Teacher Experiences of In-Service Training Programmes on Curriculum Differentiation and Modification in Inclusive Primary Schools of Capricorn District, Limpopo Province, South Africa

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Abstract: Many teachers struggle with curriculum differentiation and curriculum modification in an inclusive education setting, despite a range of in-service training programmes being offered over recent years. More specifically, several training initiatives have focused on the development of school managers, with the idea of them cascading the information down to the other staff members at school. In this article, we report on teacher experiences of in-service training programmes on curriculum differentiation and modification in inclusive primary schools in the Limpopo Province, South Africa. In undertaking the study, we followed a qualitative approach, adopting a case study design. Two officials from the Inclusive Education section of the Department of Education and six teachers from the Dimamo circuit were purposively selected to take part in the study. Data were generated through semi-structured interviews and document analysis. The generated data were analysed through content analysis. The findings of the study indicate that the participating teachers felt inadequately trained to implement various strategies that may accommodate learners with diverse needs in their classrooms, with school managers not providing feedback to teachers after attending inservice training sessions due to time constraints. As a result, we posit that the current model of teacher empowerment on curriculum differentiation, which takes the form of in-service training programmes, is ineffective. we propose that new strategies should be put in place to better equip teachers in this field through, for example, short learning programmes on curriculum differentiation and modification, resource allocation, and feedback provision.

Keywords: diversity curriculum differentiation, curriculum modification Inclusive Education, In-service training, teachers

1. INTRODUCTION

Teachers in South African primary and secondary schools seemingly find it difficult to implement curriculum differentiation and modification during their daily activities of teaching and learning to accommodate the diverse needs of all learners (Department of Education, 2006., Mzizi, 2014., Cesar & Santos, 2006., Tomilson, 2005., Hawkins, 2009., Ledwaba, 2017). In this regard, Mandukwini (2016) conducted a study in the Eastern Cape province, indicating that many of all teachers experience challenges when wanting to implement curriculum differentiation and modification in class. In a related study in the Limpopo province of South Africa, Makgato (2018) found that teachers generally face some challenges when wanting to execute this task, such as inadequate teacher training on curriculum differentiation, multi-grade teaching as well as monitoring and support programmes; limitations in terms of skilled school management teams; and insufficient human and material resources.

As the number of learners with diverse needs are continually increasing, the need for curriculum differentiation and modification is clear, as is the implied need for proper preparation of teachers to effectively execute this task. Even though the Inclusive Education challenge is the focal point for numerous education systems throughout the world, existing research indicates that many teachers remain hesitant to implement the policy.

Curriculum differentiation and modification can be enhanced through effective classroom management, varied pedagogy, and flexible teaching and learning strategies that may cater for the needs of all learners. One possible way of addressing diverse needs in schools is through curriculum differentiation and modification. According to Walton

(2013), curriculum differentiation acknowledges that learners come to class with different levels of preparedness, implying the need for teaching to be adjusted to learners' individual needs. In the same breath, Tomilson (2002) defines curriculum differentiation as teaching and learning that is informed by the view that learners will learn more effectively if teachers provide them with a variety of teaching strategies in accordance with their levels of preparedness and well-being. Through differentiated instruction, teachers can thus respond to the different needs of learners in a didactic situation. Therefore, I agree with both authors because Curriculum is seen as the heart of the whole process of teaching and learning. The presence of the content in learning is, therefore, very crucial in this regard.

Due to the importance of curriculum differentiation and modification, teachers need to be equipped with the necessary knowledge and skills to follow this route. Gorozidis and Papaioannou (2014) indicated that teachers should be motivated, and the in-service training programmes are currently found to be relevant for professional development initiatives. If teachers are well-grounded and motivated through workshops, seminars, and staff meetings, they tend to stay focused and implement the knowledge gained (Gorozidis & Papaioannou, 2014). When implementing this strategy, teachers can maximize the learning potential of a class by for example modifying the curriculum, or adjusting their teaching methods, learning resources, and activities that may address the needs of all learners. This would entail that a teacher considers individuals' or small groups of learners' levels or readiness for learning, and then adjust the tempo of teaching according to the needs of the learners as well as their interests and preferred learning styles.

