



## **Teaching Mathematics at the Supplementary Schools in Lesotho: Teachers' Perceived Benefits and Challenges**

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### **Abstract**

The study investigates the perceived benefits and challenges of mathematics teachers when teaching mathematics at supplementary schools in Lesotho. The participants were five teachers from a supplementary school in the Berea district. Data were collected through the use of semi-structured interviews guide. The Social Constructivism Theory was used as a lens through which data were thematically analysed. The study's findings have revealed that the teachers at the supplementary schools are having benefits, including, content revision, reduced workloads, good results, as well as full focus and concentration in class. On the other hand, the teachers are faced with some challenges; for instance, the teachers travel too late or too early for classes; there is insufficient time for teaching, lack of resources, teachers' high turnover, low salaries and misbehaviour amongst the students. The results have further indicated that there are more perceived challenges in teaching the supplementary classes as compared to perceived benefits.

Keywords: Supplementary School, Social Constructivism, Supplementing Students, Case Study

### **Introduction**

Private tutoring is referred to as helpful action, which deals with a curriculum content of compulsory education but is offered outside and out of regular school hours (Klemm & Hollenbach-Biele, 2016). Terms, such as, "supplementary education", "supplementary tutoring", "private tutoring" "and after-school tutoring" or "shadow education" are interchangeably used by researchers (Bray, 2003, 2006; Lee & Shouse, 2011). Shen (2008) posits that private tutoring is provided by professional tutors, college students and teachers, either in-service or retired. According to Subedi (2018), there are three types of tutoring, namely, one-to-one tutoring for individual students, tutoring students by teachers to offer for-profit tutoring to their own students. In Africa, the tutors can even teacher the students they are responsible the mainstreams (Paviot et al., 2008; Shen, 2008). The last type of tutoring is tutoring students by third-party tutors in residential hostels, which are outside schools besides school time.

The demands to get better examinations scores in mathematics and to be

competitive in class force the students to engage in supplementary education (Santhi, 2011). One-on-one interaction is a benefit of the supplementary schools unlike the mainstream where classes are large with lack of individual student's attention (Bray & Lykins, 2012). The special needs of each student are taken care of at the supplementary classes, and the teachers get extra income (Mahmud & Bray, 2017). Santhi (2011) maintains that extra classes take away sports time for the students and teachers. The teachers and students travel late in the evening due to extra classes.

In Lesotho, supplementing tutoring started around the 1990's during the Cambridge Overseas School Certificate (COCS) curriculum era. In the context of Lesotho, supplementary classes are tutoring where the students attend to improve their Lesotho General Certificate of Secondary Education (LGCSE) symbols in some subjects to gain university admissions requirements. Bray and Lykins (2012) assert that many forms of the supplementary education exist worldwide. These schools operate out of school hours during the weekdays or during the weekends. Zhan et al. (2013) and Bray et al. (2014) highlight that beyond the school hours the students attend classes to improve their symbols. In other countries, for example, Taiwan and Hong Kong, they can be attended by any student while still attending mainstream education. However, in Lesotho they are attended by grade 11 students when still going to their daily schools, and the students who have written LGCSE examination but have not successfully completed it.

The Examination Council of Lesotho (ECOL) organises and gives those students the examination in June called the supplementary exam. The supplementary examination is contacted by the ECOL every year in June, or such students can decide to write in November while all the Grade 11 of the country of that current year are having their final grade 11 LGCSE examination. The students can supplement all the subjects except the practical subjects. Most students supplement the following subjects: Accounting, Biology, Mathematics, Physical science, Sesotho (language of people in Lesotho) and English. The supplementary schools in Lesotho are found in towns as in the study of Zhang (2014) and are offered by the teachers in the rented primary schools. The students pay monthly per subject to be taught. However, Rollnik (2000) conceives that teaching mathematics and science in developing countries like Lesotho faces many challenges. Nthathakane and Mokuku (2012) and Qhobela (2012) confirm that the challenges in Lesotho include a lack of resources and reliance on the traditional teaching methods.

