusion of disability issues in teaching and research in higher education. *Perspectives in Education* 32(3), 104–117.
 23. Owen, H. (2014). Programme design that puts the 'me' back into learning experiences and spaces.
 24. Paseka, A. & Schwab, S. (2020). Parents' attitudes towards inclusive education and their perceptions of inclusive teaching practices and resources, *European Journal of Special Needs Education*, 35(2), 254-272, DOI:10.1080/08856257.2019.1665232
 25. Saloviita, T. (2020). Attitudes of Teachers Towards Inclusive Education in Finland. *Scandinavian Journal of Educational Research*, 64(2), 270-282, DOI:10.1080/00313831.2018.1541819
 26. Saloviita, T. (2015). Measuring pre-service teachers' attitudes towards inclusive education: Psychometric properties of the TAIS scale. *Teaching and Teacher Education*, 52, 66–72.
 27. Saloviita, T. (2020) Attitudes of Teachers Towards Inclusive Education in Finland, *Scandinavian Journal of Educational Research*, 64(2), 270-282, DOI: 10.1080/00313831.2018.1541819
 28. Saloviita, T., & Schaffus, T. (2016). Teacher attitudes towards inclusive education in Finland and Brandenburg, Germany, and the issue of extra work. *European Journal of Special Education*, 31(4), 458–471. doi:10.1080/08856257.2016.1194569
 29. Saloviita, T., & Tolvanen, A. (2017). Confirmatory factor analysis of the scale measuring teacher attitudes towards inclusive education (TAIS). *European Journal of Special Education Research*, 2(6), 196–203.
 30. Sauro, J. (2015). Five types of qualitative methods. Denver, Colorado. <https://measuringu.com/qual-methods/>
 31. Schwab, S. (2018). Attitudes Towards Inclusive Schooling. A Study on Students', Teachers' and Parents' Attitudes. Münster: Waxmann Verlag
 32. Schwab, S. (2019). "Inclusive and Special Education in Europe." *Oxford Research Encyclopedia of Education*. Accessed 13 June 2019. <https://oxfordre.com/education/view/10.1093/acrefore/9780190264093.001.0001/acrefore-9780190264093-e-1230>

33. Thompson, J.R., Walker, V.L., Snodgrass, M.R. Nelson, J.A., Carpenter, M.E., Hagiwara, M., & Shogren, K.A. (2020). Planning Supports for Students With Intellectual Disability in General Education Classrooms. *Inclusion*, 8(1), 27–42.
34. Tjernberg, C., and E. H. Mattson. (2014). "Inclusion in Practice: A Matter of School-culture." *European Journal of Special Needs Education* 29(2), 247–256. doi:10.1080/08856257.2014.891336.
35. UNESCO. (2017). A Guide for Ensuring Inclusion and Equity in Education. unesdoc.unesco.org/ark:/48223/pf0000248254 (2019-05-26)
36. Villegas A. M., Ciotoli, F. & Lucas T. (2017). A Framework for Preparing Teachers for Classrooms That Are Inclusive of All Students. *Teacher Education for the Changing Demographics of Schooling* pp 133-148
37. Vygotsky, L. S. (1986). Thought and language. Cambridge, MA: The MIT Press.
38. Watkins, A. (2017). "Inclusive Education and European Educational Policy." *Oxford Research Encyclopedia of Education*. doi:10.1093/acrefore/9780190264093.013.153
39. Yu, S. & Park, H. (2020). Early Childhood Preservice Teachers' Attitude Development Toward the Inclusion of Children with Disabilities. *Early Childhood Education Journal* 48 (2020), 497–506.
40. Zhou, M. and Brown, D. (2017). "Educational Learning Theories: 2nd Edition" Education Open Textbooks. <https://oer.galileo.usg.edu/education-textbooks>.

