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Teaching inclusive education: a contextual higher education analysis

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While it is widely acknowledged that inclusive education policy is the suitable approach for addressing the diverse needs of South African learners, research in the pilot stages of Education White Paper 6 warned that the implementation of this policy would be complex. Studies have elucidated that there is a chasm between policy and theory on the one hand, and practice on the other hand; a gap between knowledge and the interactional expression thereof. Drawing on qualitative data collected from thirty-nine (39) pre-service teachers (students) and eight (8) lecturers, this paper articulates three themes. Student participants possessed some knowledge regarding aspects of inclusive education, but they lacked the practical demonstration and application thereof. Lecturer participants, on the other hand, felt pressured to cover module content in a limited time, greatly influencing their attitudes towards inclusive practices. The lecturer participants furthermore suggested that their own knowledge was insufficient to prepare future teachers adequately. This paper proposes that in-service training centered on contextual inclusive educational skillsets and knowledge for lecturers and teachers should be prioritized. Modules should be integrated inter-disciplinarily, based on inclusive education policy, to adequately prepare pre-service teachers to meet the needs of the diverse group of learners that they will teach.

KEYWORDS

inclusive education, learning barriers, pre-service teachers, social justice, ecosystemic theory

Background

International dialogue about education, and more specifically the provision of equal opportunities to meet educational rights and needs of all learners, recognizes the value of strong education systems to ensure all children have a chance to develop their full potential within society (Lewis and Sunit Bagree, 2013; Lindner and Schwab, 2020). In the South African context, the advent of democracy in 1994 gave birth to the South African Constitution (108 of 1996) (South Africa, 1996a), which underlines the rights and privileges of all the citizens of the country, influencing ensuing educational policies to reflect inclusive values. The formulation of a white paper detailing inclusive education guidelines followed from this, and South Africa closely mimicked international movements in this regard (Murungi, 2015; Nel et al., 2016). As such, inclusive education should reflect both process and practice, as opposed to merely placing learners with disabilities in the same program (Webster, 2022). Teachers were identified in the resulting White Paper 6 as the main role players responsible for implementing these inclusive policies at the classroom level, ensuring that no child was left behind (Murungi, 2015; DoE, 2001). However, ongoing studies since the inception of White Paper 6 indicate that the provision of equal access, as well as the practical implementation of “No child left behind” policy, has been slow and a complex feat to achieve (Engelbrecht et al., 2015; Nel et al., 2013).

Introduction

Inclusive education is defined and expressed differently according to the contextual background of a particular country. In some developed countries, it is considered as an approach to accommodate learners with disabilities (Ainscow and Sandill, 2010). In developing countries, such as South Africa, it includes both learners with disabilities and marginalized children and is seen as a reformatory tool to welcome diversity amongst learners (UNESCO, 2001). The viewpoint adopted by the authors of this article is that education is, first and foremost, a basic human right, as expressed in the South African Constitution (108 of 1996) (South Africa, 1996a). Secondly, inclusive education is a means whereby social injustices can be relieved by the inclusion of learners from diverse backgrounds and with diverse abilities (DoE, 2001).

One aspect of inclusive education shared by countries in the Global North and South concerns governmental intentions to realize the drive towards inclusive education through the expression of various policies and initiatives. In this regard, the Salamanca Statement was one of the most significant international manifestos that influenced the global education community, becoming the impetus for establishing the “Education for all” policies in various countries (Ainscow and Sandill, 2010; UNESCO, 1994). Its influence found expression in the South African education landscape post-1994 through the South African Constitution (108 of 1996) (South Africa, 1996a), followed by the South African Schools Act (84 of 1996) (South Africa, 1996b) and the inclusive education policy titled White Paper 6 (DoE, 2001). White Paper 6 is based on the understanding that all children and adults can learn and should receive the support needed (DoE, 2001). These policies, curriculum adjustments and the move to learner-centered classrooms became the building blocks of the South African education agenda for social justice and inclusive practices.