Studies were contacted that focus on the private supplementary tutoring and parentocracy, its implications for policymakers, advantages and disadvantages of supplementary education, the student's achievement, its implications for social justice, and limits of school choice, Windle (2009), Bray and Lykins (2012), Bray and Kwo (2013) and Tan (2017) respectively. Many studies conducted concerning the supplementary classes were without the theoretical links. The Theory of Social Constructivism underpins the current study. This study attempts to increase the literature

on mathematics teachers' perceived challenges and benefits in teaching supplementary classes from the context of Lesotho.

### **Statement of the Problem**

The Examinations Council of Lesotho's (ECOL, 2020, 2021) examiners' reports demonstrate that the final LGCSE mathematics examination is one of those that are poorly performed by the students. This prohibits them from enrolling at universities' and colleges' science and mathematics related careers. The students are forced to go to the supplementary classes to adjust their results to meet the requirements of the universities and colleges in Lesotho. The students are taught after hours by the teachers who are working at the local schools in Lesotho. Due to low salaries for the teachers, they offer extra classes with the aim to increase their income (Mahmud & Bray, 2017). Teaching mathematics at the supplementary schools is likely to impose challenges and benefits to the teachers. There are no documented studies that the researcher is aware of on the same topic in Lesotho.

### **Purpose of the Study**

The purpose of this study is to explore mathematics teachers' experiences at the supplementary schools. This is approached from the perceived benefits and challenges that they are faced with. Below are the research objectives emanating from the purpose of the study.

### **Objectives of the Study**

1. To explore the perceived benefits of teaching mathematics to the students at Lesotho's supplementary classes.
2. To investigate the perceived challenges faced by the teachers teaching mathematics at the supplementary classes in Lesotho.

### **Significance of the Study**

The findings of this study would inform the government to see how it can assist with the supplementary education. It would also help the education stakeholders to hand to the teachers at the supplementary schools by making the laws protecting the teachers after knowing their challenges. Hopefully, the results of this study would also help the teachers who want to go into the supplementary classes to understand what they are getting into after knowing the perceived benefits and challenges. The outcome of this study would contribute to the body of knowledge in education research about

supplementary tutoring.

### **Literature Review**

The literature has been reviewed on advantages, benefits, disadvantages, or challenges of teaching supplementary schools.

#### **Teachers' Perceived Benefits in Teaching the Supplementary Classes**

Zhan et al. (2014) state that private tutoring is “one-on-one” tutoring of an individual, small group tutoring, and lecture type of tutoring or online tutoring. Mahmud and Bray (2017) concur with this view. As a result, this reduces the teacher workload and helps the tutors to address the student’s special needs. The study by Santhi (2011) emphasised that the students learn differently and slow students need extra time to achieve their goal and master the content. Selamat et al. (2012) established that the extra classes extend what a student has learnt during the school hours. Therefore, they have some understanding of the subject, which means that teaching is content revision at the supplementary schools. Selamat et al. (2012) further show that the students will be provided with a simple explanation plus exercises that are similar to the actual examination, and this process gives advantage to the students who attend the extra classes to improve and sharpen their understanding of the subject. The supplementary classes overlap with what is taught at the mainstream as the students have time and opportunity to understand the content. Wittwer (2014) points out that the students are able to repeat the curriculum when attending the supplementary classes.

Good results, according to Bray and Lykins (2012), shadow education delivers positive results in academics. This is because the schools offer individual support and benefits for one-on-one learning. Bray and Lykins (2012) further clarified that the tutors have appropriate skills but work with unmotivated students. In Hamid et al.’s (2009) study, 228 participants allude that students who receive private lessons have double the chance of attaining higher grade than their counterparts who do not receive private lessons. This finding resonates with that of Zhan et al. (2013) and Bray et al. (2014). Based on the survey and interview data, Zhan et al. (2013), the students perceive private tutoring to be more effective in producing good examinations results than mainstream schooling. Subedi (2018) opines that the supplementary tutoring is examination focused. However, Bray and Lykins (2012) contend that the private tutoring does not necessarily provide good results.

