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## Differentiation practices in a private and government high school classroom in Lesotho: Evaluating teacher responses

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One way in which the practice of inclusion can be actualised in classrooms is through the use of consistent, appropriate differentiated instruction. What remains elusive, however, is insight into what teachers in different contexts think and believe about differentiation, how consistently they differentiate instruction and what challenges they experience in doing so. In the study reported on here high school classrooms in a private and a government school in Lesotho were compared in order to determine teachers' thoughts and beliefs about differentiation, the frequency of differentiated instruction, and the challenges faced by teachers who implement this inclusive practice. Sampled teachers offered their views on what they understood differentiated instruction to be, the frequency of differentiated instruction, and identified challenges via an administered questionnaire. Data analysis was based on frequency counts and bar charts for comparative purposes. Findings indicate that private school teachers have a higher frequency of differentiated teaching practice, with time constraints indicated as the main challenge. Government school teachers had a lower frequency of differentiation, and identified a lack of resources, and the learner-teacher ratio as challenges, among others. In the study we highlighted the critical role that private schools can play in the national call for the implementation of inclusive teaching in Lesotho, in terms of active collaboration with surrounding government schools. Private schools, with their resources and access to professional development opportunities, can become catalysts in the implementation of inclusive teaching practices.

**Keywords:** differentiated instruction; inclusive education; Lesotho

### Introduction

According to the Lesotho Education Act No.3 of 2010 (Lesotho Legal Information Institute, 2010), promotion of education in Lesotho shall, "ensure that the learner is free from any form of discrimination in accessing education and is availed all educational opportunities provided" (p. 164). This implies that teaching and learning has to be inclusive for all learners regardless of their differences. In terms of Special Education, the Ministry of Education and Training in Lesotho from 1989 to 1990, established a Special Educations Unit (SEU) to support the transition of special education learners into mainstream schooling (Mateusi, Khoaeane & Naong, 2014). This unit also provided human resource experts on special education needs to train and support teachers on how to be inclusive in their classrooms. Inclusive education has also been incorporated in the teacher training curriculum at the Lesotho College of Education (LCE) from 1996 as a way to prepare teachers to cater for special needs learners in regular classrooms (Johnstone & Chapman, 2009).

One way that classroom teaching and learning can be inclusive is through the use of differentiated instruction. As Tomlinson (1999) states, "in differentiated classrooms, teachers provide specific ways for each individual to learn as deeply as possible and as quickly as possible without assuming one student's road map of learning is identical to anyone else" (p. 2). Little is known, however, about what teachers in Lesotho think and believe about differentiation, how consistently they differentiate instruction and what challenges they experience in doing so in this specific context. In this article we compare high school classrooms in a private and government school in Lesotho in order to determine teachers' understanding of differentiation, the frequency of differentiated instruction, and the challenges faced by teachers who implement this inclusive practice.

### Literature Review

#### *Inclusion and differentiated teaching*

Johnstone and Chapman (2009:133) define inclusive education, with specific reference to the Lesotho context as, "a practice whereby students with physical, sensory, or intellectual impairments that affect learning are educated in regular schools." This means that learners with diverse barriers to learning are taught in mainstream schools, and schools are tasked with changing to accommodate these learners. Accommodating diverse learners begins with the teacher and their classroom practices. This supports Deng's claim that "meaningful instruction within the context of an inclusive educational arrangement is a priority for students with diverse needs" (2010:204).

One way in which diversity in inclusive education can be addressed is through the use of differentiated instruction. Walton (2013) claims that differentiated instruction acknowledges that learners come to class with different levels of preparedness and thus teaching ought to be suited to learners' individual needs. Tomlinson (2000:2) has defined differentiated instruction as teaching informed by the view that learners learn best when their educators allow for the variances in their levels of preparedness, well-being and learning outlines, and describes differentiated instruction as "consisting of the efforts of teachers to respond to variance among learners in the classroom." Within differentiated instruction, Tomlinson (2000) discusses four elements that teachers can differentiate in a classroom:

- Content: this element is related to what the student needs to learn, and the materials through which this content will be learned. It requires the teacher to set goals from the curriculum and allow content to have varying degrees of difficulty.
  - Process: examines activities designed to ensure that students use key competencies to make sense of taught information. Methods of instruction and learning activities are varied to meet the needs of different learners.
  - Product: involves “vehicles” which allow the students to best demonstrate and extend what they have learnt. Different assessment tools are used to ensure that learners are all engaged.
  - Learning environment: involves the way the classroom is arranged, how it works in terms of classroom management and the relationships within it.
- Differentiated instruction is an important inclusive teaching practice. George supports this notion stating that “without differentiation of instruction, the heterogeneous classroom will likely pass away and authentic learning will also perish; without such classrooms, public schools of the future are far less likely to serve democratic purposes for which they are designed” (2005:191).