As indicated, the progress with the implementation of Curriculum differentiation and modification has however been slow, due to teachers perceiving themselves as inadequately equipped to accommodate learners with barriers to learning in their classrooms (Chataika, Mckenzie, Swart & Lyner-Cleophas, 2012). In addition, Strogilos, Lim and Buhari (2021) indicate several contextual constraints that may hinder the process of curriculum differentiation and modification, such as class size, a standardized curriculum, and national examinations. Against this background, I undertook research that focused on the reasons for teachers finding it difficult to implement curriculum differentiation and modification in the classroom, despite a series of in-service training and workshops that have been offered in the past. In undertaking the study, I aimed to contribute to the knowledge base on the outcome of in-service training and structured workshops in support of teachers' readiness for curriculum differentiation.

2. LEARNERS WITH DIVERSE LEARNING NEEDS

The concept of diversity implies a range of connotative meanings, which include but are not limited to political, social, psychological, and educational meanings (Thomas & Loxley, 2001). Diversity can furthermore be used to describe the nature and compilation of a group of people for example, in terms of social class, gender, family status, minority groups and domineering groups in society. Based on these possibilities, diversity in the classroom will not only refer to learners being different in terms of race, gender, family background and socio-economic status; it also implies that different learners will demonstrate different levels of readiness to learn, different strengths as well as different needs for individual support.

Teachers of the 21st century are expected to possess the necessary knowledge and skills to respond to the diverse needs of learners in their classrooms. Gollnick and Chin (2002) indicate that classroom teachers are therefore required to accommodate learners from a variety of cultures, languages, and abilities, according to their unique characteristics and preferences. For teachers to be able to attend to the stipulations of inclusive education policy, they thus need to possess good theoretical knowledge yet also be able to apply culturally responsive methods and strategies. Even though teachers have the obligation to create classroom environments that can accommodate all learners irrespective of their disabilities, culture or ethnicity, language background or race.

It is therefore important for teachers to be equipped with the necessary skills and understanding of their learners' functioning, background, and cultures. In this regard, Malacapay (2019) and Tomlinson (2011) argue that when implementing curriculum differentiation, and curriculum modification, the teacher needs to take into consideration some fundamental concepts of varying what is taught, which are namely, work given to learners, quality curriculum, flexible management, and ongoing assessment. When applying different instructional methods, teachers will be able to achieve their goals and objectives of supporting all learners to succeed, including those with diverse learning needs.

3. CURRICULUM DIFFERENTIATION AND MODIFICATION

Curriculum differentiation implies a teaching philosophy that is based on the premise that teachers should adapt their instructions to fit different learners' needs. Several studies on curriculum differentiation highlight the potential and possible positive outcomes of differentiated instruction when teaching learners with diverse needs (Marishane,2013; Mngomezulu,2019). Curriculum modifications include simple but powerful tools that can assist a teacher to make the learning environment more accessible to all students (Sandall, Schwartz, Joseph & Gauvreau, 2019). Curriculum modifications will affect the materials that are used to assist learners to participate. Even though the modifications will affect the materials that are used or the mode of delivery of a lesson, the learning goals and stipulated outcomes will remain the same.

Differentiation is a planned curriculum that takes into consideration the individual needs or interests of the child (Tomlinson, 2018). He further added by saying that "Differentiation means tailoring instruction to meet individual needs." The term "modification" may be used to describe a change in the curriculum. Modifications are made for students with disabilities who are unable to comprehend all the content an instructor is teaching. Teachers are therefore expected to cater to the needs of all learners in an inclusive setting, in terms of the selection of teaching methods and assessment variations. Through in-service training programmes that were conducted for curriculum differentiation and modification, teachers are expected to differentiate their learning environment itself and must manage it. On the other hand, learners can have the opportunity to work in groups with other learners as an effective strategy or work in groups in which every learner has a chance to demonstrate their different styles. Nowadays, teachers can introduce new quest speakers in English classrooms, or bring their classes into the libraries or on educational excursions.