Drawing on the study conducted in Bangladesh by Mahmud and Bray (2017), the teachers teaching the supplementary schools get extra income, which according to the participants in Mahmud and Bray (2017), compensate for the low salaries and retain the teachers in the profession of teaching. This finding corresponds with the finding by Dang

(2013) who claims that the teachers are engaged in the supplementary education for additional earnings due to low salaries (Ireson, 2004; Ha & Harpham, 2005; Zhang, 2014; Majumdar, 2014; Chui, 2016; Subedi, 2018). This result matches those of Bray et al. (2014) which stated that the private tutoring is given in a purpose of exchange for pay. The availability of teaching resources is a benefit to the teachers because they can deliver content easily when the resources are available. Subedi (2018) found out that the teachers show soft behaviour at the private tutoring and use various materials during tutoring. It may also offer more flexibility and better timing educational resources than the mainstream sector (Bray and Lykins (2012).

### **Teachers' Perceived Challenges in Teaching the Supplementary Classes**

Since the supplementary schools are off hours' classes, the teachers travel too late or too early for the classes. Mori and Baker (2010) added that the tutoring classes are held beyond the formal school hours. Santhi (2011) denoted that the extra classes are leading to a lot of stress and tension as teachers and students have to travel early in the morning or late in the evening. This matter has led to glitches like resignation of the teachers and students being overburdened (Santhi, 2011). Otherwise, they opt to shift them to Saturday (Peđrak, 2017). The other challenge faced by mathematics teachers as the supplementary schools is lack of sufficient time for teaching. In the study conducted by Peđrak (2017) in Ireland about the Polish supplementary school, the questionnaires administrated revealed that the supplementary schools are open in the evening or during the weekends for few hours. The study of Bray and Lykins (2012) confirm the similar view that there is a short interaction time. Bray and Lykins (2012) further argue that supplementary classes take way the time for other subjects and this lead to overall decline in performance by the students.

### **Theoretical Framework**

The study is underpinned by the Vygotsky's (1968) Social Constructivism Theory. Ernest (1999) pointed out that people act and interacts socially and culturally together and with their environment in constructing individual or shared knowledge. In the study, the teachers shared their experiences from their environment. The teachers constructed and shaped their ideas and meaning from their environment (Amineh & Asl, 2015). This means that the people make meaning from their interactions with their surroundings and others and the experience obtained from work before the knowledge is internalised (Akpan et al., 2020). It is therefore, implied that different individuals develop different meanings towards particular issues. Social constructivism helps the researcher to understand how the teachers interpret the challenges and benefits of teaching supplementary classes.

## **Methodology**

This section introduces the research design, the setting of the research, population and sampling, data collection techniques, data analysis, trustworthiness and ethical considerations.

### **Research Design**

This study adopts a case study, which is a type of qualitative research in which a detailed investigation, that is, in-depth data are gathered into a phenomenon (McMillan & Schumacher, 2014). Cleary et al. (2014) stipulate that a qualitative research yields outcomes grounded in the reality where information comes out innately from the participants. This helped with the in-depth investigation of the teachers' perceived challenges and benefits in teaching at the supplementary classes in Lesotho. A case study allows the researcher to focus on one unit and spend more time with the participants (Cohen et al., 2018). In this study, the researcher focused only on the perceived challenges and benefits of teaching mathematics at supplementary classes.

### **Research Setting**

The setting of the study is one supplementary school located within the town of Teyateyaneng, Lesotho. The school consists of classes of the students who supplement Sesotho (home language), Mathematics, English, Physical Science, and Biology. It was selected because it is closer to the author for the purpose of accessibility which helps to avoid financial constraints and wasted time. It admits all the students who want to improve their symbols for tertiary entry and those who are about to write their final examination for the current year.

### **Population and Sampling**

Data were collected from five teachers (3 males and 2 females) who have been teaching the supplementary classes and have more than five years of teaching experience, with teaching certificates from teacher training institutions. Purposive sampling was used to select the teachers because the researcher knew that they have rich information for the study. They have experience of the supplementary school and have served for more years.

### **Data Collection**

This study used the semi-structured interview to collect data to respond to the research questions. The first 10 minutes before each interview, there was a dialogue to

get the respondent's personal information. In this study, the one-on-one interviews provided further insights into the teachers' experiences in teaching mathematics at the supplementary schools. In this interview, the researcher was able to probe, rephrase and follow up to have a clear (unambiguous) answer from the participants. The interviews lasted 1 hour 40 minutes to 2 hours, depending on the participant's responses, and were audio recorded.