Conversations about the barriers contributing to implementation failure and suggestions to tackle them have been the focus of several research initiatives (Ainscow and Sandill, 2010; Dalton et al., 2012; De Winnaar, 2013; Nel et al., 2013; Tiwari et al., 2015). Translation at a practical level, however, is slow, as post-apartheid South Africa’s systemic exclusion still impedes the optimal adaptation to inclusive and socially just standards (Engelbrecht et al., 2015; Maguvhe, 2015; Wildeman and Nomdo, 2007). Scant research covers how teaching practices support the teaching and learning process within the classroom in an inclusive manner (Finkelstein et al., 2021). Implementation challenges are not unique to the South African education landscape only. Several countries have reported on their struggles to implement their inclusive education policies (Donohue and Bornman, 2014; Savolainen et al., 2012). The struggle for effective implementation, although a universal one, is in turn perpetuated through contextually unique factors (Murungi, 2015).

Dalton et al. (2012) established that teacher training programmes seem inadequate in preparing teachers with the knowledge and skills needed to teach for diversity. Regardless of the wide range of contributory factors, a significant portion of the research has focused on technical barriers, and solutions were hinged on tangible suggestions such as reformulation of the policy, more funding for schools, networking, and continuous workshops for teachers to assist with implementation issues (Ainscow and Sandill, 2010; Dalton et al., 2012). However, South African research and interventions have

mostly neglected investigation into the quality of teacher training, which should equip teachers to teach for diversity, and thus facilitate the implementation process of inclusive education practices within their own pedagogical practice (Hartnack, 2017). Both Hartnack (2017) and Spaul (2015) emphasize that the inadequate training of teachers is often overlooked as contributory factor to implementation failure.

As a result of the documented challenges and the need for research in the realm of inclusive teacher training, this paper investigates the implementation of inclusive education at the root level within the Higher Education context, to provide insight as to which aspects of inclusive education are being infused into current subject methodology/didactic courses at a participating university and to determine if the quality of tertiary training is sufficient in equipping teachers to teach inclusively. The authors will argue that the fundamental reason for implementation challenges lies firstly with the quality of pre-service training and secondly with the quality of content. In other words, the questions we want to answer is whether teacher training programmes at a tertiary institution provide adequate training, are they holistically infused with inclusive values or have the theories and policies been compartmentalized into standalone modules?

Before the methodological considerations of the study are detailed, the theoretical framework underlying this paper, Bronfenbrenner’s ecosystemic theory, is discussed.

Theoretical framework

The framework guiding this study on inclusive education within the Higher Education environment is underpinned by Bronfenbrenner’s ecosystemic theory (Bronfenbrenner, 1979, 1992). While both biomedical and ecosystemic models carry significant impact on educational support, the ecosystemic theory has grown in favor as a preferred lens for investigating educational support systems through an inclusive paradigm (Hay, 2012). This theory is valuable to provide a structured lens when exploring factors influencing student learning and the relationships that underlie these developmental influences (Anderson et al., 2014).

Bronfenbrenner details five subsystems that influence the development of individuals (Geldenhuis and Wevers, 2013). The microsystem depicts the immediate environment of an individual. Characteristically, this system contextualises the direct relationships guiding interaction, such as family and friends (Eriksson et al., 2018; Geldenhuis and Wevers, 2013). This theory is thus relevant to this study, because teachers should be aware of the eco-systemic levels and their interrelations to enable them to proffer holistic support to the learners. Knowledge of this theory furthermore enables teachers to identify a deficiency in a nested structure and render the relevant support to the learner on the required system. A holistic understanding of the systems could thus assist in understanding the learner and the origin of barriers experienced. The mesosystem consists of the interaction of an individual across different contexts, reflecting international value amongst different subsystems at the microsystemic level (Elliott and Davis, 2018). Perceptions may change in this system, as individuals are exposed to alternative perceptions from their own. Exosystems are systems in which an individual may or may not be actively engaging, but

which still impact (and are impacted by) the individual's proximal environment (Geldenhuis and Wevers, 2013). The macrosystem consists of cultural influences on part of the wider context within which the individual resides. This includes socio-economic and political influences (Elliott and Davis, 2018). Lastly, the chronosystem depicts the time passage that occurs in any of and across the above systems (Geldenhuis and Wevers, 2013; Gonzales, 2020).