However, teachers find themselves in a predicament and struggle to imagine how to differentiate every lesson on a daily basis. To differentiate and modify their daily activities in an effective and productive way requires a form of support. The workshops on Curriculum differentiation and modification serve as an indispensable tool for teacher development. For this article, teachers may utilize the knowledge gained from the in-service training programmes to develop and consider the learning styles, interests, abilities, and expression styles. To achieve all the above-mentioned features, teachers are expected to accept freedom in learning, flexibility, and creativity to better implement the curriculum differentiation and modification models in their classroom situations.

4. IN-SERVICE TEACHER TRAINING

For the purposes of this paper, in-service training is defined as a workshop for employed professionals, paraprofessionals, and other practitioners to acquire new knowledge, better methods, etc. for improving their skills toward more effective, efficient, and competent rendering of service in various fields and to diverse groups of people (Amadi, 2013). In addition, such a workshop is a training designed to benefit a specific group of teachers at a particular school. Good in-service training should, via workshop trainees and improve the quality of programming for the development of teachers in service. An in-service teacher training program is any program or activity that is designed to have a positive impact on the education process which takes place within an educational institution. It also includes all the practices and experiences that teacher undergoes after joining the teaching profession. It is composed of both the professional and subject matter of education. The importance of planning in-service teacher training for curriculum differentiation and curriculum modification is designed to meet the conditions of the educational system and the professional needs of the teachers. It enhances teacher teaching and contributes to viewing from a new angle to meet classroom needs (Ramsey, 2000). Continuous and efficient in-service training on curriculum differentiation programmes of teacher development is the key factor in the success of the education process.

It helps teachers to follow the changes in this process and enables them to advance in technologies, development of curricula, and modern teaching techniques. In-service training on curriculum differentiation and curriculum modification programmes plays a significant role in teachers' continuous professional development. In addition, teacher professional development plays a crucial role in the quality of education in schools and improves the academic achievements of students (Guskey.2002).

In-service training programmes in curriculum differentiation and curriculum modification are important because they promote a very flexible environment, for teachers easily adapt to the working situation. On the other hand, it also motivates employees or employers and increases creativity in the educational process. In-service training programmes for curriculum differentiation and curriculum modification help teachers acquire new understanding and instructional skills to develop their effectiveness in the classroom. The in-service training programmes place teachers at the center of any improvement effort in the educational institution.

According to Owen (1990), "the positive aspect concerning professional development of teachers is that the program will make sure that learning activities are planned and concentrated on empowering affected teachers to correct policies, curriculum development, teaching and views on how to achieve high productivity and students' performance".

5. THEORETICAL FRAMEWORK

I was guided by the bio-ecological theory of f Bronfenbrenner (1997) which state the interdependence between a multitude of organisms and their immediate background and environment, with every section contributing to the entire process. The Bioecological theory is an umbrella concept that is used to refer to a variety of social theories that place emphasis on the importance of considering agency, being sensitive to the local context, and understanding the centrality of interpersonal relationships in the world of a child (Scott, 2005). The bio-ecological theory acknowledges the role of the environment in the functioning of human beings. If the ecological systems are disturbed in any way or do not function together or support one another, the idea of implementing curriculum differentiation and modification cannot be a success, within the context of inclusive education.

The ecological theory aligns with the vision of inclusive education as it emphasizes that the ecology of human development involves the scientific study of the progressive, mutual accommodation between an active, growing human being and the changing properties of the immediate settings in which, the person lives and functions. Bronfenbrenner's ideas brought an important influence in transforming and creating the understanding of specific levels of interaction in the process of human development. He further identified five systems interacting dimensions that are used in understanding the process of human development, but for the purpose of this research, only four levels were dealt with in full, that is, Micro level, Meso level, Exo level, and Macro level.





Micro levels are described as the immediate environment in which man develops gradually and gradually through the active participation process as indicated in figure 1.1. Swart and Pettipher, (2005) indicates that this type of interaction refers to face-to-face interactions that are continuous in nature. In this article, teachers are faced with the serious task of implementing curriculum differentiation and curriculum modification in the classrooms. This is the most important

and immediate part of teaching and learning that ensures that all learners must receive equal quality education to the best of their ability. This is the level where teachers do not wish to accommodate learners with disabilities in their schools, the importance of in-service is, therefore, crucial to equip teachers with the skills and knowledge necessary to enhance learning in schools.