Differentiation can, however, also be considered as more than a teaching strategy as it is underpinned by a particular way of thinking about teaching and learning, and adopts a specific theoretical stance (Tomlinson, 2009). According to constructivist theory differentiation requires knowing what knowledge is and how it is acquired (Hargreaves, 1998; Santangelo & Tomlinson, 2012). This assumes that teachers have a deep knowledge of their subject, can assess individual as well as common needs of learners, and adapt curriculum, teaching strategies, activities, assessment and the learning environment to meet students’ needs, their interests and learning profiles (Subban, 2006; Tobin & McInnes, 2008). Teachers are required to engage consciously in considering how to differentiate teaching techniques, as well as the acquisition of the necessary knowledge and skills required to do so (Santangelo & Tomlinson, 2012). Edwards, Carr and Siegel (2006) assert that the “[p]rinciples of differentiated instruction reflect research findings of Vygotsky and other educational innovators, such as Howard Gardner (multiple intelligences, 1983), and Robert Sternberg (thinking styles/cognitive research, 1997), each of whom recognized the uniqueness of individuals” (p. 582). Miller (2002) states that in order to work within a learner’s Vygotskian Zone of Proximal Development, which is a key tenet of socio-cultural constructivism, it is necessary to acknowledge the importance of assessment, scaffolding curriculum, the process of learning, flexible grouping, and choice. This enables teachers to provide developmentally appropriate instruction (Miller, 2002). With this in mind, we explore differentiated instruction in the Lesotho school context.

#### *Research in Lesotho on inclusive education*

Most research studies done in Lesotho have concentrated on the implementation and challenges of inclusive education in primary schools (Johnstone & Chapman, 2009). This is because the Ministry of Education and Training’s aim was to start inclusion at primary school level as primary basic education is free. Shelile and Hlalele (2014) also point out that “... the Ministry of Education and Training through the Special Education Unit chose to focus on primary schools as its main target of training” (p. 674). A case study conducted by Mateusi et al. (2014) on challenges of inclusive education in Lesotho focused on 900 primary school teachers in Lesotho. Data were collected in the form of Likert-scale questionnaires. The results indicate that most teachers did not understand what inclusive education was, few used additional teaching methodologies to accommodate weak learners, and few had received training from the SEU. Challenges pointed out by teachers mainly centred on inadequate skills, resources and infrastructure.

#### *International research on differentiation*

Ainscow and Miles (2008) suggest that “teachers are the key to the development of more inclusive forms of education” (p. 21). Teacher understanding of differentiation is relevant to consideration of the implementation of differentiated instruction. In the United States in a survey analysis of 37 teachers with varying experience on differentiated instruction, James (2009) found that there was no significant difference between any groups of teachers in terms of their knowledge and implementation of differentiated instruction. Most teachers knew the philosophy of differentiation but were not consistent in implementing it.

Siam and Al-Natour (2016) conducted research to determine differentiated instruction practices by Jordanian teachers and the challenges they faced regarding learners with learning difficulties. The research use of a Likert-scale type questionnaire administered to 194 teachers at different schools. The questionnaire included the four differentiation elements identified by Tomlinson (2000), namely, content, process, product and learning environment. In this study we narrowed the focus to the elements of process and product as they involved students more directly in terms of what happens in the classroom. Siam and Al-Natour’s (2016) findings indicate that the insufficiency of resources and time constraints were some of the challenges teachers faced and that the type of school played a role in the use of differentiated instruction, as “the means [to differentiate] among private schools were instructively higher than those of public schools ...” and furthermore “many of the private schools were found to invest in teacher’s ability to run educational processes that guarantee sufficient

consideration for individual differences in regular classes ...” (p. 179).

In a comparative study by Butt and Kausar (2010) public and private school teachers in Rawalpindi were compared in terms of their use of differentiated instruction using self-constructed questionnaires which included open and closed-ended questions. Data analysis indicated that “there was a highly significant difference between the teaching practices of the public and private school teachers” (p. 113). They attributed this contrast to student-teacher ratio differences and the need to complete syllabus by public school teachers. In terms of measuring differentiation in the classroom, most research literature indicates that measurability was done on the basis of using a specific differentiation strategy to an intervention group compared to a control group (Altintas & Özdemir, 2015; Kuntz, McLaughlin & Howard, 2001; Najmonnisa & Saad, 2017).

#### *Differentiation and its challenges*

O’Brien and Guiney (2001) point out that differentiation involves human interactions in the classroom and is affected by beliefs and attitudes of teachers and learners. Differentiated instruction also requires collaborative teaching for its success. In light of this, Loreman, Deppeler and Harvey (2010:7) argue that collaborative teaching “works best with teachers who understand and demonstrate effective teaching and learning practices within a framework of collaboration and support from the school and local community.” Time constraints and heavy workloads of teachers may serve as an obstacle to collaboration.

Taylor (2017:60) points to the fact that differentiation is clouded with misconceptions that may lead to its misuse in the classroom as she states that “teachers and policy makers do not appear to have an explicit understanding of how to apply in-depth differentiation and the best process for successful implementation to positively impact students with varied needs and backgrounds.” She argues that differentiation on its own is not sufficient, as learning has to take into account other non-school factors like social class, socio-economic background, gender, and culture. She further points out that “it is very difficult to estimate the actual impact of differentiation on learner achievements as there is a need to consider the correlation of student characteristics and other unobservable factors on academic outcome” (p. 63). She states that the technique becomes ineffective when applied to large class sizes with limitations in time and resources. Thus, she calls for extensive research, planning and implementation in order to ensure that differentiated instruction is a success. Johnstone (2007) shows that some challenges to inclusion at school level in Lesotho are a lack of available resources and class size, and that teachers are often under pressure to

cover content, and thus neglect inclusive teaching strategies. More research is still required to identify and implement effective inclusive teaching strategies for schools in Lesotho, taking into account their context based on their experienced realities of culture, overcrowding, lack of resources and socioeconomic backgrounds. Given the above discussion the theoretical framework is the theory of differentiation as an inclusive strategy.