The value of Bronfenbrenner's model is found especially through the contextual nature of inclusive education. Given the powerful sociopolitical macro-context of South Africa, the discussion thus far has illuminated the issues associated with cultural diversity amongst the country's student population, necessitating a multicontextual approach to guide this study. Furthermore, the use of Bronfenbrenner's ecosystemic theory contributes to the field of inclusive education research in South Africa. Therefore, a context-specific investigation is important to unpack not only how pre-service teachers develop their inclusive practices, but the way in which they experience their interactional value with their wider ecosystem (specifically their own instructors and policy).

Methodology

This paper follows a qualitative approach to gather the perspectives of lecturers and pre-service students regarding the teaching-learning context of inclusive education within the higher education context. Specifically, the study aims to thematically analyse semi-structured interviews and responses for understanding trends that emerge within specific themes. This section details the sampling, analysis and ethical considerations that informed the methodological design of the study.

Research process

The research was undertaken as part of the Teaching and Learning Capacity Development Improvement Project, in conjunction with the Department of Higher Education and Training and the European Union. The authors hope to identify the extent to which aspects of inclusive teaching are being infused into current subject methodology/didactic courses at a participating university and whether the quality of pre-service training is adequate to equip teachers. The researchers made use of hard copy questionnaires which was sent to all subject methodology lecturers in the B. Ed programmes at the participating university. Lecturers in selected methodologies and phases were invited to take part in an individual interview. The interview was designed to explore inclusive education in depth (Walton, 2017). A total of 8 interviews were conducted with lecturers who teach in the B. Ed programme of the foundation phase. In addition to the interviews with lecturers, questionnaires were sent out to final year B. Ed students to explore their perceptions on whether they felt equipped for the task of teaching inclusively. Forty questionnaires were sent out and 39 were completed.

We acknowledge that this is a small number of participants especially from the tertiary education sphere, but our aim is not to generalize their responses as being representative of all foundation phase teacher educators. However, we are of the opinion that these responses can provide some insight regarding the content and

approach of teacher training programmers and inform future research opportunities.

The lecturer-participants were asked to respond to a set of 7 questions, namely:

- 1 What do you know about inclusive education?
- 2 What is the source of this knowledge about inclusive education?
- 3 What is your personal opinion about inclusive education?
- 4 Please describe anything that you do in your course that equips students to teach inclusively.
- 5 Please tell me what prevents you from doing more to equip B. Ed students to teach more inclusively.
- 6 How does or can the practicum in your subject develop students' ability to teach more inclusively?
- 7 Other questions arising from the responses to the survey

Additionally, an open-ended self-structured and self-administered questionnaire with fourth year B. Ed students at three universities were conducted. This questionnaire required a response to a scenario developed with international colleagues to ascertain their preparedness to teach in inclusive classrooms. This was done to better understand how pre-service teachers feel about their demonstrable knowledge of inclusive education practices in the classroom. These questionnaires encompassed the completion of semi-structured responses to the students' perceptions about inclusive education practices within their programmes, and on whether they felt equipped for the task of teaching inclusively. Forty semi-structured questionnaires were sent out and thirty-nine (39) were completed.