### **Data Analysis**

The primary mode of analysis used was thematic data analysis from the semi-structured interviews. Thematic analysis is locating the interviewees' thinking patterns, and the action pattern is shown (Alhojailan, 2012). The researcher transcribed each interview audio and used the field notes to identify the perceived challenges and the benefits. That is, the challenge or benefit was taken to be a challenge or benefit provided it was raised by at least 3 of the five participants even if the words the participants used may not be exactly the same. This helped the researcher to identify the patterns, categories and regularities emerging from the data collected to form themes. The themes were then coded under one umbrella term. For example, the participants may have said, "we have little time, "the time to teach is reduced", "we are working within an hour", "we have 60 minutes of interaction" and "we don't have to waste time", all were classed under lack of sufficient time for teaching as a key finding of the study.

### **Trustworthiness of the Data Collected**

According to Lincoln and Guba (1985), trustworthiness of data is judged by whether it is credible, transferable, conformable and dependable. Credibility was maintained by sharing the transcribed interviews with the participants to verify their written words (member check), by ensuring consistent data coding and by presenting the findings to the participants to ensure that their experiences are reflected (Creswell & Clark, 2011). This helped the researcher to ensure that the meaning of the participant is not misinterpreted.

Merriam (2009) speculates that transferability of a study can be achieved by showing that its findings can be applied in other contexts. In the present study, a thick description of methodology is given, and other readers can independently assess the findings transferability to other context. Transferability depends on how well the methods are explained. Anney (2014) defines conformability as the findings being shaped by the participants not the researcher's bias. In this study, the researcher kept recordings and transcriptions of the interviews (practice reflexivity) for step by step verification. Dependability refers to the stability of findings over time (Bitsch, 2005). It was maintained using code-recode strategy where the researcher analysed data and left it for

two weeks and does the analysis again and compares the results.

### **Ethical Considerations**

In this research, the ethical principle was adhered to and well established. The permission to conduct the study was requested and approved by the school manager. The participants were fully informed about the nature of the study to their understanding. They were audio-recorded during the interviews at their own authorisation. Acronyms, which served as pseudonyms, were used to guarantee confidentiality.

### **Results**

The first sub-heading displays the results pertaining to the first research question and the second sub-heading in this section lay out the results for the second research question. Note that the researcher is abbreviated for the interview with the letter, R. The names; Pule, Lineo, Kabi, Lerato and Lefa are the pseudonyms for the participants in the study.

#### **Perceived Benefits of Teaching Mathematics to Students in the Supplementary Classes**

Content revision is the advantage for the teachers teaching the supplementary school. At the extra classes the topics are the repetition of the content learnt at their schools. The results of the current study match with those of Selamat et al. (2012), who mentioned that teaching is about simple explanation plus exercise similar to the examination. In this study, it appears to confirm that in the supplementary schools, teaching is a content revision; and this seems to be a common answer amongst all the participants in the study. Below is a brief excerpt from Kabi's interview:

*Kabi: Most of the students who supplement mathematics, you will find that they did well in all the subjects, so they are not that bad in mathematics. Most of the topics are repetition, so the class moves quickly hence; they can even write in June.*

*R: Mmmmmm, carry on.*

*Kabi: Yes, to most students, you will find that some of the topics are just a repetition of what they did before at their schools. Here, we just equip them with examination skills.*

The interview exposed that teaching at the supplementary school is a revision as the students are not new to the content of the LGCSE. The interviewees raised an important point that teaching at the supplementary schools is examination driven and students are equipped with the skills for examination. In line with the Constructivist, this is based on their experience that they gather from their environment. The results also



support the findings by Selamat et al. (2012). In support of this claim, Kabi and Lerato alluded that other topics can be completed in a short time. Sometimes students consult about those before even being taught since knowledge is constructed through interaction with others.