#### **Research Question**

The research questions posed for this study were:

- What do teachers in a private and a government school in Lesotho think and believe about inclusion and differentiation?
- How frequently do these teachers use differentiated instruction?
- What are the challenges with implementing differentiation that are experienced by teachers in these specific contexts?

#### **Aim**

The aim of the study was to investigate teacher understanding of differentiation, frequency of the use of differentiated instruction, with specific attention to the process and product of differentiation in the high school classroom, and challenges experienced by teachers in a private and government school in Lesotho. The intention was to gain insight into the use of differentiation in the Lesotho context, comparing a private and a government high school to better understand support requirements for enhanced practice.

#### **Method**

A descriptive quantitative design was used for this study. A descriptive quantitative design measures variables (in this case, frequency of use of differentiated instruction) without changing the variables or intervening in the environment. Grove, Burns and Gray (2013:215) suggest that descriptive quantitative design may be used to “develop theory, identify problems with current practice, justify current practice, make judgements or determine what others in similar situations are doing.” In this study the frequency of use of differentiated instruction was measured in two groups, namely teachers from a government and teachers from a private school. Ten teachers per school were randomly selected from the English, mathematics, science, humanities and modern languages departments.

Data collected were based on teachers’ responses to an administered questionnaire, and was comparative in nature, examining the frequency of differentiation in a private and a government school in Lesotho, teacher understanding of differentiation and challenges experienced. A limitation to the use of questionnaires as opposed to interviews is the fact that opportunities to probe participant responses are compromised. This limitation was addressed by

including open-ended questions in addition to closed-ended questions in the questionnaire. The method selected supported the intention of measuring frequency which needed to be quantitative in nature in order to be measurable. Teacher participants were not observed teaching, as the intention of the study was to explore their expressed understanding of differentiation, to measure how frequently they claimed to have used differentiation and to capture their articulation of challenges, rather than to observe the actual manner in which they implemented differentiation in the classroom.

#### Sampling and Ethical Considerations

A random, stratified sample of 20 teachers from two schools (one a private school and the other a government school) was used in this study. Ten teachers per school were randomly selected from the English, mathematics, science, humanities and modern languages departments. The selected teachers were given a survey questionnaire to complete. A small sample group was deliberately selected to allow for a comparative analysis between two closed sets, namely, a government high school and a private high school. Ten teachers per school completed a questionnaire that comprised of both open- and closed-ended questions which generated a sufficient sample to reach saturation of views across participants. There are limitations to such a small sample size, notably the fact that generalisability is compromised, however this was mitigated given the aim of the study, which was to compare examples of two specific school contexts in Lesotho. Ethics approval was sought and obtained from the University of the Witwatersrand and the Lesotho Ministry of Education and Training. Institutional anonymity was maintained through the use of pseudonyms for the participating schools. Anonymity and confidentiality were maintained in that participants were not identified and completed the questionnaire privately and individually.

#### Instrument

McMillan and Schumacher argue that “it is necessary to judge the degree of validity [in measurement] that is present based on available evidence” (2014:195). Thus, the survey questionnaire was adapted from research carried out by James (2009), Joseph (2013), and Siam and Al-Natour (2016), through examining the test reliability of their questionnaires. The survey questionnaires used by Siam and Al-Natour (2016) had reliability measurements of internal consistency determined from the Cronbach’s Alpha method which McMillan and Schumacher describe as determining “agreement of answers on questions targeted to a specific trait” (2014:198). Joseph (2013) verified his questionnaire by pilot-testing it and using feedback to improve it. This is supported by McMillan and

Schumacher (2014:195) who argue that whether “a locally prepared or established instrument is used it is best to gather evidence for validity before the data for a study are collected.” Item analysis of each question was done by James (2009) to determine discrimination coefficients as the participants were from different cultures, ethnicity and socioeconomic backgrounds. After adapting the questionnaire instrument a pre-test was given to heads of the schools/department heads, to allow them to evaluate the appropriateness of the questionnaire, before it was administered to the teachers.

The initial part of the questionnaire gathered demographic information related to the number of years of teaching, the average number of learners in a class, and the subjects taught. The questionnaire consisted of three parts – each containing quantitative closed-ended questions with a four degree Likert-scale measure of frequency of behaviour, followed by qualitative, open-ended questions. Parts 1 and 2 of the Likert-scale tables that measure the frequency of differentiated practices focused on two domains: the process of learning and products/outcomes of learning. Parts 1 and 2 of the open-ended questions aimed to determine the challenges in practicing differentiated instruction in relation to the process and products/outcomes of learning, and to allow teachers to add other classroom practices omitted by the questionnaire. Lastly, in Part 3 a Likert-scale table was used to determine the teachers’ thoughts and beliefs about differentiated instruction and inclusion, and also an open-ended question for some final reflections on differentiation in classroom practices.

#### Data Processing

Quantitative data from the Likert-scale parts of the questionnaire were analysed in terms of frequency counts, which were related to numbers. Frequency tables and bar charts were created to represent processed data. The challenges identified with reference to differentiated instruction by teachers were categorised as either related to (1) student-teacher ratio; (2) material resources, and (3) other/s, indicating alternative challenges identified by the teachers. Data from both schools were compared.

