

## Strategies Used by Teachers in Teaching Gifted and Talented Learners in Regular Primary Schools in the Hhohho Region, Eswatini

**Maseko, Sanele Derrick**

*Department of Educational Foundations & Management, University of Eswatini*

Email: [derricksanele@gmail.com](mailto:derricksanele@gmail.com)

<https://orcid.org/0009-0002-5812-9491>

**Thwala, S'lungile Kindness**

*Department of Educational Foundations & Management, University of Eswatini*

Email: [sskthwala@uniswa.sz](mailto:sskthwala@uniswa.sz)

<https://orcid.org/0000-0002-7844-1514>

**Faremi, Yinusa Akintoye**

*Department of Educational Foundations & Management, University of Eswatini*

Email: [yafaremi@uniswa.sz](mailto:yafaremi@uniswa.sz)

<https://orcid.org/0000-0001-9136-9134>

---

### Article History

Received: 8th December 2023

Accepted: 17th May 2024

Published: 30th June 2025

### Keywords

Gifted and talented learners, giftedness, regular schools, strategies, talent, teachers.

**\*Corresponding Author:**

[derricksanele@gmail.com](mailto:derricksanele@gmail.com)

### Abstract

Gifted and talented (GT) learners receive less coverage in research compared to learners with learning disabilities and handicaps in Sub-Saharan countries like Eswatini. This study, therefore, sought to explore the strategies used by teachers in teaching GT learners in regular primary schools in the Hhohho Region of Eswatini. The objective of the study was to: explore the teaching methods used by teachers to implement strategies used in teaching GT learners in regular primary schools. An explanatory sequential mixed-methods research design was employed. Quantitative data was collected from 74 upper grade teachers using questionnaires and analysed descriptively using Statistical Package of Social Science (SPSS) version 25 to get percentages, means and standard deviation. Qualitative data was collected from 9 purposively sampled teachers using individual interviews. Qualitative data was analysed thematically. Findings indicated that teachers used relatively few teaching methods to implement strategies used in teaching GT learners. It was concluded that GT learners were not effectively catered for by teachers in regular primary schools, hence it was recommended that practicing teachers need to be provided with training on giftedness and gifted pedagogy, and direct classroom support regarding GT learners.

---

### Introduction

Like any other learners with special educational needs, extensive literature embraces the idea that Gifted and Talented (GT) learners need the provision of explicit teaching strategies and well-structured and sequenced learning experiences to develop their gifts into talents despite their superior academic abilities (Ngara, 2017; Onyemaechi et al., 2022; Taylor, 2016). However, it fails to explicitly show how teachers implement these strategies to cater for the learning needs of these learners. Hence this study sought to gain an in-depth understanding of the strategies used by teachers in teaching GT learners in regular primary schools in the Hhohho region of Eswatini, by exploring the teaching methods teachers used to implement these strategies in their quest to develop the learners' gifts into talents.

In line with the Differential Model of Giftedness and Talent by Gagne (2015) that underpinned this study, Ngara (2017) defines GT learners as those identified by professionally qualified persons, who by virtue of their outstanding abilities are capable of high performance and require differentiated educational programmes and/ or services beyond those normally provided by the regular school programmes in order to realize their contribution to self and society. Although these learners are not a homogenous group, they share common typical characteristics that include; learning rapidly, extensive vocabulary, excellent memory, reasons well, and strong curiosity (Kaya, 2022), mature for age, good sense of humor, keen observation, compassion for others, vivid imagination, long attention span, ability with numbers, concern with justice and fairness, sensitivity and wide range of interests (Ngara & Al-Mahdi, 2016; van Wyk, 2018). Explicit teaching methods that respond to these characteristics are required to implement strategies used in teaching these learners.

Despite their outstanding abilities, GT learners are made into under achievers in regular schools due to challenges that they face namely: a dull, meager curriculum; inappropriate teaching strategies that are incompatible with their learning styles and negative attitudes towards the learners (Erin, 2021). Also, they are not effectively catered for in regular classrooms in Sub-Saharan countries like Zimbabwe, Zambia, Namibia and South Africa due to the ever-present assumption that the GT will do well regardless of special intervention (Ngara, 2017). Instead, various literature sources show that learners with learning disabilities and handicaps tend to receive greater coverage in research and sympathy in special education provisions than GT learners from African researchers (Ngara, 2017; Thwala, 2018; Thwala et al., 2015), hence the need for this study.

In light of their superior abilities, there is a range of specific strategies that can help schools meet the additional needs of GT learners in a typical regular classroom (Tingzhao, 2019). GT learners require an accelerated curriculum to challenge them because of their superior abilities which allow them to learn at a rapid rate (Taylor, 2016; Eşsizoglu & Çetin, 2022). The main teaching method used to challenge gifted learners is the inclusion of advanced learning material in their learning programme, such as: investigation of real problems; interdisciplinary units based on complex, abstract ideas; and/or more challenging reading material (Taylor, 2016).