One advantage of teaching at the supplementary school is that the teacher's workloads are reduced. There are few students who attend supplementary school, so the students-teacher ratio is balanced. This creates more time for each student. The five teachers have a similar view that the teacher's workload at the supplementary school is reduced. This result is congruent with the study by Zhan et al. (2014), who contend that there is a reduced teacher workload and the tutor can fully address all the students' needs. When talking to Lerato, she raised the same view, and the following exchange took place:

*Lerato: Few students supplement because supplementing is expensive as it includes daily transport to and from, so a few students from high income families or families that sacrifice attend.*

*R: How does this affect your preparations for the lessons?*

*Lerato: We prepare very well for the students because we know who is more capable than the other, and we are even able to help each student at their pace.*

The above extracts show that the workload of the teacher is reduced; there is more preparation for the lessons, and the students are given maximum attention in the learning environment. There is a sufficient support of this claim by other participant, Kabi, who pronounced that setting tests and exercises is simple because they just take a previous examination paper and revise it after marking. This reduces their workloads.

The findings of this study further shows that the students get good results at the supplementary school to enroll into universities. This finding that supplementary schools increase attainment overlaps with that of Kuan (2011) as reported in the literature. Below is an extract from the interview with Kabi, who raised the fact that the supplementary schools enhance the students' performance:

*Kabi: Whenever the results are released, we become the happiest people due to the results. We mostly admit the students with grade F, G, and U but we mostly have as, A's, B's, C's, D's, and a few E's.*

*R: Mmmmmm, wow!*

*Kabi: Yeah! We mostly have the students with very good mathematics credits every year, and last year, we had 100% pass with all credits (symbol C and above).*

The above responses show that the students at the supplementary schools get good results. The current study's findings concur with Bray and Lykins (2012) and Zhan et al. (2013) who confirmed that the students receiving supplementary education obtain good results. The interview has shown that a student who was admitted with a symbol U (0%-19%), after attending the supplementary education, will get C (60%-69%), B (70%-78%) or A (80%-100%). Knowledge is a human product that is constructed through interactions with the students. Similarly, Hamid et al. (2009), claim that the

supplementary school students' performance is double the performance of their counterpart in the mainstream.

The other benefit of working at the supplementary schools is that the teachers get extra income. This finding on increase in the teachers' salaries working at the supplementary schools overlaps with other researchers, for example, Ha and Harpham (2005) and Mahmud and Bray (2017). The following is the recap of my discussion with Lineo, one of those who mentioned that the teachers get extra income by teaching at the supplementary school:

*Lineo: One of the benefits is that we have an income generated from here. We really offer tutoring service for some cash.*

*R: Why? Is cash your main purpose for the extra classes?*

*Lineo: Yes, we want extra income; you know our salaries are not enough.*

As reported in the literature, the teachers around the world offer extra classes to get extra income. This study is also evident. Another advantage raised by the teachers is full focus and concentration in class. This advantage is not part of the perceived benefits reviewed in the literature but has emerged from the responses of the teachers in the current study. All the teachers rose that the students demonstrate full focus and concentration in classes. Since many students supplement one, two or three subjects, there is much concentration in classes. The following is the conversation with Pule, the teacher who raised the issue, full focus and concentration as a benefit:

*Pule: In the class, there is full focus and concentration because some students are preparing to write in June. This may be because they are doing few subjects in number or they now have the purpose of doing mathematics.*

*R: Do the students talk when you are still teaching?*

*Pule: No, they are silent and focused; they only talk when asked to do so, or when they ask the fruitful questions in class.*

The above interview demonstrates that when a student knows something they begin to concentrate when that is taught to improve their understanding. The interviewed teachers echoed that full focus brings about competition in class, and the questions that the students asked are very constructive and help shape the lesson into what the students really want. From the Constructivist point of view, the teachers have created this meaning through interaction with the students.

### **Perceived Challenges Faced by a Mathematics Teacher Teaching Supplementary Classes**

One of the challenges that the teachers face at the supplementary schools is that the teachers travel too late or too early for the classes. The supplementary classes are offered in towns to people who want to improve their symbols in mathematics after hours. This makes the teachers to travel late in the afternoon. The current study's results

resonate with Santhi (2011), who posits that traveling in the morning and late gives the teachers a lot of stress and tension. My discussion with Kabi, a teacher, who also mentioned that the teachers travel too late or too early for the classes as a challenge ensued as follows:

