



Pre-service teachers' learning about inclusive education from an online module



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Background: Thousands of South African pre-service teachers have completed an online course to prepare them for school-based practice, which included a unit on inclusive education.

Aim: In this article, we present students' responses to a written task to answer the question of what pre-service teachers learned about inclusive education from an online module, called *Teacher Choices in Action*.

Setting: The online module was designed to prepare pre-service teachers for school-based learning through guided analysis of recorded lessons.

Methods: Data were analysed from 176 B.Ed. and PGCE (Postgraduate Certificate in Education) students who completed the task in the inclusive education unit of the module.

Results: The findings show that half of the coded responses reflected the instructional strategies such as scaffolding and participation, but with minimal emphasis on multilingualism, making connections, breaking down concepts and differentiated pacing, which were emphasised in the module. A quarter of the coded responses focussed on creating a supportive classroom ethos and the remaining quarter reflected teacher disposition (taking responsibility for inclusive teaching and being aware of the barriers to learning and diversity).

Conclusion: We conclude by arguing that while we initially approached the data by thinking about who the teacher is as separate from what the teacher does, it became clearer how these are embedded.

Contribution: We argue it is helpful to revisit Bernstein's concepts of the instructional discourse (strategies for inclusive pedagogies) being embedded in the regulative discourse (the moral values expected in the classroom of both teachers and learners).

Keywords: inclusive education; pre-service teachers; online module; instructional discourse; regulative discourse; teacher disposition.

Introduction

There is a strong imperative for all countries to adopt inclusive education that centres on education for all learners (UNESCO 1994). In South Africa, inclusive education is legislated in the Education White Paper 6 (DoE 2001), which documents that all schools should become inclusive, and this legislation extends the view of inclusion beyond disability. Barriers to learning are seen broadly as related to race, gender, socio-economic class, language and sexuality, as well as individual disabilities. Teachers and teacher educators are positioned as critical to promoting the inclusive education transformation agenda (Andrews, Walton & Osman 2021), and teachers are meant to ensure equitable and quality learning, access and participation for all learners (Engelbrecht & Muthukrishna 2019).

Teachers need to teach learners with a wide range of differences requiring particular kinds of support. However, empirical studies suggest that teachers are unable to be responsive to all learners' needs because often they lack the required skills and knowledge to support each learner in the classroom (Florian & Linklater 2010; Mtika et al. 2023; Saloviita 2018). These challenges are also faced by pre-service teachers when they doing their work-integrated learning at schools.

When schools closed in March 2020 because of the coronavirus disease 2019 (COVID-19) pandemic, it was clear that student teachers would not be able to complete their work-integrated learning in schools. A group of teacher educators designed a module called *Teacher Choices in Action* (TCIA), that prepares pre-service teachers for practice-focussed learning through guided

observations and analysis of recorded lessons. Some South African universities chose to include this module in their teacher education curriculum as a supplement to school-based practice. During the module, pre-service teachers learn about the pedagogical choices that all teachers make when planning lessons. They notice the choices teachers make in a variety of authentic lessons recorded in diverse school contexts, and interrogate why some choices are more appropriate than others. One unit of this online module focussed on inclusive education. This article focusses on what participants learned from this unit.

In this article, we report on the data generated by 176 pre-service teachers from a single university in South Africa. The participants responded to a task about inclusive education, and this data are analysed here. The article is structured as follows: we engage critically with the literature on inclusive education, highlighting the key challenges in South Africa with the implementation of the inclusive education policies. We then describe the conceptual framework that we used to interrogate the data and explain the methodology. After presenting the findings, we argue that it is helpful to revisit Bernstein's concepts of the instructional discourse (strategies for inclusive pedagogies) being embedded in the regulative discourse (the moral values expected in the classroom of both teachers and learners).

Literature review

Inclusive education in South Africa

Within the South Africa education context, inclusive education imperatives reflect transformation in the political and social milieu brought about by democracy (Engelbrecht 2020). Inclusive education is thus a socially just endeavour towards transforming the education system in line with the values and human rights for all that are entrenched in the Constitution (Walton & Engelbrecht 2022). In 1996, the democratic government of South Africa legislated in the Constitution and Bill of Rights that *all* South Africans had a right to education. Specifically, the Education White Paper 6 – Special Needs Education: Building an Inclusive Education and Training System (Department of Education 2001) aimed to mitigate the barriers to learning that existed in the education system, ensuring the rights of all. According to Savolainen et al. (2012), this was a move away from the prevailing medical deficit discourse model of special needs used during apartheid. The medical-deficit discourse individualised disability, positioning learners with disabilities as objects to blame and change rather than acknowledging the systemic barriers that prevented access and participation for many children (eds. Iriarte, McConkey & Gilligan 2015).

To cater for the different needs of learners and expand provision, schools in South Africa are categorised as special schools, full service schools or mainstream schools (Department of Education 2001). Learners who require minimal support are placed into mainstream schools and learners who require slightly more support attend full-service

schools, where their specific disability-inclusion needs are supported. This may include curriculum differentiation for learning disabilities or wheelchair access for the physically disabled (Dehaye & Hanass-Hancock 2023). Learners with severe disabilities and needs who are unable to be accommodated within mainstream and full-service schools are placed in special schools (Andrews et al. 2021).