Questions for students included:

- 1 Who are learners at risk of marginalisation in South African schools?
- 2 To what extent are all learners valued in South African schools?
- 3 What is meant by 'ability' and 'potential'?
- 4 To what extent is it possible to know learners' needs and abilities?
- 5 What is meant by 'achievement' and how do we know if learners are achieving?
- 6 Other questions derived from questionnaire responses

Analysis

Analysis of the gathered data was informed through thematic analysis (Tesch, 1992). The semi-structured interviews with the lecturers and the semi-structured response-based questionnaires from students were transcribed. The transcriptions of the student responses added triangulation value to the narratives of the lecturers. However, both sets of data were first separately inductively thematically analysed. Trends in the data were identified and grouped together and informed the themes identified within the study. As a result, the trends in the data that emerged were used to answer the question: Do teacher training at a tertiary institution provide adequate knowledge to prepare pre-service teachers to implement inclusive education in their own practice? Themes that emerged from the data were: (1) Lecturers' understanding of inclusive education and their role in imparting

knowledge; (2) Lecturers' ability to teach content related to inclusive education to pre-service teachers effectively and (3) pre-service teachers' perceptions of effectively implementing inclusive education.

To respond to the research question and include the importance of understanding both how teacher educators educate and how pre-service teachers receive knowledge about inclusive education, the data is presented as a unified corpus including both teacher educators and pre-service teachers.

Ethical considerations

The study received ethical approval from the Human Research Council at the specific university. Further gatekeeper consent was sought from the respective departmental heads of the B. Ed programmes of the university to sample lecturers and students from the faculty. Lastly, lecturers could choose not to present the questionnaires to their students. Student as well as lecturer participants were provided with the consent information detailing the study as well as the ethical protocols in place. Students were not obligated to participate, and were afforded the choice to withdraw should the need arise. The study encompassed no participant harm or deception. Participant names and identifiable information were removed during transcribing, with further anonymity being ensured throughout the reporting phase of this paper, with no identifiable information being presented. The ethical clearance number administered to the study is UFS-HSD2017/1109.

Results

The results of the study are presented below, individually unpacking each theme with reference to participant narratives in verbatim form. These results are discussed in depth in the subsequent section, with the data providing a triangulation platform informing the recommendations.

Theme 1: lecturers' understanding of inclusive education and their role in imparting knowledge

All the lecturer participants were aware of South African inclusive education policies and were in agreement that this was the best approach to teach diversity. The consensus amongst the lecturers reflected their understanding of *who* was included in the definition of inclusive education. Their understanding was however partial and limited to learners with specific barriers, such as physically disabled, blind and deaf learners as well as those who experienced neurological barriers such as dyslexia and attention deficit disorder. One participant elaborated by stating that teachers had to "*look at the different abilities of learners, and the fact that they learn differently.*" Only one of the participants referred to inclusion as is defined by the South African Constitution (108 of 1996) (South Africa, 1996a,b) and White Paper 6 (DoE, 2001), to include not only learners experiencing barriers but also those from diverse backgrounds. One participant specifically noted:

I think everything looks good on paper in terms of the White Paper 6 also, but I don't think it's always very practical. I think there is a lot of red tape involved in getting children with special needs into special schools. I understand the process but I think sometimes it is delayed and children are the ones that are suffering from that.

Those teacher educators who were education methodologists had been informed of the policies and related theories during their tertiary training or further studies. As they were pre-service teacher lecturers, they were acutely aware of research and support strategies regarding topics such as the SIAS (screening, identification, assessment, and support) policy (DoE, 2008), universal design for learning (UDL), and curriculum differentiation strategies. Two of the participants who were subject specialists, for arts and culture and mathematics, respectively, replied that their tertiary training focused primarily on the theoretical knowledge of their subjects of choice. These participants mentioned that they had been less exposed to, or were uninformed regarding, the implementation strategies as well as *who* were included in the definition of inclusion per se.

While the interviews revealed that all the participants generally felt positive towards the concept of inclusive education, all participants were, nonetheless, of the opinion that implementation at the classroom level held challenges for teachers.