Meso levels can best be described as the set of microsystems that interact with one another on a continuous basis. Swart and Pettipher in Landsberg, Kruger and Nel, (2005) defines the meso level as the relationships that develop and exist between the microsystems and influence the relationships between teachers and the district levels. Donald et al. (2006) indicate that when looking at the theory of inclusion, it can be deduced that implementing curriculum differentiation and curriculum modification is not possible without paying attention to the relationships developing between the different microsystems. Therefore, in the Capricorn District of Limpopo Province, the in-service training programmes in curriculum differentiation and curriculum modification were conducted by the two directorates from the Inclusive Education Section of the Department which rotates in all schools on daily basis. Some were based at the district offices and only intervene when they are needed by the schools to aid.

Exo levels do not directly involve the participation of the learners Swart et al. (2005) but may be positively or negatively influenced by what is taking place at schools. Donald et al. (2006) indicate examples of the education systems in the form of curriculum designers and policymakers and the place where parents are working. Lack of resources has shown to be a serious factor that hampers the process of policy implementation of curriculum differentiation and curriculum modification in many Provinces including Limpopo. For the purpose of this article, Exo levels may refer to other systems where learners are not directly involved, an example may be the teachers that are not functioning according to their levels of competence, resulting from problems existing in the system. If the Provincial Department of Education does not design and provide guidelines that govern teachers in schools, their actions will affect the learners who depend on their skills and knowledge to benefit from their assistance.

The macro level involves the dominants of the social, cultural, and economic structures, as well as the values, norms, and practices that affect all systems. In the South African context, the macro level can be described as the highest level where the policy decisions about the working of the department are formulated. Guidelines are formulated at the National level, and therefore provided to the provinces according to the needs of the learners. During the time when the study was conducted, there were clear guidelines and structures documented at this level to regulate the effectiveness of the in-service training sessions on curriculum differentiation and curriculum modification in schools.

6. METHODOLOGY

We followed a qualitative approach (Teherani,2015) and adopted a case study design (Crowe,2011) with the aim of gaining a better understanding of the participant's views on the effect of in-service training on curriculum differentiation and modification. This approach allowed the participants to share their voices, based on their lived experiences of the phenomenon. Quantitative studies are often fast, focused, scientific, and relatable. The speed and efficiency of the quantitative method are attractive to many researchers.

7. SELECTION OF PARTICIPANTS

The sample size consisted of 1914 teachers from 957 schools in the Capricorn district of Limpopo Province, South Africa. Limpopo Province is one of the biggest provinces in the country, where most people depend on agriculture for their survival, and most learners are left with their elderly people, as their parents have left to seek job opportunities in the metropolitan areas. For the purpose of this article, six teachers were purposively selected to take part in the study. These participating teachers should have attended at least five in-service training sessions on curriculum differentiation and modification in the Limpopo Province.

8. DATA GENERATION TOOLS

For data generation and documentation, we utilized interviews and observations. The individual interviews followed semi-structured interviews which gave me an opportunity to ask questions according to an interview schedule, and in addition, the semi-structured interviews offered the researcher the measuring abilities of a structured interview. In the same breath, they allow interviewers to compare candidates on the same set of questions. There is significant flexibility to pursue new topics as needed. Therefore, Semi-structured interviews can be used by family medicine researchers in clinical settings or academic settings even with few resources (DeJonckheere & Vaughn,2019).