Debates and contestations surrounding inclusive education

For the last three decades, there has been ongoing debate around the meaning of inclusive education (see e.g., Donohue & Borman 2014; Engelbrecht et al. 2015; Miles & Singal 2010; Muthukrishna & Engelbrecht 2018). These researchers agree that there cannot be a single definition of inclusive education because context, perceptions and assumptions influence how it is understood. In addition to different understandings of the concept, systemic factors like poverty and apartheid as well as cultural beliefs make it difficult to fully implement the idealised version of inclusive education in South Africa (Walton & Engelbrecht 2022).

A number of studies on the implementation of inclusive education in South African schools shows its failure to gain traction (Engelbrecht 2020; Muthukrishna & Engelbrecht 2018; Ngcobo & Muthukrishna 2011; Walton & Engelbrecht 2022). South Africa's complex historical inequalities, the concomitant high levels of poverty and a bi-modal system of education have meant that the idealised version of inclusive education has proven difficult to implement. A bi-modal schooling system refers to the unequal system of education currently evident in South African schooling. Twenty per cent of schools that are fee paying schools tend to serve the middle class (Spaull 2013, 2019). These schools have adequate human and material resources with access to quality education, while the rest of the schooling population attend non-fee-paying schools, which have fewer of these resources that then affects education quality (Spaull 2013; Spaull & Kotze 2015). Learner achievement broadly maps onto this bi-modal system, where many learners in the latter schools show poorer performance (Spaull 2019). Therefore, many classrooms have learners with a wide range of competences, often not at a grade-appropriate level, which adds complexity to achieving inclusivity.

Engelbrecht (2020) also argues that because research tends to focus on the barriers that prevent the successful implementation of inclusive education, this entrenches the notion that it is challenging to implement. Research consistently shows that many teachers believe that inclusive education is about learners with disabilities who are a challenge to teach, are a burden on the system and require intense support beyond their capabilities (Donohue & Borman 2014; Muthukrishna & Engelbrecht 2018; Engelbrecht et al. 2015). The sources of barriers are both systemic and micro level factors. Micro level factors include attitudes of teachers and parents (Engelbrecht et al. 2015; Hauerwas & Mahon 2018; Kruschler & Pit-ten Cate 2019) and a competitive school ethos (Andrews et al. 2021). Systemic educational

factors include government will (Engelbrecht 2020); lack of resources (Engelbrecht 2018); insufficient teacher knowledge (Spaull 2013); lack of professional development that is responsive to educator needs and contexts (Dela Fuente 2021) and a rigid and fast-paced national curriculum (Andrews et al. 2021). It is for these reasons that teachers and schools often prefer learners with disabilities to be moved into special schools (Human Rights Watch 2015). By positioning the individual learner as problematic, little attention is paid to systemic factors that cement exclusion.

Despite the tensions and contestations, there is widespread agreement that inclusive education is about access, acceptance and participation of all learners in the education system (Engelbrecht et al. 2015) and removing barriers that lead to oppression of subordinate groups. Researchers also indicate that one of the positive ways to address the confusion and negativity around inclusive education (Engelbrecht 2020; Walton & Engelbrecht 2022) is to treat inclusive education as an 'evolving' context-specific practice. There is growing support to showcase positive ways in which teachers are able to negotiate contextual, social and political factors in order to challenge current negativity about inclusive education (Skae, Brown & Wilmot 2020). Only when we truly and critically learn from teachers about their ways of working and thinking within their particular contexts that we can 'open up the moral and political space for effective educational reform efforts' (Singal & Muthukrishna 2014:300). Researching what occurs at the micro level of the classroom may provide an additional focus to studies that focus primarily on the challenges of inclusive education.

Teacher education and inclusive education in South Africa

The Minimum Requirements for Teacher Education Qualifications (MRTEQ) (Department of Higher Education and Training 2015) guides teacher education in South Africa. This policy positions teachers as critical to the success of inclusive education (Walton 2018). Teacher education inclusive education programmes across universities in South Africa aim to develop pre-service students' knowledge about barriers to learning in order to respond to individual learning needs (Walton & Rusznyak 2019). However, McKenzie et al. (2023) argue that MRTEQ fails to provide clear direction of how to address the specific support that is needed to teach inclusively. Further, teacher education programmes have failed to adequately prepare pre-service students as inclusive education programmes tend to follow a 'silo' approach, which is contrary to the MRTEQ guidelines (Majoko & Phasha 2018). The silo approach means that inclusive education is taught as a standalone module rather than integrated across the programme (Majoko & Phasha 2018). Themane and Thobejane (2019) also critique inclusive education teacher programmes in South Africa for failing to equip teachers with the knowledge needed to work in resource-poor environments. Walton and Rusznyak (2019) and Majoko & Phasha (2018) reiterate these ideas and additionally argue that many programmes, policies and

practices are undergirded by ideological constructions associated with interests and the influence of colonialism and apartheid.