#### Assumptions

The research was conducted under two central, interlinked assumptions. Firstly, that teachers already had some knowledge of what differentiated teaching was, as it formed part of teacher’s training for their teaching qualification, and that they practiced some form of differentiated teaching in their classrooms. Additionally, the fact that the Ministry of Education and Training in Lesotho has called for inclusion of special needs students in mainstream schooling through its policy statements and has offered teacher training in this regard.

Therefore, the inclusive approach to education is not necessarily a new concept in these schools. The second assumption was that based on findings from similar studies, challenges experienced were likely to include student-teacher ratio and material resources.

**Results**

In order to ensure anonymity, pseudonyms in the form of abbreviations were allocated to the different schools. The government school was abbreviated as **GS**, and teacher participants from this school designated a number from one to 10 with the letter G, while the private school was abbreviated as **PS** and teachers designated numbers from one to 10 with the letter P. In the results below, demographic data are presented first, followed by a discussion of Parts 1 and 2 (product and process of learning); Part 3 (challenges) and Part 4 (thoughts and beliefs) of the questionnaire.

**Demographic Data**

This section establishes the number of students in the respective classrooms, the subjects taught and years of teaching experience. Both the GS and PS had experienced teachers, though some respondents from the PS omitted this section. The respondents taught a range of subjects and the average number of learners at the GS was 50, and that of the PS was 23. This confirms Johnstone’s claims that the regular classroom number in government schools in Lesotho is 50 (2007), a ratio of 50 to 1, while

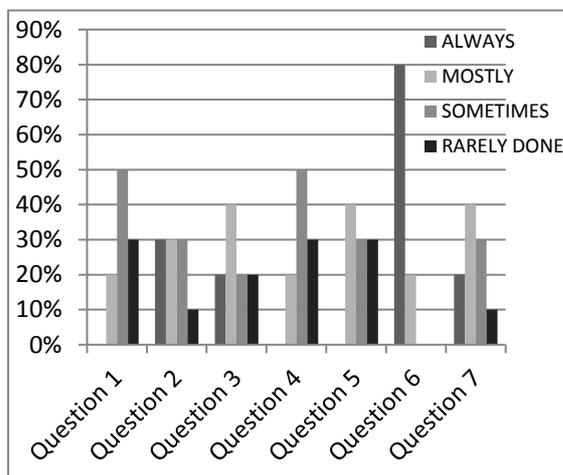
international and private schools, “are known for their low learner-to-educator ratio of 1 to 16.2” (Walton, Nel, Hugo & Muller, 2009:121), although the private school in this study had an average of 23 – slightly higher than the global average.

**Likert-Scale Responses to Part 1 and 2: Process of Learning and Product of Learning**

The questionnaire completed by participating teachers contained seven indicator statements to evaluate differentiation during the process of learning. These indicators were:

- 1) I implement special plans for different students (regular classroom activities and supplementary for gifted and/or struggling learners)
- 2) I normally form small groups to explain important ideas and skills
- 3) I provide additional support for learners who struggle
- 4) I use technology-based learning and a variety of media (videos, images, models) that increases the interest and attention span of learners
- 5) I set different levels of expectations to conclude an assignment
- 6) I encourage all students to interact and participate
- 7) I use various differentiated learning approaches all the time in my classes

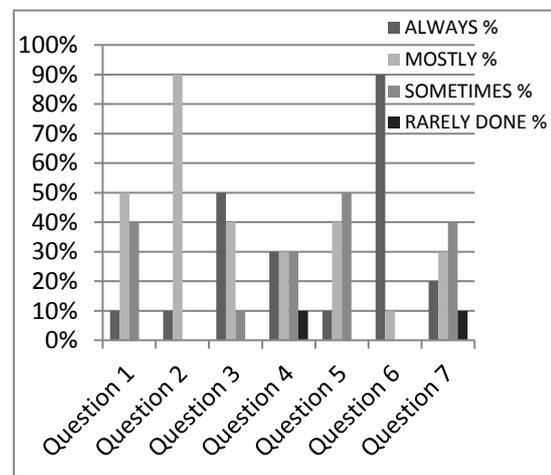
Participants responded to the statements using an indicator scale of 1 to 4: 1 = rarely done, 2 = sometimes, 3 = mostly, 4 = always. Responses from each school are represented in the frequency bar graphs below. Figure 1 represents responses from the GS and Figure 2 represents responses from the PS.



**Figure 1** Part 1 – Process of learning (GS)

As for the process of learning, the questionnaire contained seven indicator statements for evaluating differentiation in products/outcomes using the same indicator scale of 1 to 4. The indicator statements for this section were:

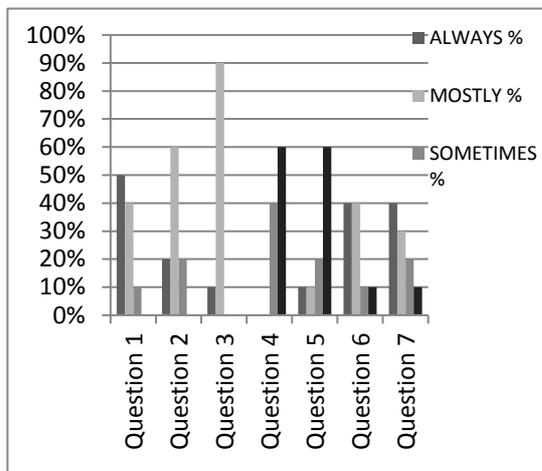
- 1) I give students the opportunity to participate in activities as individuals or in groups or in cooperative manner