One participant for instance noted:

We know we are educationists and know the whole issue of theory and practice is always very difficult, there is always that continuum between trying to gel the two together with theory and practice. With theory it looks rosy and good, and it looks like it can be implemented, but in practice there are many hurdles of barriers that the teachers in the classroom come across. For instance I am fortunate, I can deal with learners with disabilities because the university has already taken a step, but in schools' situation context we found that the teacher has to start first with identifying the learner, understanding the barrier, sometimes they don't know what to do with learners in the classrooms.

They all expressed concerns, mentioning several factors hindering their own ability to impart the practicalities of inclusive education to the current students they teach (pre-service teachers), such as time constraints, large classes and low class attendance amongst others.

One participant noted:

I think it is always in the back of one's mind when you teach but there is not always time to really stand still for 5 or 10 minutes to concentrate on a piece of work, how this will be taught inclusively? But I think one must be aware, one does not plan this beforehand. It is something you pick up in the class, a situation crops up and you act according to that situation.

Almost half of the participants acknowledged that their skills and knowledge regarding the topic were patchy. However, at the same time, two of them were convinced that the responsibility for imparting the theory and practice of inclusive education rested with inclusive education specialists and was therefore being covered in courses designed specifically for this reason. "*I think maybe it's not the main or big component in our modules,*" one of them answered. They all agreed

that they utilised, to some extent, the practicum of their course subjects to develop students' ability to teach inclusively. They shared some examples during the interviews, with lesson planning surfacing as a popular and common choice. Some participants also allowed students to express their understanding of course material for assessments in various ways.

Theme 2: lecturers' ability to teach content related to inclusive education to pre-service teachers effectively

From the interviews with the lecturer participants, we gathered that course content at the undergraduate level relating to the inclusive education policies, theories, and practicalities of implementation strategies was concentrated in specific modules designed for that purpose. According to some of the participants, the explanation or application of inclusive education, as related to their subject, was found compartmentalised in one unit of the course content. One participant explained, "*They do not integrate it throughout the textbooks.*" Cross-pollination was not transpiring either between courses or amongst the units comprising a module. It seems as if education themes are presented in courses without an infusion of inclusive education as underlying philosophy. One participant specifically mentioned: "*We do have a module in the foundation phase where we specifically talk about inclusive education, and students do refer back to that. I think as a lecturer we have to make that part of our whole teaching approach.*" Another participant pointed out: "*I am not 100% clued up on the content of some of the other modules.*"

Results indicated that all the participants highlighted that a balance between theory and practice on the topic of inclusive education was tipped towards theoretical knowledge and lacking in practical demonstration and application. As a lecturer indicates:

"We know we are educationists and know the whole issue of theory and practice is always very difficult, there is always that continuum between trying to gel the two together with theory and practice. With theory it looks rosy and good, and it looks like it can be implemented, but in practice there are many hurdles or barriers that the teachers in the classroom come across."

The above participant's response refers to the exosystem within which pre-service teachers are taught. Pre-service teachers in South Africa specifically face a myriad of barriers, and therefore the theory taught may not necessarily align with practise when the teacher ultimately imparts knowledge, and how they impart it. This highlights the exosystem as a key system within which inclusive education is taught to pre-service teachers, requiring that teachers not only be knowledgeable of the macrosystem's influence (multiculturalism) of, specifically, South Africa, but a variety of influences that impact the mesosystem of the teacher and learner.

Some of the subject specialist participants presented subjects that naturally lend themselves to the practicum of inclusive theories, arts and culture being one prominent example. It can be argued that this is due to the demonstrative and creative requirements of the subject. Noteworthy is the subject specialist participants' acknowledgment that their theoretical knowledge was limited due to not having studied B. Ed curricula specifically. These participants were more inclined to

report on an openness to adapt their course content to reflect the practice of inclusive education.

The following lecturer drew on time and student numbers as constraining exposure potential to content and skills at the mesosystem level between lecturer and their pre-service teachers.