Given the diversity of learners within classrooms today, it is vital for teacher education to develop the knowledge and skills of pre-service teachers on how to implement inclusive pedagogies that are effective for diverse learner needs. Nepal, Walker and Dillon-Wallace (2021) studied Australian pre-service teachers' pedagogical practice of differentiation as a way to respond to learners' academic needs. Their study showed how pre-service teachers used differentiation practices to provide different support options that enabled their learners to understand knowledge and information. Researchers therefore argue that pre-service teachers should develop and practise contextually relevant differentiation strategies to use in their own classrooms (Garwood & Van Loan 2019; Kraska & Boyle 2014; Nepal et al. 2021). However, research shows that South African secondary school teachers feel ill-equipped to assist and respond to all learner needs through practices such as providing a different range of explanations to aid understanding (De Jager 2017).

In addition to the pedagogical practice of differentiation, research suggests that teachers' attitudes and dispositions are important for the success of authentic, inclusive education in schools (Garwood & Van Loan 2019; Kraska & Boyle 2014). The study conducted by Garwood and Van Loan (2019) found that when pre-service teachers focus on building quality positive relationships with learners and reflect on their own attitudes and beliefs they can influence the behaviour and success of learners in the classroom. Mtika et al. (2023) have also highlighted the importance of connecting with learners and their experiences in order to know how to respond to the 'whole child', as part of the relationship building process. They have shown the importance of interpersonal skills like kindness, patience and caring for diverse learners in helping learners to grow holistically.

In summary, key issues that emerge from the literature are that inclusive education is a complex and contested construct that is always under reconstruction. South African studies show that inclusive education is regarded as too challenging to implement successfully for various reasons such as a lack of consensus of what inclusive education is, lack of support and resources as well as a lack of teacher professional development (Andrews et al. 2021; Engelbrecht 2020; Engelbrecht et al. 2015; Majoko & Phasha 2018). There is a new shift toward researching what teachers are actually doing in their classrooms, rather than only focussing on the challenges (Skae et al. 2020). Research also shows that within teacher education, there is no clarity about what student teachers should know and be able to do in order to develop inclusive pedagogies that are responsive to all learners (Walton & Rusznyak 2019). It is therefore essential that teacher education programmes engage

with these complexities and attempt to adequately prepare teachers who are crucial to the successful implementation of such programme.

Conceptual framework

We drew on the literature review to develop a conceptual framework that would be suitable to analyse our data. Skae et al. (2020:7) provide a set of categories of the emergent factors that they observed in three South African Foundation Phase classrooms where teachers were practising inclusive pedagogies. They describe four synthesised categories, namely language of teaching and learning; class size, infrastructure and resources; supportive learning environment and teaching and learning strategies. We noted that these four categories are not of a kind, for example a small number of learners and the presence of resources are *enabling factors* that are not the same as the pedagogical strategies that teachers use. Thus, we adapted Skae et al. (2020) and used only the categories of a *supportive learning environment* and *teaching and learning strategies* (what the teacher does). This is because we were not observing classrooms and thus could not comment on the Language of Learning and Teaching (LOLT), class size and resourcing. Thus, these categories were deemed not relevant to our data set. We also included *teacher beliefs and dispositions* (who the teacher is) given that the literature emphasises the importance of teachers' believing that it is their work to teach inclusively (Black-Hawkins & Florian 2012). We used these three broad categories to code the data deductively (see Figure 1). We elaborated on these three broad categories by adding examples inductively drawn from the data.

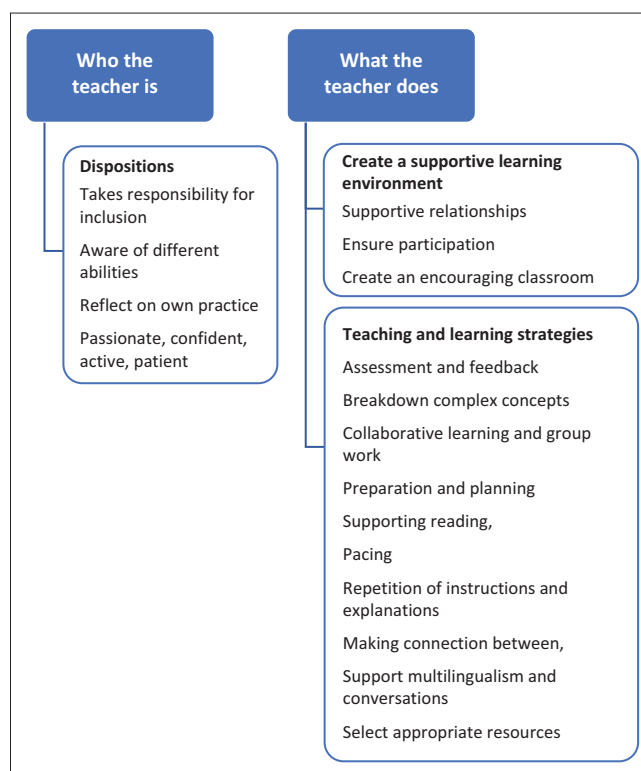
Research methods and design

In this study, we analysed data generated by student teachers from a task on Inclusive Education from Unit 5 of the TCIA module (see Figure 2).

The TCIA module was developed in response to the COVID-19 pandemic, where pre-service students were not able to complete the school-based experience component of the Bachelor of Education and Post Graduate Certificate in Education programmes because of school closures (Rusznayk 2022). Some universities in South Africa chose to make this a compulsory module to supplement and prepare pre-service teachers for school-based experience. B.Ed. students could take the module once in any of their 4 years of study. The module, which had five units, was offered online and students could complete it at their own pace but within the semester. In its first 4 years, this module has been completed by more than 70000 pre-service teachers drawn from 24 South African higher education institutions (Bertram & Rusznayk 2024). An underpinning discourse of this unit is that professional teachers are inclusive teachers who commit to teaching all learners.