In addition to individual interviews, we used observation to generate data where, observation is a qualitative method with roots in traditional ethnographic research, whose objective is to help researchers learn the perspectives held by study populations. As qualitative researchers, we presume that there will be multiple perspectives within any given community (Duke University Libraries, 2022). We namely attended and observed two sessions of in-service training on curriculum differentiation and modification, gaining insight into how the facilitators were conducting the sessions. We observed the resources which were made available during the training sessions and the organization of the entire process at large. We were also able to detect the daily practices of teachers in the classroom through observation. Teachers namely allowed me to observe their lessons incorporating curriculum differentiation and modification for 30 to 40 minutes, during which we recorded their instructional techniques, teacher behaviour, and the use of language when presenting. In observing the teachers, we thus focused on their activities and listened to them communicating about themselves, their activities, and their lives in general. The main aim of conducting observations was to gain insight into the constraints and possibilities of the in-service training on curriculum differentiation and modification in the participating inclusive primary schools. Throughout, we made reflective field notes, using an observation guide that was specifically designed for this study.

We also included visual data by taking photographs of different amenities and activities in the participating schools. For this purpose, We reviewed school-based documents such as referral notes, the curriculum, individualized educational plans, and assessment reports in order to obtain information on the implementation of policy on inclusive education in these schools.

9. DATA ANALYSIS

Data were analyzed through thematic content analysis, which involved a descriptive presentation of the qualitative data (Caulfield, 2022). The following steps were followed to effectively analyse the collected data. The first step is to prepare and organize your data, and print out my transcripts, to gather the notes, documents, or other materials. In addition, I must mark the source, any demographics we may have collected, or any other information that will help me analyse my data. The second step is to review the collected data. This process required me to read my data, probably several times, to get a sense of what it contained. This afforded me an opportunity to keep notes about my thoughts, ideas, or any questions we might have had. The third step is to Create initial codes. We used codes as highlighters, and notes in the margins, which helps me to connect with my data. The fourth step is to review the codes and revise them into themes. The last step is to present themes in a cohesive manner. This gave me the opportunity to consider the audience, the purpose of the study, and what content should be included to best tell the story of my data.

To conduct a thematic content analysis, researchers systematically generate data from a set of texts, which can be written, oral, or visual in the form of e.g. books, newspapers and magazines, speeches, or transcribed interviews. In analysing the data, we constantly reflected on the relationships and collaborations that exist between the different sets of data. The documents were analysed and arranged according to the themes we identified.

10. CODE OF ETHICS

The following ethical considerations were adhered to in this study.

Informed consent

To receive informed consent, the researcher's aim of the study and the process was explained in full to the participants, and informed consent to participate in the study was received verbatim and in writing. The participants were informed that they may withdraw from participation at any stage during the research process, without any form of penalty. The researcher was sensitive to the principles of human rights and dignity, and the importance of protection of the participants from any form of harm was highly rated.

Permission

For the research to be conducted, permission was received from the Research Ethics Committee of the University of Limpopo in South Africa. Permission was also received from the Department of Education to conduct the study in public schools of the Capricorn District of Limpopo Province. Written permission was received from the participants in the form of completion of the consent forms.

Voluntary participation

Participants were informed that their participation was highly valued in the study and was on a voluntary basis, there shall be no stipend for their participation, and that they had the right to participate up to the extent they wish to participate without any form of penalty or offense. This means that the participants were informed that they were at liberty to withdraw from participation at any moment.

Research Integrity

The researcher strove to maintain integrity when carrying out the research project. The researcher attempted to comply with the high standards with limitations of findings and methodological constraints indicated, accurately representing areas and degrees of expertise, and reporting findings, to avoid misrepresentation of results (Mouton, 2001).

Confidentiality and Anonymity

Any study involving the participation of human beings, should be treated with great respect to the participants' rights and privacy. In this study, participants were informed that the researcher and his supervisor would have access to the information. Data collected would be kept confidential and their identity would be protected, and their names would be omitted, or pseudonyms used.

Feedback

Feedback may be forwarded to the principals of the schools that participated in the study in a form of a complete written document.

11. FINDINGS

We identified three themes because of the thematic content analysis I completed. Three findings emerged from my data analysis. The themes relate to the participants' understanding of curriculum differentiation and modification, their confidence to implement it in class.