**Figure 2** Part 1 – Process of learning (PS)

- 2) I allow students to present their productions verbally (oral presentation, singing, poetry, recitation)
- 3) I allow students to present their productions in a written manner
- 4) I allow students to present their productions through performance style or use of video
- 5) I use a rating scale/rubrics to describe expectations from written work
- 6) I adopt individual and group assessments

7) I use and adopt not only textbook material, but online material to accommodate differing learner abilities. The frequency bar graphs below represent the data

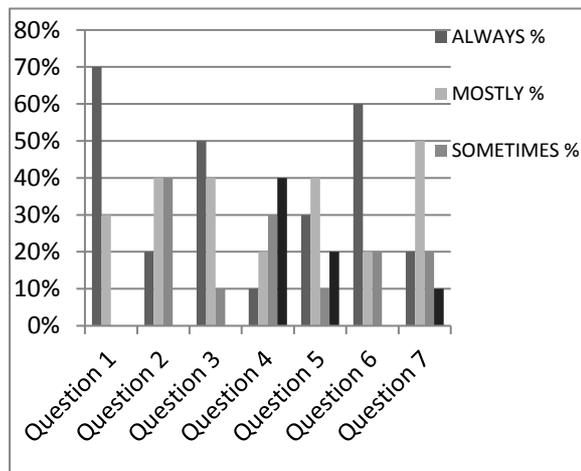


**Figure 3** Part 2 – Product of learning (GS)

In comparing the two schools, it was encouraging to discover that teachers from both schools encouraged participation, collaboration and group work in their classes, supporting Deng's claim (2010) that using classroom interactions, where learners support each other (peer-to-peer learning), is best practice for inclusion. Most teachers from both schools mostly and always claimed to use differentiated teaching – 60% for GS and 50% for PS. Nonetheless, the findings suggest that in the GS classrooms teachers were marginally more likely to encourage peer-to-peer learning, possibly because of the large class size. However, these claims were based on the teachers' own interpretations, and were not observed and confirmed by the researcher, which was a weakness of this study. Tomlinson, Brighton, Hertberg, Callahan, Moon, Brimijoin, Conover and Reynolds (2003:122) have found that when "teachers have attempted differentiation, it has often been used in ways that are limited and ineffective." Thus, classroom observation would determine how effectively differentiated teaching is implemented. This, however, was not the focus of this particular study.

PS teachers were in a position to always offer additional support 50% of the time, as private schools generally provide more training to understanding barriers to learning, and thus can

collected for each school. See Figure 3 for responses from teachers at the GS and Figure 4 for responses from teachers at the PS.



**Figure 4** Part 2 – Product of learning (PS)

respond to these challenges, in and outside the classroom (Walton et al., 2009), and have a small number of learners. Assessment practices such as using performance assessment and rubrics to assess student outcomes were rarely used by either the GS or PS. Sixty percent of GS teachers reported rarely using performance assessment or rubrics while 40% of PS teachers reported that they rarely used performance assessment and rubrics. This supports Johnstone's claim that "teachers may overlook inclusive methodologies when rapid coverage of content is needed" (2007:33) and thus avoid more time-consuming assessment practices. From differentiated processes of learning, 30% of GS teachers rarely used special plans and technology media, while 10% of PS teachers rarely did. Despite differentiation being used more frequently in PS than GS classrooms, it was clear that use of differentiation was still challenging in both environments. Identifying challenges is, however, an important first step in initiating the process of inclusion (Mariga, McConkey & Myezwa, 2014).

#### Responses to Part 3: Challenges to Differentiation

Table 1 and Table 2 below represent participant responses to identified challenges to differentiation. Abbreviations and symbols used in the tables: (N/A) means not applicable and (√) means applicable.

**Table 1** Teacher responses to challenges of practicing differentiated teaching, and other differentiated strategies used in their classrooms (GS)

Challenges to differentiation and other methods used in the classroom				
Respondents	Challenges			Other differentiation methods used
	Class number	Material resources	Other(s)	
1G	N/A	N/A	Time allocation for struggling learners	Independent learning like research
2G	√	√	N/A	N/A
3G	N/A	N/A	Some methods may exclude other learners	Discovery learning through experiments
4G	√	N/A	Time to prepare lessons	Use of models and multiple representations
5G	N/A	N/A	Time to prepare lessons	Learner presentations
6G		√	Time to prepare lessons	N/A
7G	√	√	N/A	Intelligence/ability grouping
8G	N/A	√	Time for syllabus coverage	Educational excursions, presentations, pair work
9G	N/A	√	N/A	Dramatisation
10G	√	√	N/A	N/A

**Table 2** Teacher responses to challenges of practicing differentiated teaching, and other differentiated strategies used in their classrooms (PS)