The three sections from Unit 5 are:

- 5.1 Teaching and learning resources must reflect the diversity of learners – no harmful or discriminatory representations.



Source: Adapted from Skae, V.A., Brown, B.J. & Wilmot, P.D., 2020, 'Teachers' engagement with learners in inclusive foundation phase classrooms', *South African Journal of Childhood Education* 10(1), a873. <https://doi.org/10.4102/sajce.v10i1.873> and Black-Hawkins, K. & Florian, L., 2012, 'Classroom teachers' craft knowledge of their inclusive practice', *Teachers and Teaching* 18(5), 567–584. <https://doi.org/10.1080/13540602.2012.709732>

FIGURE 1: Conceptual framework.

TASK 5.5.

Now read what Teacher Patricia says about her approaches to lesson planning.

'I can't plan lessons to suit everybody. So, I have to remember there are always going to be those kids that do very well and there will always be those who fail. There is not much I can do for the ones who are going to fail. I think about the ones in the middle when I plan lessons – I plan for those kids who are the average. That way I know the lesson will suit most of them. That is the easiest way.'

What would you say to teacher Patricia so that she could:

- Feel confident about teaching all learners
- Be more responsive to learners' needs through her teaching choices
- Ensure the full participation of all learners during her lessons.

Source: Rusznayk, L. (ed.), 2020, *Teacher Choices in Action Resource book*, p. 130, Department of Higher Education & Training, Pretoria.

FIGURE 2: Online task completed by student teachers.

5.2 Language – choices about when to use Language of Learning and Teaching only, when to include multi-lingual support and when to code switch.

5.3 Supporting learner achievement – understanding what remains the same for all learners, and what to make different (differentiation).

The data that we analysed were the student teachers' responses to the following task:

We had data from 176 PGCE (Postgraduate Certificate in Education) and B.Ed. students from a selected university who had responded to this task. We analysed the data using Nvivo 12, which is the qualitative software package supported by our university. We set up three main codes: teacher dispositions and beliefs, creating a supportive

learning environment and teaching and learning strategies, which were established by the conceptual framework (Figure 2), drawing on literature. While we engaged primarily with the data deductively, new sub-codes were added inductively to the three established categories. Data were put through Turnitin to establish if text was plagiarised from the Internet. Plagiarised data and data that described verbatim the exemplar lesson that was provided were coded as Invalid. One fourth (25%) of the total data (31 responses) were coded as Invalid and thus do not form part of the analysis.

Ethical considerations

All students who completed the module were asked to give online written consent for their responses to be used as data. Student participation was voluntary, and reporting of findings was done anonymously to maintain confidentiality. Each participant was allocated a number for data reporting for example, P1, P2 and so forth. Participants did not have access to other students' comments and ideas. Ethical clearance was sought from the University of KwaZulu-Natal Humanities and Social Science Ethics Research committee, Protocol number HSSREC/00001830/2020.

With regard to the limitations of the study, the texts were short responses for a compulsory online module task that was not formally assessed. Other tasks were formally assessed. Thus, levels of motivation were different, which resulted in some responses that lacked depth. Responses varied in length and the average was 120 words.

Results

In order to answer the research question: 'What did pre-service students learn about inclusive education from the TCIA module?', we first present an overview of the quantitative data (i.e., how many chunks of text were coded for each category) and then discuss each category in greater detail, providing qualitative data. We present the data according to the three analytic categories explained in Figure 2.

Table 1 shows that there were 566 'chunks' of text that were coded in Nvivo 12. Of these, 124 (22%) 'chunks' of texts were coded to the category of teachers' dispositions and beliefs about inclusive education. More than half of the coded references (55%) were related to pre-service teachers' understanding of inclusive teaching and learning strategies and 23% of the coded references reflected their understanding of a supportive inclusive classroom environment. In the following section, we present both quantitative and

TABLE 1: Total number of coded text 'chunks' per analytic category and the percentage of the total data set (excluding invalid responses).

Analytic category	Total number of text 'chunks' coded	Percentage
Teacher disposition	124	22
Supportive learning environment	130	23
Teaching and learning strategies	312	55
Total	566	100

qualitative data, which provides examples of how we coded these references.

Teaching and learning strategies

We categorised 13 teaching and learning strategies that the pre-service teachers identified as important as shown in Figure 3.