"... time is also a challenge and I also feel maybe the number of students. I cannot have a one on one with students and make sure that everybody understand, but we don't have the time, the classes aren't structured in a way that everyone can share experiences or share solutions. So that is the only thing. And also I would like to, if students can make their own practical examples ... for example in a micro setup. But time is not on our hand to do so."

The lecturer here draws on possibilities residing within the chronosystem's digital-realm influences to enhance practical, example based learning. However, time does not allow for engaging within this realm effectively at such a level. The skillsets and knowledge accumulation through a blended approach at microlevel would benefit pre-service teachers to better bridge the physical and digital realm inclusively during disruptive changes in the chronosystem such as COVID-19 (Ali, 2020) and the Fourth Industrial Era.

Referring to the Higher Educational context, Moriña (2017) points to how diversity at the student level already carries important weight for inclusive education. In conjunction with Moriña (2017), the diversity of the students in such a micro setup within the mesosystem digitally could be especially valuable to create contextually relevant and diverse content to draw upon. However, time becomes a barrier to effective implementation.

The lecturers who were engaged with teaching the theory and policies, and who had been trained in the education field, were less inclined to demonstrate inclusive education in the courses they presented. They were aware of the scope of the theories and policies informing inclusive education and could convey these in an excellent way, but they lacked in their demonstration or practical implementation thereof. There was a general consensus amongst these educationalists that certain expectations to "*cover the content that [we] have to be doing because [we] have to assess them on that and there are continuous semester marks*" resulted in a rushed approach with little time for practical applications.

Theme 3: pre-service teachers' perceptions of effectively implementing inclusive practices

Questionnaires distributed to student participants aimed to understand to what extent they felt equipped for the task of teaching inclusively. They were provided with a case study including various types of diversity and barriers to learning, and were asked to explain how they would teach for the given scenario. From the case study, the participants also had to indicate what knowledge and skills they had obtained in their training that would enable them to teach effectively in the given scenario. They then had to identify what knowledge and skills they still needed to meet the situation effectively.

Almost all of the participants indicated that they were provided with some theoretical training on the topic of inclusive education. One participant's response succinctly summarised the general feeling of most

of the other participants when she explained that: “*We have been trained (limitedly) to try to include all learners by adapting our lessons to be suitable for all needs. However, we have never been given practical advice or examples to prepare us fully for the diversity we will face.*” This response indicates, again, the highly contextual nature of inclusive education within South African education, deterring universally applicable solutions to individual barriers experienced. Although the participants agreed that they had been informed regarding the policies and the various differentiation techniques to meet the needs of diverse learners, they agreed that they lacked practical implementation experience.

Most participants mentioned that they feared the new diverse teaching environment they would find themselves in after they graduated, as they felt they were lacking in practical skills. Several of the participants had never been exposed to some of the kinds of diversity or barriers mentioned in the case study and had no idea how to teach effectively to meet the needs of these specific learners. The participants mentioned that there were such a vast number of barriers, but that they were only exposed to a handful of these barriers and even less so to practical teaching methods for each specific barrier.

Although the participants generally had a positive attitude towards the philosophy of inclusive education and the policies underwriting this approach, the participating pre-service teachers from the foundation phase expressed a more positive attitude towards inclusive education than their counterparts from the other phase. Most of the participants commented that they would be able to gather enough resources from the environment as part of their approach to be able to teach inclusively. They could not, from previous practical experience, comment sufficiently on whether enough resources were available at a specific school to facilitate inclusive teaching.

Discussion

The purpose of this study was to examine the factors contributing to the implementation failure of inclusive education policies in South African schools. The literature review has clearly established that a gap between the theory and the practice exists and that teachers are mainly responsible for the effective implementation of the policy. The narratives provided by participants reflect more contextually on factors mediating their attitudes towards inclusive education and the subsequent implementation thereof.