Moreover, Taylor (2016) identifies three teaching methods that are suitable to implement curriculum modification in a regular classroom for GT learners namely; curriculum compacting, independent research and open-ended tasks. Further, GT learners need to be provided with activities that develop critical thinking skills such as; higher order thinking skills, questioning and reasoning teaching methods and problem-based learning (Van Tassel-Baska, 2014). Furthermore, involving gifted learners in decision making about their learning programme is an effective teaching method (Van Tassel-Baska, 2014) that enables consideration of individual learners' needs, interests and learning styles. Houghton (2014) concurs that opportunities for personalised learning and effective teacher-student relationships are key in meeting GT learners' learning needs.

The seating arrangement for gifted learners in regular classrooms needs to be differentiated by using various grouping options. Bushra (2018) in Australia shows that gifted students perform better when grouped with their like-minded peers resulting in high academic achievement and an increase in social and emotional development. In contrast, Valiandes (2015) found that mixed ability grouping offers GT learners opportunities for group interaction which enable learners to develop co-operative working skills and leadership skills. However, Part of the findings of a study conducted by Ariss (2017) in America indicates that students enjoy being in

flexible grouping. This means that mixed grouping has to be used alongside other grouping strategies.

Despite the availability of empirical evidence on strategies used by teachers in teaching GT learners in the international context, it is, however, unclear as to how teachers in Eswatini cater for their GT learners in regular classrooms. The researcher thought that this study would make contribution to the knowledge base by informing teachers' classroom practice in providing for GT learners and further assist school administrators to provide the support required for class teachers and to create a positive culture for GT learners in regular schools. The findings from this study may also be used to inform policies to assist teachers in their efforts to cater for GT learners, as well as development of pre-service and in-service professional learning opportunities for teachers.

### **Statement of the Problem**

In inclusive classrooms learners with different needs and abilities are grouped together to be supported in such a way that their diverse needs are met equitably (van Wyk, 2018). However, learners with learning disabilities and handicaps in Sub-Saharan African countries, including Eswatini, tend to receive greater coverage in research and sympathy in special education provisions than GT learners (Ngara, 2017). It suffices that GT learners are left out and are not really benefiting from an equal educational opportunity as their peers (Ngara, 2017), and their full potential is not considered (Awandu, 2014). In that backdrop, understanding the teaching methods used by teachers to implement strategies used in teaching GT learners was imperative for the researcher.

### **Purpose of the Study**

The main aim of the study was to explore the strategies used by teachers in teaching gifted and talented learners in regular primary schools in the Hhohho Region of Eswatini.

### **Research Objectives**

The objectives of the study were to:

1. explore the teaching methods used by teachers to provide a challenging curriculum to gifted and talented learners in regular primary schools;
2. establish the teaching methods used by teachers to promote gifted and talented learners' critical thinking skills in regular primary schools;
3. establish the teaching methods used by teachers to provide choices in gifted and talented learners' learning programs in regular primary schools;
4. determine the teaching methods used by teachers to modify the curriculum for gifted and talented learners in regular primary schools; and
5. find out the teaching methods used by teachers to group gifted and talented learners in regular primary schools.

### **Research Question**

1. What teaching methods are used by teachers to provide a challenging curriculum to gifted and talented learners in regular primary schools?

2. Which teaching methods are used by teachers to promote gifted and talented learners' critical thinking skills in regular primary schools?
3. What teaching methods are used by teachers to provide choices in gifted and talented learners' learning programs in regular primary schools?
4. What teaching methods are used by teachers to modify the curriculum for gifted and talented learners in regular primary schools?
5. How do teachers group gifted and talented learners in regular primary schools?

## Methods and Materials

An explanatory sequential mixed methods design was adopted in this study. Creswell and Plano Clark (2018) define an explanatory sequential design as a mixed method design that is conducted in two distinct sequential interactive phases. In the first phase, a quantitative strand is designed and implemented, and the quantitative findings that need explanation are decided. In the second phase, a qualitative strand is designed and developed to explain the quantitative findings. Finally, findings are integrated by drawing on the combined results from both sets of data after the qualitative phase is completed (Creswell & Plano Clark, 2018; Schoonenboom & Johnson, 2017).

This design was considered appropriate because it allows the researcher to widen his inquiry with sufficient depth and breadth through its quantitative and qualitative arm of data collection. Additionally, it helps in obtaining more rigorous conclusions, as employing both methods ensures that the strengths of qualitative methods offset the weaknesses of quantitative methods and vice versa (Creswell & Plano Clark, 2018). By adopting the explanatory sequential mixed methods design, the researcher gained deeper insight into the teachers' personal constructed views on the teaching methods they used in implementing strategies used in teaching GT learners. With this insight, the author developed and presented interpretations of the teachers' constructed views in the results and discussions sections of this paper.