Challenges to differentiation and other methods used in the classroom				
Respondents	Challenges			Other differentiation methods used
	Class number	Material resources	Other(s)	
1P	N/A	N/A	Time availability to plan	Role play and games
2P	N/A	N/A	Time availability, knowledge of learning styles and differentiation	Debates, projects
3P	N/A	√	Time availability to plan	Ability grouping and use of simulations
4P	N/A	N/A	Workload, time availability, classroom management	Peer-to-peer learning
5P	N/A	N/A	Time to complete syllabus, and classroom management	Learners doing models
6P	√	N/A	Time to prepare lessons and focus on weak learners	Peer-to-peer learning, learner input in lesson design
7P	N/A	N/A	Information on learner abilities and cognitive diagnosis	Word puzzles and ability grouping
8P	N/A	N/A	Time frame and the syllabus, mathematics does not accommodate other forms of assessment like recitation	Ability grouping
9P	N/A	N/A	Lack of administration support, teacher workload, common final international exams that do not differentiate much	Notes and verb tasks for weak students, peer-peer grouping
10P	N/A	N/A	Time to plan, difficulty to implement, lack of uniformity when assessing different types of work	Charts, PowerPoint presentations

In comparing the two sets of data GS teachers did identify student-teacher ratio and material resources as challenges, whereas PS teachers did not. However, the extent to which GS teachers identified these challenges was lower than expected, and this finding is significant in that it suggests that they have accepted their challenging school situation and use what is available in the school to still attempt to differentiate their teaching. This is confirmed by Mittle (2000:27) who discovered that in Lesotho, teachers “with 50–100 children in a class

never lost track of the need to include all children in a lesson.” Supporting this, Renaud, Tannenbaum and Stantial (2007:13) claim that it is important how teachers regard class size in their own situation and that the “exact number does not really matter.” Arguably the challenge of class size is linked to the teacher’s own individual perception and experience.

There was consensus from both GS and PS teachers that there was a lack of time allocation to plan and implement inclusive strategies, which confirms Civitillo, Denessen and Molenaar’s (2016)

findings that a lack of time and a heavy workload are barriers to differentiation. PS teachers had less constraints concerning resources and teacher-student ratio, and these teachers seemed to have more knowledge on a variety of differentiation strategies than GS teachers did, corroborating what Butt and Kausar (2010), and Siam and Al-Natour (2016) determined. Significantly, this also lays a foundation for the argument that when it comes to the practice of inclusion, private or international schools could be used as a resource for local schools through government partnership as “there is some evidence that school-to-school collaboration can strengthen the capacity of individual organizations to respond to learner diversity” (Ainscow & Miles, 2008:29).

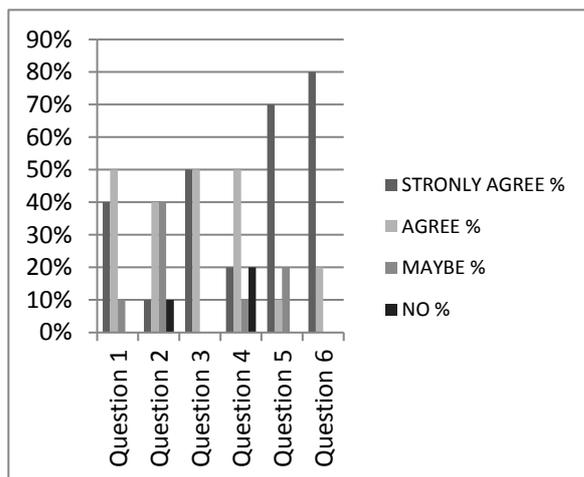
#### Likert-Scale Responses to Part 4: Thoughts and Beliefs about Differentiation

The questionnaire completed by participating teachers contained six indicator statements through which teachers’ thoughts and beliefs about

differentiation were captured. These indicators were:

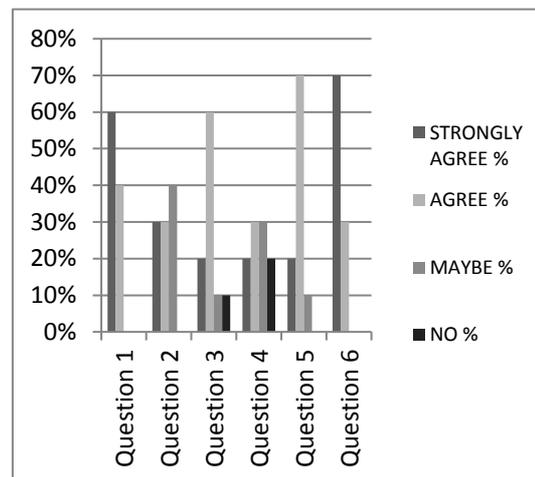
- 1) Learners in my classroom are diverse in abilities and differentiated instruction can respond to those differences
- 2) I am well equipped with various teaching strategies/methods to respond adequately to my learners’ needs
- 3) I find the time to reflect on my lessons as a way to improve on my approaches towards differentiation
- 4) I collaborate with my colleagues when preparing for lessons ensuring that my differentiated approach works
- 5) There are learners that need attention beyond classroom teaching and learning and I try to accommodate them
- 6) Inclusion of learners can be achieved by effective use of differentiation strategies.

Participants responded to the statements using an indicator scale of 1 to 4: 1 = no, 2 = maybe, 3 = agree, 4 = strongly agree. Responses from the GS teachers are represented in Figure 5 and responses from the PS teachers in Figure 6.