The results elucidated that lecturer participants held positive attitudes towards the notion of inclusive education and agreed that it was the best approach to facilitate the inclusion of diverse learners. This concurs with the general findings reported by [Maher \(2009\)](#) that educators considered the education policy White Paper 6 as the best approach to teach for diversity. [Mdikana et al. \(2007\)](#) note in this regard that in countries such as South Africa, where laws driving inclusive education were in place, educators generally held positive views towards inclusion of diverse learners.

The present investigation further explores the ambivalence amongst lecturers on the topic, specifically regarding implementation at the classroom level. Past cross-cultural studies about teacher attitudes towards inclusive education have shown that the differences in attitude vary amongst individual community stakeholders, with these differences being especially true between countries ([Leyser et al., 1994](#); [Maguvhe, 2015](#)). The before mentioned research indicates that the differences in attitude could be attributed to the fact that countries who had no special

policy or limited training were less positive towards inclusive education. This still holds true with the contextual nature of these results discussed. Although the South African education system has shown commitment to an inclusive education system through policies and legislation, the findings of this study are indicative that the second criterion, adequate training of future teachers, needs specific attention.

Many lecturer participants perceived their skills and knowledge as insufficient to train future teachers in inclusive education. Contributory factors mentioned by them included pressure to complete module content (theory) in a limited timeframe, a lack of practical contact sessions, and a general belief that the practical application of inclusive education strategies was the focus area of special modules. Connected to their perceptions that they lacked skills to impart the philosophy of inclusive education, they also chose to refer education students experiencing barriers to the Center for Universal Access and Disability Support (CUADS) at the university for demonstrating how inclusion could be realized with these students experiencing barriers. This finding amongst lecturers that there is a tendency to abdicate their role as inclusive practitioners as opposed to mere conveyors of knowledge was not unexpected. It is explained in literature, where attitudes about inclusive education are strongly connected to a lack of confidence in educators’ own skills ([Ahsan et al., 2012](#); [Mdikana et al., 2007](#)). Because teachers have been entrusted with the practical execution of inclusive education; it is therefore reasonable to deduce that these educators should be equipped with suitable training to prepare them for this task of accommodating diverse learners in a single classroom.

Attitudinal-based studies suggest that educators often lack the development of emphatic understanding of disabling and challenging conditions, which in turn affects their ability to infuse their teaching with a philosophy of inclusion ([Avramidis and Norwich, 2002](#); [Mastropieri and Scruggs, 2017](#)). A further preoccupation with content as well as the disjunction between lecturers’ perceptions of their teaching role, on the one hand, and lack of translation of inclusive attitudes and beliefs, on the other, also seem to be confirmed by these results. It is worth highlighting that research has shown the importance of an inclusive attitude as it can empower or constrain the implementation of inclusive education at the classroom level ([Lewis and Sunit Bagree, 2013](#)). The results show that many lecturers consciously teach content without holistically infusing inclusive values through their teaching strategies.

[Lewis and Sunit Bagree \(2013\)](#) emphasizes the importance of implementing inclusive education in all modules of students, thereby eliminating standalone courses on inclusive education, because this could convey a message that inclusive education is a special topic for specialist educators and not an issue for every teacher to consider. Standalone courses or modules accentuate the popular belief that inclusive education is a separate initiative as opposed to a holistically infused approach for all school environments. With this in mind, we considered the results for theme 2 and found that theories and implementation strategies were concentrated or capsulized in specific courses specially designed for that purpose. Data provided by both the lecturer and student participants confirmed that little infusion of inclusive content was taking place, either between modules and disciplines or within course content.

From the results, it becomes evident that the balance between theory and practice was skewed towards theoretical conveyance and lacking in practical sessions. One reason for this can be linked to the perceptions, as [Murray and Macdonald \(1997\)](#) explain, that tertiary educators hold, where dissemination of knowledge takes precedence over practical sessions. The importance of sufficient opportunities to

observe and implement inclusive theories and strategies is underlined in several studies (Lewis and Sunit Bagree, 2013; Hartnack, 2017; Mdikana et al., 2007). The authors of these studies argue for an effective balance of theory and practice-based learning in teacher training programmes to equip teachers to teach for diversity. Noteworthy is that student participants highlighted the lack of adequate training as a primary factor influencing their perceptions about inclusive education.