For these pre-service teachers, *differentiated teaching* was the most significant way in which to practise inclusivity. The following are examples of differentiated strategies and activities that the participants wrote about. Some participants, such as P29, gave detailed accounts of a differentiated strategy of providing additional support to learners who need it as 'not all learners learn in the same way at the same pace'. What is interesting is the link between the instructional strategy and a classroom ethos where learners feel valued:

'She [*Teacher Patricia*] could learn that some learners require more assistance or input in understanding concepts, creating a classroom environment where learners feel valued. Not all learners learn in the same way at the same pace, so the teacher can give learners different tasks to cover main ideas at different levels or can keep learners' activities the same and give temporary support. Providing assistance to [*sic*] those who need it.' (P29)

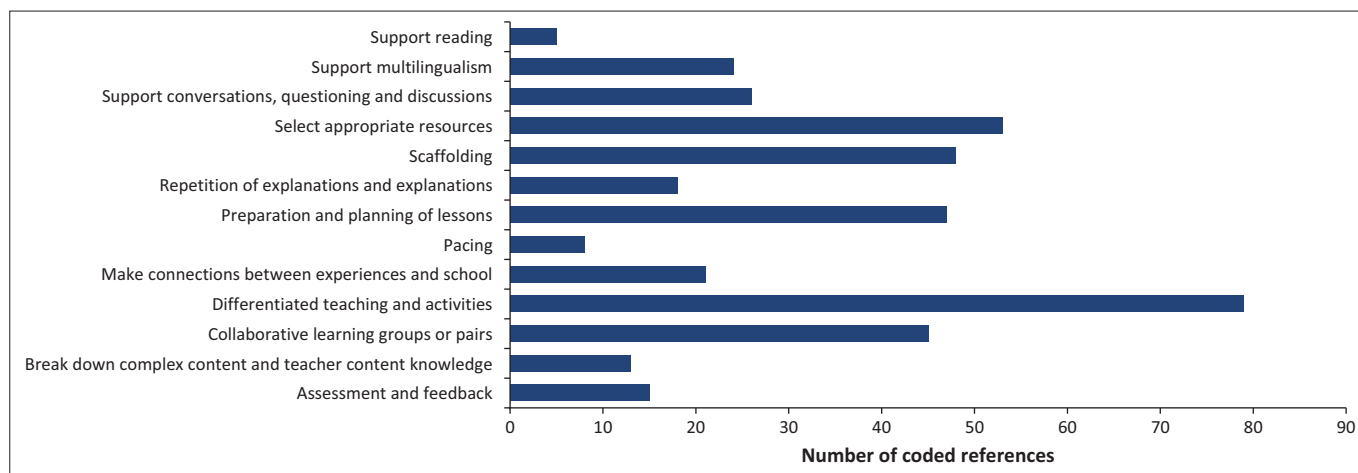
In the same way, P42 notes that not all learners learn in the same way and that the teacher needs to provide differentiated support. She offers group work as one way to do this as well as providing different activities and different levels of scaffolding:

'Not all learners learn exactly the same way. Some learners require special attention in order for the learning to take place. In this unit, they showed us different ways of learner support in the classroom. Some of these include keeping the same content for the whole class and then explaining to smaller groups. Others contain giving learners' different activities but still maintain the core or main ideas of the lesson. Providing different levels of scaffolding to different learners will also help her feel confident when teaching the whole class.' (P42)

P58 shows a good understanding of differentiation that allows learners to develop reading skills with support and then to become independent readers. She also notes that differentiation is not just about support for 'slower' learners but also for enrichment tasks:

'She [*Teacher Patricia*] can put in place extra learner enrichment for the ones that are doing well but also for the ones that are not doing so great but these tasks will not be the same but it should not be made easier but find new ways around her questions for the ones that do not do so well ... For example, some learners are good at reading and do not need the teacher to spend more time with them. But those that do not do so well in reading, the teacher can group them. She can sit down with those who are not so fast and teach them at a pace that they function on but allow them to read the same book as others.' (P58)

Following after *differentiated teaching*, the next strategy that was emphasised was *selecting appropriate resources*. P3 makes



Note: Teaching and learning strategies total references = 402.

FIGURE 3: Bar graph showing the number of coding references per instructional strategy.

it clear that appropriate resources are important both for the learner and for the beginning teacher to grow in confidence, knowing that choices can be responsive to learner diversity. P12 notes the contribution of the resources to a respectful classroom ethos and a positive teacher–learner relationship and to provide access to knowledge:

‘Teacher Patricia could learn about how to choose learning resources wisely and how to use them in lessons in order to make sure that all of the learners are included in the lesson. By learning this, it will help her to feel confident when teaching as she will know that her resources will not exclude any of the learners and will be able to plan lessons that include all the learners and not just the average learners. She could learn to use learning resources that represent the knowledge being taught accurately, which will enable all learners to participate and that reflect the diversities of the learners.’ (P3)

‘To make a classroom an inclusive and respectful space, teachers should take care to choose resources, texts, and examples carefully. Where appropriate, resources should be selected to reflect learner diversity and portray positive role models. When selecting resources, teachers should analyze them to check the kind of messages being sent to learners. These can be messages about what and who is valued. The teacher needs to check that there are no harmful and hurtful discriminatory representations. Ensure full participation of all learners: she should check whether her teaching resources give access to knowledge and reflect the diversity of learners in her classrooms.’ (P12).