**Figure 5** Part 4 – Thoughts and beliefs (GS)

Responses from teachers in both schools agreed with findings by Barrington (2004), Loreman et al. (2010), Subban (2006), and Tomlinson (2000) that classrooms are characterised by diversity. Appreciating and recognising diversity means that teachers will more consciously respond appropriately to different learning requirements, as, “classrooms must be places where rigorous intellectual requirements characterise the curriculum, [and] each student is known well and taught with appropriate means” (Tomlinson et al., 2003:121). Again, in terms of differentiation capability with regard to various teaching strategies, 40% of teachers from the GS agreed, 10% strongly agreed, while 30% of PS teachers strongly agreed and 30% agreed. Teachers in the private school thus showed stronger confidence in their ability to accommodate different learner needs. This finding



**Figure 6** Part 4 – Thoughts and beliefs (PS)

supports Mittle’s (2000) claim that more teachers in Lesotho need confidence in their own competencies to teach a diverse range of pupils, and training should build on these competencies, with particular reference to GS teachers. In terms of time for reflection, GS teachers indicated slightly more time for reflection on differentiation than PS teachers. This finding is similar with regard to collaboration tendencies, with GS teachers indicating more collaborative opportunities. Nonetheless, both findings suggest that reflection and collaboration are given greater allowance, as successful inclusion requires “effective teaching and learning practices within a framework of collaboration and support from the school and local community” (Loreman et al., 2010:5).

Seventy percent of GS teachers strongly agreed that learners needed attention beyond classroom

teaching, compared with 70% of PS teachers that only agreed, which is consistent with the notion that private schools tend to be more inclusive, as they have school-wide support services available, such as special needs teachers and councillors (Walton et al., 2009), while GS teachers often provide their own additional support. Lastly, all teachers agreed that inclusion could be achieved through effective differentiation practices in response to classroom diversity. This was a positive indication that teachers in the two schools had some idea about inclusion and its practices, which supports Copfer and Specht's (2014) claim that teachers who believed in inclusion were effective in accommodating a range of diverse learners in the classroom.

Responses to the last section of the questionnaire, "Final thoughts", included eight GS teachers specifically requesting more ideas to approach differentiated teaching, and two PS teachers expressing the need for their school to offer more time for collaboration and planning in a "*non-threatening system as part of professional development*." This clearly draws in the importance of school leadership for inclusion (Ainscow & Miles, 2008). These reflection responses are important because they offer an opportunity for teachers to reflect more consciously on the practices and challenges of inclusive teaching.

### Discussion of Results

The results presented above are discussed here in relation to the research questions posed in the study. Three research questions were posed and the discussion summarises key findings for each research question.

#### What do Teachers in a Private and a Government School in Lesotho Think and Believe about Inclusion and Differentiation?

Teachers from both GS and PS schools strongly indicated that their classes were characterised by diversity, and that inclusion was necessary for all learners to be given opportunities to succeed. Inclusion was related to recognition of diversity and meeting the needs of all learners. Teachers from both schools recognised that differentiation was a means to ensure that the needs of learners were met. Key differences between GS and PS teachers were, however, noted in the self-reported confidence levels in their ability to actually accommodate learner needs. PS teachers were 20% more confident than GS teachers in their ability to meet the needs of learners. All teachers agreed that inclusion could be achieved through effective differentiation practices in response to classroom diversity, however, 70% of PS teachers reported feeling supported in their training and practice to achieve this, in comparison to only 20% of GS teachers. In contrast to these findings, Mateusi et al. (2014) suggest that most teachers did not understand what inclusive education was, few used additional teaching

methodologies to accommodate weak learners and few had received training. However, our study suggests that participant teachers from both GS and PS schools did have an understanding of inclusion and differentiation, but that there was less confidence in their own ability to implement it, and that training, particularly for GS teachers, was considered insufficient.

#### How Frequently do these Teachers Use Differentiated Instruction?

Sixty percent of GS teachers claimed to mostly and always use differentiated teaching. For PS teachers, 50% claimed to mostly and always use differentiated teaching. The slightly higher percentage noted for GS teachers may be related to the inclusion of peer-to-peer learning as an indicator of differentiated teaching, as class sizes in the GS school was notably bigger, suggesting that these teachers used peer-to-peer learning as a means to cope with this challenge. PS teachers reported that they were in a position to always offer additional support 50% of the time, which could be attributed to better access to training and/or smaller class sizes. Thirty percent of GS teachers reported that they rarely used special plans and technology media, in comparison to 10% of PS teachers. This indicates that differentiation in using special plans and technology media was more frequently done in PS classrooms. This could once again be attributed to smaller class sizes in PS schools, and to the better availability of resources. Given that the goal of the Lesotho Education Act No. 3 of 2010 (Lesotho Legal Information Institute, 2010) was to ensure that all learners are "availed all educational opportunities provided" (p. 164), it was relevant to consider the frequency of differentiated instruction reported by teachers in this study. If the education goal of ensuring that all learners were enabled to fully engage with educational opportunities was to be met, it was necessary to recognise differentiated instruction as a means to that end, and consider ways in which teachers could be supported to increase its frequency of use.

#### What are the Challenges with Implementing Differentiation that are Experienced by Teachers in these Specific Contexts?

Class size was identified as a significant challenge and was supported by the data, which indicate the average number of learners in GS classes as 50, in comparison to that of PS class sizes of 23. Additionally, GS teachers identified a lack of material resources as a challenge, whereas PS teachers did not. Both GS and PS teachers reported a lack of time allocation to plan and implement inclusive strategies and a heavy workload as barriers to differentiation. The results also suggest that a lack of confidence in ability to implement differentiation is significant, and that professional development opportunities are limited in GS schools. These results concur with Johnstone's (2007) findings that

in Lesotho, challenges to inclusion at school level include a lack of available resources and class size, and pressure to cover content. Taylor (2017) suggests that differentiation becomes ineffective when applied to large class sizes with limitations in time and resources, which is significant, given the findings of this study.