*Kabi: There is a lot of traffic in the afternoon when we have to attend the supplementary lessons, and since some students who are working also attend the classes, we have to wait for the classes that start at 5.30pm and knock off at 6.30pm. We are bound to travel home too late.*

The interview utterance above shows that the teachers who are teaching the supplementary classes travel too late in the afternoon. Kabi, Pule and Lineo said that they want to resign from teaching due to risking their lives. This finding can be explained in the Constructivism, which means that knowledge is constructed through human activities. The similar view was reported by Santhi (2011) who emphasised that teachers as a result of working too early or late, the teachers want to resign. The study found that the supplementary classes can be attended by working people, the students who wrote the LGCSE in the past years and the mainstream grade11 of the current year. To accommodate all these people, the classes start late.

There is lack of sufficient time for teaching since the classes are attended late in the evening. Therefore, is a short time for interaction and a loaded syllabus of material to be covered at grade 11. Pule expressed his view on insufficient time in the following interview:

*Pule: There is a limited time to cover everything especially for those who want to write their examination in June.*

*R: Who decides when each student will write the examination?*

*Pule: The parents and the students are in charge since the writing depends on each student's budget. A parent can pay for the whole year, and a student can write in November.*

It is clear from the above interview that the supplementary time is limited due to the amount of work that needs to be covered, especially for the students who want to take their examination in June. Such findings have been reported elsewhere by Bray and Lykins (2012). From the Constructivist perspective, meaningful learning happens due to interactions. Hence, the teachers' interaction with the students enables them to identify time factors as a possible challenge that they face.

Another challenge that emerged in this study is lack of resources that the teacher, who are teaching the supplementary schools are faced with. Those resources include text books, mathematics kits, square boards and photocopy machines, to mention but a few. The interviewed teachers contend that they are the only ones with the text books, and this causes them to work very hard to make obvious content easy to the students without the textbooks. The response was clarified in the conversation with Lefa as follows:

*Lefa: We do not have resources to teach, but we still try to borrow from the school that we are using its classes.*

*R: I am listening.*

*Lefa: We rely more on lecture method. They are no photocopy machine, so it is difficult to make question papers: no computers, there is nothing. Mostly, we make some copies for tests only on the nearing internet café.*

The above interview has shown that the teachers at the supplementary schools in Lesotho are faced with serious challenge of the resources. However, this finding matches with those of Qhobela (2012) and Nthathakane and Mokuku (2012), who established that the Lesotho secondary and high schools are faced with the challenge of a lack of teaching resources. Kabi shared the same sentiments with Lefa and further revealed that they lack physical infrastructure. They rent a building for the classes.

The participants mentioned that other challenges include the teachers who leave the schools in the middle of the term. The researcher decided to name this condition, the teacher's high turnover, which is a state in which the teachers do not take a long time in one school but quickly move to another due to poor salaries and poor working condition or leave due to other personal reasons. The excerpt below is the interview with Lerato on the teacher's turnover:

*Lerato: Due to low salary, some of the most productive teachers were bound to lose here, so it is difficult to work with a new teacher all the time, especially a teacher who has never worked at the supplementary schools.*

On the same view, Lefa highlighted that some mathematics teacher left the supplementary classes due to low income. This finding is unique to this study, hence the study contribution to the literature. A similar view was raised by other participants, Lineo and Kabi, who were also willing to stop teaching the supplementary school due to low income.

The other challenge that the teachers face is poor salaries for the teachers working permanently at the supplementary schools. The teachers who were interviewed confirmed that they are poorly paid. This is the case where one person could not receive his or her monthly income or obtain part of their salaries. The following is the recap of the researchers' exchange with Pule:

*Pule: When it is month end (31), we will sometimes be told that the students have not paid the M150.00, which they pair monthly per subject. Sometimes we go home empty handed on a number of months, especially those who are not doing this for extra income but rely here.*

The above interview shows that the teachers in Lesotho who are teaching at the supplementary schools are poorly paid because their salaries are the collection of M150.00=\$8.72 paid monthly by the students. The same amount is used to buy a chalk, pay rent for the classes and pay the teachers' incomes.