Many pre-service teachers also focussed on the role of *scaffolding* in supportive inclusive pedagogy. Some only mentioned the technique of scaffolding (P40) without an explanation, while others (P84) showed a deeper engagement with the strategy of scaffolding and showed how it can be used as a response to learner diversity:

‘She could use the scaffolding technique by creating tasks that will break complex concepts and simplify them.’ (P40)

‘Teacher Patricia can design a single lesson for all the learners and their cognitive thinking abilities but also make sure that there is enough support for all the learners needs, should they require it. Teacher Patricia can also keep the explanations the same for all

and then work with smaller groups to revise or extend concepts. This will be the time to reach the slow learners which she abandons in her lesson preparation and delivery. Teacher Patricia can also teach different groups separately, varying the explanations or language per the learners’ needs.’ (P84)

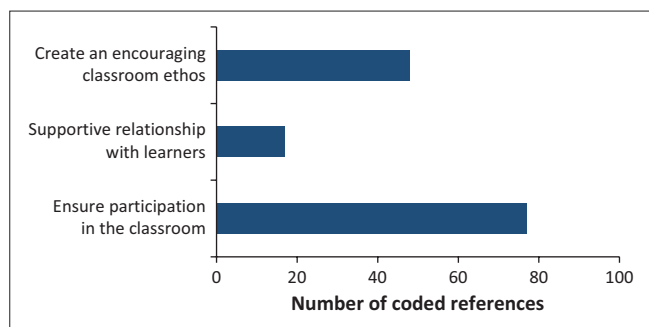
Collaborative learning was also a significant practice mentioned by the pre-service teachers. Responses showed that inclusive pedagogy integrates a range of strategies, seen in P136, who mentions learners working co-operatively and collaboratively on a range of tasks with the end goal being learners taking ownership of their learning and developing critical thinking skills:

‘She could have also provided opportunities for learners to work with their peers toward a common goal. Students should need to rely on each other to achieve their task, so be sure to assign students roles and clear expectations through direct instruction. Activities such as think-pair-share, chalk talk, and jigsaw can be easy ways to shift the focus in her classroom and encourage learners to take ownership of their learning. Games and problem-solving activities are especially effective for cultivating collaborative and critical thinking skills in young students.’ (P136)

The strategies of supporting reading, pacing, repetition of instructions and explanations, breaking down complex concepts, assessment and feedback, making connection between, support multilingualism and conversations were other examples mentioned by the pre-service teachers (see Figure 3). In comparison with the strategies that we have discussed above, they were less significant with each coded with fewer than 10 references.

Supportive classroom environment

Within the category of creating a supportive classroom environment, participants noted three different aspects, as can be seen in Figure 4. This shows how many pre-service teachers’ task responses reflected the classroom ethos and the nature of the relationships between the teacher and learners and between learners.



Note: Classroom environment total references = 142.

FIGURE 4: Bar graph showing number of coding references for the category 'classroom environment'.

The pre-service teachers indicated that ensuring *participation in the classroom* was an important aspect of an inclusive classroom. Both P49 and P70 make the connection between participation and collaboration, and here the focus is on how these strategies create a particular kind of classroom environment where learners can 'shape and contribute to classroom learning':

'She [Teacher Patricia] must know that learning is not a marathon, kids should not compete with each other. She must encourage the learners' participation by choosing to recognize their willingness to participate even if they are not doing well, compliment their effort and help them individually.' (P70)

'As an educator, one should provide learning and teaching that doesn't exclude learners based on their different abilities. Patricia, in her lessons should try being more inclusive rather than exclusive. Learning should never be teacher-centred. Learners should be given an opportunity to shape and contribute to classroom learning.' (P49)

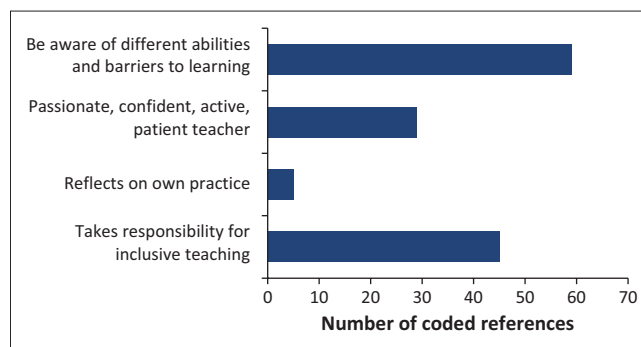
The second aspect that was noted was creating an *encouraging classroom ethos* where learners feel valued and respected. The following excerpts paint pictures of classrooms that create curiosity, excitement, exploration and motivation by including meaningful connections to learners' lives. There is a strong focus on accessing meaningful knowledge, which is supported by an encouraging and responsive classroom space:

'Teacher need to be demonstrating curious thinking for students, so that they create learning environments full of excitement, exploration and imagination.' (P10)

'Hearing other points of view can enhance student learning by exposing everyone to fascinating debate, broadening perspectives on traditional and current concerns, and locating learning within students' own settings while investigating those circumstances. Students are more motivated to take charge of their education when their teachers identify them, make meaningful connections to their life, and respond to their individual problems.' (P54)

An interesting finding is how the pre-service teachers focus on the classroom as a respectful place where learners are not embarrassed or shamed:

'The teacher could first start by making the classroom a place of respect and inclusive spaces for the learners and herself as the teacher.' (P12)



Note: Dispositions and beliefs total references = 138.

FIGURE 5: Bar graph showing number of coding references for the category 'teacher dispositions and beliefs'.

'She could learn about inclusive learning by ensuring that she understands the diversity in her classroom and make the classroom a respectful place by not discriminating or shaming.' (P40)

Teacher dispositions and beliefs

Figure 5 shows how many times the participants mentioned the dispositions and beliefs of a teacher who practises inclusive pedagogy.