Theme 1: Understanding of curriculum differentiation and modification

One of the goals of the. in-service training programme on curriculum differentiation and modification is to clarify the meaning of these concepts according to the different ability levels of learners in an inclusive classroom. The participating teachers shared their understanding of curriculum differentiation and modification in different ways. Their contributions attest to the participants having a fairly good understanding of what this entails, as evident in the following broad view shared by one of the participants: *Curriculum differentiation* is *based on the assumption that learners differ in their learning styles, strengths and abilities.*. This view was elaborated on in the following way, by another participant:

No two learners are the same. Each learner is unique with different abilities and capabilities. Learning content should be imparted to learners in a manner that their unique educational needs are met. Each learner needs to be acknowledged as a unique individual and not be seen as part of "others". Intervention and support measures need to be designed to meet the individual needs of each other.

Another participant shared a similar view, as captured in the following words:

Learners are different in many ways. There are those learners who have abilities or problems that require special needs education or other services to reach their potential needs. These kinds of learners are exceptional in nature because of their physical, intellectual, or behavioural skills which differ substantially from the norm, either higher or lower.

The participants' view on curriculum differentiation and modification align with the content of the in-service training programme in terms of what these concepts mean. The different views that the participants shared lead to the assumption that teachers who had attended the in-service training programme may have possessed a more in-depth view on the topic, being more knowledgeable than those who did not attend the programme. The participants however also indicated that, even though they understood what curriculum differentiation and modification implies, they still

found it difficult to demonstrate and implement curriculum differentiation and modification in class, as captured in the second theme that I identified.

Theme 2: Confidence to implement curriculum differentiation and modification

The participating teachers did not seem confident about the way in which they would implement curriculum differentiation and modification. They communicated uncertainty about whether they were doing the right things, based on what they had learnt from the in-service training programme. Based on their responses, it became clear that the participants did not view the training they had received as sufficient to the extent that they knew exactly what to do in practice. One of the participants said the following in confirmation of this deduction: All the different categories of learners with diverse needs require well-trained teachers with passion, who will understand their lifestyle in a proper way, not us who attended a micro-wave like training for four and half hours, what kind of skill do you expect to acquire?"

In elaborating on this experience, the participants indicated that the time spent on the training was, in their view, not sufficient. Their views are captured in the following excerpts taken from the data:

- One of the challenges we had was that the in-service training sessions were only conducted for four and half hours, which is not enough.
- We need more time to assimilate the package of information on curriculum differentiation and modification received within a short space of time
- The duration of time taken for training the teachers for the implementation of curriculum differentiation and modification was not enough, more time is needed for these kinds of training. If more time is granted, the efficiency of the in-service training programmes may improve.

Our classroom observations support the teachers' indication that they did not feel sufficiently competent to implement curriculum differentiation and modification. We namely observed that the teachers tended to only make use of one medium of instruction when presenting their lessons, thereby not applying the principles of individual attention and differentiation of instructional strategies. This was the case in all the participating schools.

Some of the efforts of accommodation that we did however observe relate to the treatment of learners who are visually impaired. These learners were for example allowed additional time when class tests were administered due to their visual challenges, which imply a form of curriculum modification. In addition, examination concessions were arranged for some learners with the Department of Basic Education, in an attempt to support learners who required additional time when completing tasks or undergoing assessments.

Theme 3: Being challenged by limited resources.

The teachers who participated identified a shortage of the necessary resources as a challenge that prevented them from effectively understanding and implementing curriculum differentiation and modification. They referred to limitations in terms of the provision of the necessary materials and human resources needed for effective curriculum differentiation and modification in the classroom. They for example reported the following perceptions: ... space, furniture, and lack of resources is a serious challenge. There should be a provision of resources to enable the effective facilitation of workshops and apply the process of cascading promptly to other teachers as the implementers of the policy.

In addition to the participants experiencing limitations in terms of the required resources to implement curriculum differentiation and modification, they thus also regarded the resources used for the training programme to be insufficient. Our observations confirm this idea, as noted in the field notes.

Our observations in the schools furthermore confirm the participants' indication that they lacked the necessary resources to effectively attend to curriculum differentiation and modification. We, for example, noted that learners with special needs are generally not catered for in most schools, with the result that learners who are deaf, for example, may be disadvantaged due to teachers not being able to effectively communicate with them.