One of the challenges faced by the teachers who are teaching at the supplementary schools is misbehaviour amongst the students. Lineo and Pule defined misbehaviour as a condition in which a student exhibits bad manners that are unaccepted by the community due to the norms and culture. All five teachers consented to the bad behaviour of the supplementing students. The discussion with Lineo, who also raised misbehaviour as a challenge that they are faced with, transpired as follows:

*Lineo: I have a problem with bad behaviour of some of the students. Since they do not wear school uniforms they act like adults; and their class is not neat. Some of them use drugs, and I am even afraid to say anything when they arrive late to the classes.*

*R: You are free to say more about the issue of bad behaviour.*

*Lineo: Some students just come here to please their parents. Some will come to class late wearing funny clothes so that they call attention of the rest of the class and distract my lesson. Remember that we just have an hour with them. I wish I would get a job in the government because here, you cannot say anything to such a student. After all, that will affect the number of the students coming if one gets expelled.*

Based on the interview above, the students in additional classes misbehave; this affects their grasp of the content. According to the Constructivist, the students are used to this behaviour from their environment, so it is easy to exhibit such behaviour and influence the others. In addition, Kabi highlighted that no one is responsible for dealing with the students' behaviour since the owner of the supplementary classes is a profit-oriented foreigner.

## Discussion

The study shows that there are perceived benefits of teaching the supplementary schools that overlap with those reported in the literature. Those include content revision, reduced workloads, extra income and getting good results. However, there is a perceived benefit that is unique to the study, and that is there is full focus and concentration in class. The study found that teaching at the supplementary schools is a repetition. This finding matches that of Selamat et al. (2012). This implies that teaching at the supplementary schools is easy for the teachers in terms of both content delivery and assessment. The lesson learnt from this study, is that the supplementary schools are examination driven that include equipping the students with examination skills, and that revision of the past examination papers is a norm. This makes assessment simple and reduces the teachers' workload.

The similarity that the current study shares with that of Hamid et al. (2009) and Zhan et al. (2013) is that the students attend the supplementary schools obtain better results as compared to those at the mainstream. This result closely resembles those of Bray and Lykins (2012). However, the literature has shown that this may not necessarily

be the case. The study found that the students who supplement do not do more subjects, and their teachers emphasised full focus and concentration, which is a greater competition amongst the students. It is clear that teaching where the teacher to the students' ratio is balanced enables the teachers to give each student attention, no matter the learning pace of such a student, and the students can decide when to write the final examination. Since the students are from different schools, there is lot of competition and everyone wants to demonstrate that they are capable.

The perceived challenges that surfaced from this study are parallel to those reported in the literature. Those are: the teachers travel too late or too early, lack of sufficient time for teaching and lack of teaching resources. The result that the supplementary schools rent the classes after mainstream classes' hours complements the finding of other studies, for example, (Peđrak, 2017). There was enough evidence from the participants' utterance that at the supplementary schools, they rely on the teacher centered strategies due to lack of resources ,such as, text books and square boards, to mention a few, and a lack of sufficient time for engaging interaction.

The unique perceived challenges that emerged due to this study include the teachers' high turnover, and misbehaviour amongst the students and low salaries. The challenges about poor salaries for the teachers at the supplementary school can be attributed to the fact that the students' monthly payment is a small amount of money. Unlike in the study of Mahmud and Bray (2017), where the teachers attend the supplementary classes for extra income, the study found that some teachers work at supplementary schools in Lesotho due to high unemployment. This finding is an addition to the existing literature. The lesson drawn about the supplementary schools from this study is that some students are forced by their parents to attend extra classes knowing that they have an attitude towards mathematics; hence they misbehave. In Lesotho, extra the classes can be attended by any person at any age who wants to improve their LGCSE mathematics symbols.

### **Conclusion and Recommendation**

The researcher can conclude that the theory of the Social Constructivism has assisted in the analysis of the teachers' thinking about the challenges and benefits of teaching mathematics at the supplementary classes. The study has shown that mathematics teachers' perceived the challenges are more than the perceived benefits in the teaching supplementing students. Some unique perceived challenges and benefits have emerged in the present study, which contribute to the literature. The government should engage in building the supplementary classes with wheelchair ramps so that disabled people can also access them. It is recommended that the government should make rules and regulations for the supplementary classes. Finally, the supplementary

education should be extended to the rural areas of Lesotho.

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