Participants highlighted the importance of teachers *being aware* of different abilities and barriers to learning. The next biggest sub-code was that pre-service teachers believe that they are *responsible* for the learning of all learners in their class. This reflects an understanding of inclusivity that caters for *all* learners, which is the discourse that underpins Education White Paper 6. The importance of both aspects is highlighted by a number of studies (see Garwood & Van Loan 2019; Mtika et al. 2023):

'Learners do not learn at the same rate and a teacher should acknowledge that. If you have ruled out any physically or mental disabilities, that means learning a second language is harder for this particular student.' (P48)

'She should eliminate prejudice in her classroom and believe and have the same goals for every learner in the classroom but take different routes that work with their diversity.' (P87)

'Additionally, the teacher must adapt to her teaching practices for all cultures, her own behavior towards learners, give herself time to know all her learners, and use classroom adaptations that do not reduce content, yet make the curriculum more easily accessible to all learners.' (P62)

An interesting point from P52 is that teachers are not only responsible for all children's learning but must also believe in the capacity of their children to achieve, recognising that this may require that teachers 'cross an extra mile':

'It is a teacher's responsibility to own a sense of hope that underperforming learners can perform well in their schoolwork, considering they have distinctive learning capacities. Patricia must cross an extra mile; she may need to repeat instructions to the slow learner one more time.' (P52)

Furthermore, the characteristics of an inclusive teacher were described as passionate, confident, active, dedicated

and patient. A few of the pre-service teachers also noted that the teacher should be self-reflective. However, this was a small sub-code in relation to the other aspects (see Figure 5).

'The teacher could have come with a very vibrant energy to the classroom and by doing that, the learners are going to be eager to see what they will be learning about during the lesson from the start up until the end of the lesson.' (P91)

'Teacher Patricia should start by having a passion for teaching and have a subject content in their heart.' (P33)

'She must teach with patience so that even slow learners can understand. She must encourage her learners by praising them every time they seem to be engaged by answering questions so that every learner would want to participate.' (P11)

In summary, the data show that the pre-service teachers focussed primarily on teaching and learning strategies, that there were some strategies taught in the module that they did not mention and almost all participants believe that inclusive education is their responsibility. In the following section, we elaborate these findings in greater detail.

Discussion

To respond to the question of what do pre-service teachers learn about inclusive education from the online module, the weight of the data (55% of the coded text) reflects that the strongest focus was on teaching and learning strategies. As shown in Figure 3, the greatest emphasis was placed on differentiated teaching, which was a strong focus in the module. The module suggests that differentiation can happen through making knowledge accessible by choosing what to keep the same for all learners and what to change, for example explaining to the whole class and then teaching smaller groups. This aspect was coded 78 times (14% of the total coded texts) and thus it seems that that this concept was learned. However, we cannot claim that the pre-service teachers would be able to practise it in their classrooms, as it is a challenging practice to implement (De Jager 2017). The module further suggested that teachers should plan explanations carefully to unpack the concepts' complexity and provide concrete experiences and examples. However, these ideas did not appear in many responses, indicating that these strategies had not been internalised by many participants.

Scaffolding, selecting appropriate resources, collaboration and differentiation were all strategies taught in the module that were mentioned by the pre-service teachers. These aspects made up 56% of the total text coded for instructional strategies. Ten per cent of the total text coded for instructional strategies reflected the importance of group work to create a supportive environment, which is advocated in the module. However, participants highlighted the socialisation purposes of group work, such as collaboration and participation, rather than the cognitive aspect of learning from others. This is in keeping with findings from Mtika et al. (2023) where relationship building between learners was seen as the most critical factor indicative of inclusive education practices.

The strategies of focussing on reading, breaking down complex concepts and the importance of using a range of languages were advocated in the module but did not appear to be internalised by the pre-service teachers. These aspects made up only 10% of the total text coded for instructional strategies. The module had a substantial section on multilingual classrooms and the importance of teachers' understanding of learners' proficiency in the LOLT, which would inform their choices of when to code switch with the learners' home language. However, only 23 chunks of text (of 402) mentioned multilingualism as a strategy for inclusion, indicating that that this practice had not been internalised. This is unfortunate as teaching, learning and thinking happens through language.

The data show that participants embraced the idea that *all* teachers are inclusive teachers and are responsible for inclusive pedagogy. Twenty-two per cent of the total coded text referred to teacher dispositions and responsibility to ensure that all learners can access knowledge and participate in learning and a further 23% of the total coded texts reflected the importance of an inclusive classroom environment. This was a strong message in the unit, as seen in the following excerpt: 'Teachers have a responsibility to ensure that all learners in the class can participate in the lessons' (TCIA Student guide: 108) and is also supported by literature (Black-Hawkins & Florian 2012; Garwood and Van Loan 2019).

Thus, in response to the question of what pre-service teachers learned, the data show that they primarily internalised the teaching strategies of differentiation, scaffolding, group work and selecting appropriate resources. Very few mentioned the unpacking of complex concepts, a focus on reading and multilingualism as instructional strategies although these were foregrounded in the module. At least 45% had internalised the need for teachers to be responsible for inclusive teaching and the importance of creating an inclusive learning environment.