In addition, we observed limitations in terms of the participating schools not having the required infrastructure to attend to inclusive practices. For example, infrastructure for effective inclusive practices include ramps, accessibility to upstairs buildings, and toilets for learners in wheelchairs yet the schools that we observed did not meet these requirements, implying that certain learners may not be accommodated in terms of their special needs. These observations, in conjunction with the reported views of the participants, confirm insufficient preparation for inclusive education in-service training based on limited available resources.

12. DISCUSSION

The purpose of my research was to explore the experiences of teachers of an in-service training programme on curriculum differentiation and modification, in a specific province in South Africa. The study followed the offering of the in-service training programme in the Dimamo circuit, of Capricorn District, Limpopo Province, with a considerably large number of teachers attending the training.

The findings of my study indicate that the teachers gained a better understanding of curriculum differentiation and modification because of their attending the in-service training programme. The views shared by the participating teachers indicate that there was a shift in their understanding of these concepts, from a narrow to a broader view. This finding aligns with the findings of similar studies by Dean (2019), Tomilson (2000) as well as Renzulli (1977) in terms of the potential value of in-service training for broadening participants' understanding of a concept.

Despite their understanding of curriculum differentiation and modification gaining depth, the findings of my study also indicate that the participating teachers were not confident about the practical implementation of what they had gained. Bearing in mind that barriers to learning may have implications for different aspects of the curriculum such as the content, language, classroom organization, teaching strategies, pace of teaching, and time available to complete the curriculum, it is understandable that the participants felt as if they required additional training before taking on the task with confidence. This finding aligns with existing literature indicating that the lack of clear criteria for effective inclusionary training remains a problem within the context of inclusion (Florian, 2015; Lacey & Scull, 2015). As a result, teachers at ground level often continue to engage in practices that are not sufficiently inclusive (Florian & Black-Hawkins, 2011).

In addition, the participating teachers' perception that the time allocated to the training they received was not enough, is consistent with the findings of other researchers (Ledwaba, 2017, Hamman, 2014; Mngomezulu, 2019; Marishane, 2013). This may result in teachers experiencing a sense of inadequacy to implement curriculum differentiation and modification in their classrooms, as was the case in my study.

Finally, the findings of my study reveal that improper distribution of resources can create a challenge for teachers who want to implement curriculum differentiation and modification, as part of inclusive education in South African schools. In addition to the infrastructure of all schools not having been attended to the Department of Education has seemingly not succeeded yet in supplying all schools with the necessary documents required for curriculum differentiation and modification.

13. CONCLUSION

The implementation of inclusive education has been a priority in South African schools for the past almost 15 years yet many teachers still find this to be a challenge. Even though the Department of Education has introduced several plans to get this done by for example capacitating teachers with regard to the implementation of curriculum differentiation and modification, more work is required to ensure that teachers are confident enough to implement the policy on inclusive education. If sufficient resources can be provided and the capacity building of teachers be taken care of, in-service training programmes such as the one on curriculum differentiation and modification may have better results in terms of empowering teachers on the ground level.

Despite in-service training programmes being offered to teachers in the Limpopo province of South Africa in 2015, curriculum differentiation and modification is not yet given the necessary attention in many schools. However, if such in-service training programmes can be offered in a more effective way, teachers may benefit, which implies an indirect benefit to the learners they teach.

14. REFERENCES

[1]. Bronfenbrenner, U. (1997). Ecological System Theory, in R. Vasta (Ed.).Six Theories of Child Development: Revised Formulations and New Trends, pp. 187-249. London: Jessica Kingsley.