Previous research undertaken amongst pre-service teachers indicates that inclusive education practices were not covered in training, noting an alarming need for special teaching skills to render these teachers competent to teach inclusively (Materechera, 2018; Mdikana et al., 2007). It was found that the absence of adequate practical and specialised skills directly influenced teachers' confidence in their own abilities to teach inclusively. Similarly, past research reported that one third or less of teachers believed they had sufficient time, skills, training, and resources available to teach inclusively (Mastropieri and Scruggs, 2017). The above-mentioned findings concur with the results from this study where the same themes surfaced, namely the lack of practical skills and fear of teaching for diversity.

Recommendations for future practice

In the past, a large portion of the research focused on practicing teachers, with solutions regarding the implementation gap being remedy-orientated or deficit-centred. This paper has aimed to approach the implementation issues from a different position, looking at those responsible for the preparation of these teachers as key partners in the process. Lewis and Sunit Bagree (2013) assert in this regard that it is vital for every stakeholder in the education sector to be equipped to prepare future educators to teach inclusively. We argue that this is therefore the responsibility not only of teachers, but equally so of those who have been charged with modelling and preparing them for their task ahead, their lecturers. A concerted effort is needed to infuse inclusive education principles into all teachers' training, where the training must bring together the theory and the practice of inclusivity. Authors such as Lewis and Sunit Bagree (2013), Hartnack (2017), and Mdikana et al. (2007) argue that inclusive education principles should be integrated into all courses relevant to teacher training and that pre-service teachers should be exposed to these principles from day one of their training. This will result in teachers who will see inclusive education as a natural part in their everyday implementation, and not as a compartmentalized tool for use by specialists. Ideally, these courses should provide pre-service teachers with opportunities to observe and implement the theories with necessary support from mentors, and it should provide them with adequate time to reflect on their practices. A suggestion towards the realization of this may be the regular exposure of teacher trainers to learners from diverse backgrounds.

Limitations and future research

The primary limitation of this paper resides in the implications of employing a contextually orientated qualitative design. The results

should in turn not be regarded as generalisable, as this was not the intended aim of the study. This paper provides one account of several universities sampled. Further value can be derived in a comparative analysis of different contexts to further illuminate the experiences of pre-service teachers and lecturers in implementing inclusive education policy at practical level. Furthermore, an observational study to examine the impact of reflection as a capacity-growing method for teachers on their journey to teach more inclusively should provide valuable insight into teacher behavior. It is noted that more interviews would have strengthened the results, or that a focus group interview would have been beneficial to the gathering of the results.

Conclusion

We introduced this paper with a reminder about the important role that education plays and will play towards the attainment of social justice, especially when it includes learners from diverse backgrounds and abilities. The South African education arena made provision with the relevant policies to drive this initiative, but implementation at classroom level have remained problematic. The importance of teachers as the main role players to close the gap between the policies and practical implementation is indisputable. However, for them to be able to do this, teachers need to be empowered. They should receive appropriate tertiary training from the onset of their studies with enough practice-based opportunities to adequately prepare them to meet the learning and participation needs of learners from diverse backgrounds. It must be noted that White Paper 6 acknowledges the significance of empowered teachers. Teachers, it is said, who are not empowered by adequate training should not be held responsible to teach for diversity (DoE, 2001). We strongly advocate that it is therefore not only the responsibility of teachers but also those who have been charged with modelling and preparing them for their task ahead to ensure that every child has a teacher who is trained to meet their needs.

Author's note

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Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving humans were approved by University of the Free State Ethics committee for Education research. The studies were conducted in accordance with the local legislation and institutional

requirements. The participants provided their written informed consent to participate in this study.

Author contributions

YK: Writing – original draft. CB: Writing – review & editing. ES: Writing – review & editing.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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