This supports Black-Hawkins and Florian's (2012) argument that to teach inclusively requires the belief that it is your responsibility to do so. However, this responsibility is a heavy one, given the reality in South Africa that many of the barriers to learning are located outside of the classroom. It was interesting that some participants focussed on the dispositions of the inclusive teacher as being patient, passionate and confident, which is not mentioned in the TCIA module. Nevertheless, these pre-service teachers extended and re-framed the pedagogic responsibility advocated in the module to include the *characteristics* of the ideal inclusive teacher, particularly the virtue of patience. This was an unexpected finding.

Initially, our conceptual framework for data analysis that we drew from the literature, focussed on the dispositions of the teacher (who the teacher is) and on the instructional

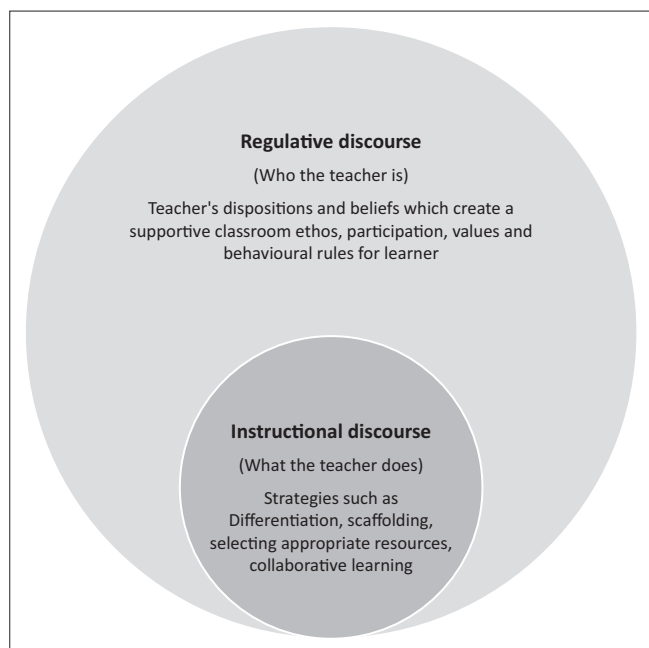


FIGURE 6: A proposed inclusive pedagogy framework where instructional strategies are embedded in the regulative discourse that supports inclusive pedagogy.

strategies (what the teacher does) as two separate categories (see Figure 2). However, on reflection after the data analysis, we see these categories as inextricably connected, drawing on Bernstein's (2000) argument that in a classroom the instructional discourse is embedded in the regulative discourse.

Bernstein (2000) describes the **regulative discourse** as concerned with the classroom ethos that encompasses the moral values, behaviour, orderliness, character, identity and attitudes that are expected in the classroom. Usually, the regulative discourse focusses on the values and behaviour exhibited by the *learners* (Norlund 2018) but from the data in our study, we argue that it can also encompass the moral values, disposition and character of the *teacher*.

The instructional discourse is embedded in the regulative discourse (Bernstein 2000). We have developed Figure 6 to illustrate that the teaching strategies and the sequencing, selection and pacing of knowledge cannot be separated from the classroom environment in which they are practised. This inclusive classroom environment is created by a particular kind of teacher, who both believes that inclusive pedagogy is their responsibility and has the 'right' dispositions and pedagogic knowledge. This is particularly important for the endeavour of inclusive pedagogy. We illustrate this embeddedness by presenting a framework of inclusive pedagogy that shows that instructional strategies must be embedded in a particular regulative discourse. This regulative discourse embraces who the teacher is as well as the classroom ethos that the teacher establishes for the learners (i.e., rules for behaviour). Thus, while we initially approached the data by thinking about who the teacher is as *separate* from what the teacher

does (see Figure 2), it became clearer how these are embedded rather than being separate. Thus, inclusive pedagogy embraces both who the teacher is and what the teacher does.

Conclusion

We argue that the concepts of the regulative and the instructional discourse are a useful way for teacher educators to visualise the relationships between the categories of the learning environment, the teaching and learning strategies and teacher beliefs and dispositions. While we started the analysis process with a separate focus on who the teacher is and what the teacher does, we believe these aspects are more closely entwined. Teachers' dispositions and beliefs are not a separate category but, in fact, form part of the regulative discourse as moral values, behaviour and character are expected of both the teacher and learners. This could be a productive framework for teacher educators to imagine how to teach inclusive pedagogies to pre-service teachers. The data in this study indicated that most participants had internalised how important it is to establish a supportive regulative discourse in their classrooms and had internalised some instructional strategies. However, key strategies such as systematically explaining concepts, focussing explicitly on reading, and multilingualism were not internalised by participants. This finding has implications for teachers learning about inclusive pedagogic practices to ensure learner access and participation.

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Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

M.M. conceived of the study and did the initial literature review. M.M. and C.B. both coded the data and contributed equally to the analysis of data and writing of the article.

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Data availability

The data that support the findings of this study are available on request from the corresponding author, M.M. The data are not publicly available due to the fact that the article is containing information that could compromise the privacy of research participants.

Disclaimer

The views and opinions expressed in this article are those of the authors and are the product of professional research. It does not necessarily reflect the official policy or position of any affiliated institution, funder, agency or that of the publisher. The authors are responsible for this article's results, findings and content.

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