#### Implications

Although limited in scope, this study has shown that inclusive education in Lesotho was evident, and that the reforms initiated by the Ministry of Education were having an important effect in creating and affirming an inclusive culture in schools. This was through the creation of a common mind-set on what inclusion in the school environment was (Ainscow & Miles, 2008; Loreman et al., 2010). This positive conceptual effect was, however, limited in practice, suggesting that there was a need for continued policy reform that focuses on the pragmatics of implementation and practice. Muzvidziwa and Seotsanyana (2002:139) suggest that in terms of the education policy in Lesotho “changes that have occurred have been mainly of a cosmetic nature” with “limited impacts on the school curricula and the educational delivery system.” The findings of this study suggest that there is a need to support and extend progressive policy with an implementation plan that takes active steps towards providing opportunities for professional development. Contextual challenges such as large class sizes and limited material resources also need to be addressed as part of a development plan to ensure the conditions necessary for successful policy implementation. If inclusion is to be realised in classrooms in Lesotho, teachers need to not only know what differentiation is, but also how to use it, and be equipped with the structural support to ensure that this happens. The findings of this study demonstrate that while teachers may know what differentiation is and acknowledge the relevance of the practice, there was less confidence in the ability to implement it, and that differentiation was not as frequently used in GS schools as it was in PS schools. The argument could be made that since findings were based on teacher’s responses to questionnaires, classroom observations would be necessary to shed light on the conclusions reached, which indicates a future area of research. As Tomlinson (2000) points out, there “is no recipe for differentiation. Rather, it is a way of thinking about teaching and learning that values the individual and can be translated into classroom practice in many ways” (p. 4). The focus of this study was to determine teachers’ views on how frequently they used differentiation, and what challenges they faced.

The study also identified the value and need for more collaborative opportunities between government and private schools in Lesotho, using a whole-school approach. Findings show that

government schools faced a high learner-to-teacher ratio and a greater lack of resources, which is supported by findings in a similar study by Butt and Kausar (2010). Collaborative opportunities could entail private school teachers sharing their resources in collaboration with government school teachers and vice versa. This would necessitate training in collaborative skills as collaboration “has been found to be a key coping strategy for teachers [with] many concerns about inclusion” (Copfer & Specht, 2014:100). The concept of teachers’ craft knowledge and accumulated wisdom in differentiation can be of use in both schools, to develop those who need skills in this practice as well (Florian, 2015). Professional development is also necessary to improve teachers’ self-agency and confidence in implementing inclusive practices (Cimer, 2018). Generally, private schools are in a better position to access resources for professional development (Walton et al., 2009), which further supports the claim for more active collaborative efforts between government and private schools. Advantages to such collaboration include the sharing of skills and resources, opportunities to learn, and greater ownership of the process of developing professional skills. The teachers of both government and private schools benefit by sharing best practice and learning from one another in partnership. This has the advantage of developing a community of practice. A community of practice is defined by Wenger (2007) as being a group of people who engage in a sustained, interactive process of collective learning. Learning and skill acquisition are facilitated by engaging in the practice and is mediated by the participants’ different perspectives. This is a positive form of professional development that occurs in a non-threatening process of mutual support, experience and encouragement. One of the difficulties associated with such collaborative efforts, however, is time demands and constraints. It is necessary to point this out given the finding that time constraints already impacted negatively on teacher use of differentiation in the classroom. Teachers indicated a lack of time to plan, prepare, cover the syllabus, and also collaborate. This finding is supported by Aftab (2015), who found that most sampled teachers believed that they had no time to plan and execute differentiation effectively. In order to address this a whole-school approach, it would be required of the school leadership to support the collaboration, both in principle and in practice, through making structural arrangements such as adjusting teaching timetables or workloads. Another challenge is that for such collaboration to achieve positive results, great care must be taken to avoid a hierarchy mentality where some are seen to be authorities and others apprentices. It would be necessary to ensure that the framework for collaboration is that of equal sharing to increase personal knowledge and skills of

all participants, rather than a transmission of more knowledge to those with less knowledge.

### Conclusion

Despite policy such as the Lesotho Education Act No. 3 of 2010 (Lesotho Legal Information Institute, 2010), which legislates that teaching and learning has to be inclusive of all learners regardless of their differences, this study has highlighted differences in the implementation of strategies such as differentiation in a government and private high school. Although teachers in Lesotho demonstrated conceptual understanding of differentiation and inclusion, they did not consistently implement the strategy across contexts for a variety of identified reasons. PS teachers used differentiation more frequently than GS teachers. Challenges were experienced by teachers in both contexts, but GS teachers were especially challenged by high student-teacher ratios and a lack of resources. We argue that private schools can play a vital role in the national call for the implementation of inclusive teaching in Lesotho, in terms of active collaboration with surrounding government schools. Private schools, with their resources and access to professional development opportunities, can become catalysts in the implementation of inclusive teaching practices.

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### Authors' Contributions

ML wrote the manuscript and collected the data. DG and TB substantially reworked the manuscript and prepared it for publication. ML, DG and TB reviewed the final manuscript.

### Notes

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