- [2]. Cesar, M and Santos, N. (2006). From exclusion to Inclusion; Collaborative work contributions to move inclusive settings. European Journal of Psychology of Education, 21(3);333-346.
- [3]. Chataika, T., McKenzie, J.A., Swart, E., & Lynner-Cleopas, M. (2012). Access to education in Africa: Responding to the United Nations Conversion on the rights of Persons with Disabilities. Disability and Society, 27(3): 385-398.
- [4]. Caufield , J. (2022). How To Do Thematic Analysis/ Step by Step Guides and Examples.
- [5]. Dean, P. G. (2019). Teaching and learning mathematics: Routledge.
- [6]. Department of Education, (2001). White Paper 6: Special Needs Education: Building an Inclusive Education and Training System. Government Printers: Pretoria.
- [7]. Department of Education, (2006).
- [8]. Department of Basic Education. (2010). The status of the language of learning and teaching (LOLT) in South Africa: A quantitative overview. Pretoria: Government Printer.
- [9]. Florian, L. & Black- Hawkins, K. (2011). Exploring Pedagogy. British Educational Research Journal, 37(5). 815-828. Dol: 10.1080/01411926.501096.
- [10]. Florian, L. (2015). Inclusive Pedagogy: a transformative approach to understanding and responding to individual differences. Online resource available.
- [11]. https://www.heacademy.ac.uk/sites/default/files/resources/eedc_education_online .pdf.
- [12]. Hawkins K.A.(2009) is Chávez populist?: Measuring Populist Discourse in Comparative Perspective
- [13]. https://doi.org/10.1177/0010414009331721
- [14]. Golnick, D., & Chin, P. C. (2002). Multicultural education in a pluralistic society (6th ed.). New York: Merrill Prentice Hall.
- [15]. Lacey, P. & Scull, J. (2015). Inclusive Education for Learners with severe, profound and multiple learning in England. Including Learners with low Incidence Disabilities.
- [16]. Ledwaba, R.G. (2017) Teacher training guidelines for curriculum differentiation in Foundation Phase programme, University of Pretoria, South Africa.
- [17]. Mahlo, F.D. (2006). Secondary Schools Teachers' Experiences of Implementing a Sexuality Education Programme in Life Orientation Area in Mpumalanga. MED Dissertation; University of Johannesburg: Johannesburg.
- [18]. Makgato, M.J. (2018), The implementation of curriculum and Assessment Policy Statement at the Foundation Phase. A case of Koloti Circuit in the Capricorn District, Limpopo Province.
- [19]. Mandukwini, N. (2016). Challenges towards curriculum implementation in High schools in Fletcher District, Eastern Cape, South Africa.
- [20]. Mngomezulu, S.P. (2019) Teachers' experiences of using differentiated curriculum approaches in teaching fractions in Grade 3, University of Kwazulu Natal, Unpublished Dissertation.
- [21]. Mzizi, N.A. (2014) N.A (2014). Curriculum Adaptations for Learners with learning impairments in the Foundation Phase in Thabo Mofutsanyana Education, Central University of Technology, Free State.
- [22]. Marishane, N.(2013). The Rights to Basic Education for all: Addressing the educational needs and barriers of immigrants' learners in South Africa. University of Venda, South Africa.
- [23]. Renzulli, J. S. (1977). The Enrichment Triad Model. Mansfield Center, CT: Creative Learning Press.
- [24]. Sandall, S., Schwartz, I., Joseph, G., and Gauvreau, A. (2019). Building Blocks for teaching preschools with special needs. Third edition, Brooks Publishing Company.
- [25]. Scott, M. (2005). A socio-educational analysis of multidisciplinary programmes for learners with emotional barriers to learning towards a model for prevention, intervention, and support. Master of Education Dissertation, Pretoria: University of South Africa.
- [26]. Strogilos, V., Lim, L., Buhari , N.B.M (2021) Differentiated instruction for students with SEN in Mainstream classrooms. Asia Pacific Journal of Education. DOI: 10.1080/02188791.2021.1984873.
- [27]. Thomas, G., Loxley, A. (2001), Deconstructing special education and constructing inclusion. Philadelphia: Open University Press.
- [28]. Tomilson, C.A.(2002), Different Learners different lessons. Instructor, 112(2), 21-25.
- [29]. Tomlinson, C.A (2005), How to differentiate in a mixed-ability classroom, 2nd ed. Upper Saddle River, N.J: Pearson Education
- [30]. Walton E. & Rusnynak (2013), Pre-service teacher's pedagogical learning during practicum placements in special schools. Teaching and teacher education, 36,112-120.

DOI: https://doi.org/10.15379/ijmst.v10i4.2173