The target population for the study consisted of 250 teachers from 16 regular primary schools in the Mbabane cluster of the Hhohho region in Eswatini. The sample size for the quantitative phase comprised 78 (31.2%) teachers who taught upper grades and automatically became part of the study after their schools were selected through stratified and systematic sampling techniques. This sample size was considered sufficient to provide maximum insight into the phenomena under investigation because a sample size of 10-30% is advisable for quantitative studies in the social sciences (Johnston and Christiansen, 2012). Nine teachers were selected using homogeneous purposive sampling from three convenient primary schools that participated in the qualitative phase. The homogeneous purposive sampling technique allowed for the selection of available regular class teachers who were knowledgeable and experienced in teaching GT learners.

Empirical quantitative data was collected using a survey questionnaire, while qualitative data was gathered through in-depth individual interviews. The advantage of using questionnaires in this study was that they allowed for wide coverage at minimal cost and effort, enabling respondents sufficient time to provide well-thought-out and articulated responses (Chawler & Sondhi, 2016). The questionnaires were personally delivered to different schools within one week and collected along with consent forms and response letters for participation in the qualitative phase by the third week of the same month. The hand-administered questionnaires increased both the response rate and return rate (Creswell, 2017).

The questionnaire contained 19 item statements from a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). In the study, the overall weighted mean was used as a decision rule to determine whether teachers agreed or disagreed that they used the mentioned items as teaching methods. Items with means more than the overall weighted mean were regarded as major indicators showing that teachers mostly agreed whereas items with means that were less than the weighted mean were regarded as those that teachers disagreed with. A Coefficient of Variation (CV) that was less than 1 meant low variation in the responses of the respondents while a CV of more than 1 meant high variation.

The purpose of the in-depth individual interviews was to get explanations to some of the findings of the survey, as well as potentially any other information that might have not been included in the items in the questionnaires. It enabled the interviewer to generate more insightful responses and rich understanding of attitudes, perceptions and motivations of teachers behind the provisions they made for GT learners in their regular classrooms through; asking follow-up questions, probing for additional information and monitoring changes in tone and word choice (Gerring & Mahoney, 2016). The interview sessions were successfully conducted using an interview guide over a period of three days and each session lasted between 25 minutes to an hour.

Three experts from the Faculty of Education (UNESWA) were asked to validate the research instrument by assessing the relevance of the content of the questionnaire to ensure that it covered the areas under investigations (content validity) or appeared to measure what it was designed to measure (face validity). To assess its reliability, the questionnaire was administered to a group of 30 teachers who did not participate in the study twice at intervals of 2 weeks. The two results obtained were used in computing an overall correlation coefficient value using the Cronbach Alpha reliability testing technique. The overall Cronbach Alpha Coefficient value of the questionnaire was 0.82 which meant that it was relatively reliable, because George and Mallery (2003) state that the rule of thumb is that a Cronbach Alpha Coefficient of 0.80 is a reasonable goal for the reliability of a research instrument.

Trustworthiness of the qualitative findings was retained by assessing credibility, transferability, dependability and conformability of the study through various strategies (Gunawan, 2015). To achieve credibility, the researcher used strategies like method triangulation, member checks and thick description of the phenomenon under scrutiny. To achieve dependability, an audit trail was kept which allows any observer to trace the course of the research (Creswell, 2017).

A sequential mixed analysis technique, which involves analyzing data from mixed methods chronologically, was adopted (Combs & Onwuegbuzie, 2010). Data from the survey was analyzed descriptively using a Statistical Package for Social Science (SPSS) version 25 to obtain percentages, means, and standard deviation. Responses for each of the closed questions were coded prior to entry into the SPSS program to enable the identification of patterns in the data. The results were presented in tables.

Qualitative data from interviews were analysed using thematic analysis technique. Thematic analysis refers to a method for identifying, analysing and reporting patterns (themes) within data (Maguire & Delahunt, 2017). The individual interviews were recorded using a cellphone, listened to and transcribed verbatim into a Microsoft Word document. The researcher then followed a step-by-step approach to discover relevant themes. The six steps adopted from Braun and Clarke in 2006 in Maguire and Delahunt (2017) were followed in analysing the data, namely; reading and re-reading transcripts from transcribed data, generating initial codes,

reviewing preliminary themes, defining themes that emerged and writing up a report after integration of results from the two strands in this study.

Permission was obtained from the Institution Ethical Review Board from the University of Eswatini and the Ministry of Education and Training before carrying out the study. Informants signed consent forms willingly to ensure that participation in the study was voluntary. The researcher verbally articulated the purpose and objectives of the study to the informants and told them of their right to withdraw from the study at any time they wished. Raw collected data from questionnaires and transcripts from audio records were kept confidential by storing it in the laptop and securing it with a password. Anonymity was ensured by not linking collected data to schools or individual informants by name.

## Results and Discussion

Results from the questionnaires are presented first and followed by the analysis and presentation of data from the in-depth individual interviews.

### Quantitative Results

Data was collected from 74 teachers, 42 (56.8%) were female compared to 32 (43.2%) males. Most teachers (36, 48.6%) held a diploma closely followed by 35 (47.3%) who had a degree. Regarding respondents' training in gifted education, 41 (55.4%) teachers indicated that they were not trained in gifted education while 33 (44.6%) were trained. Quantitative results are presented based on the research question as follows;

### Research Question 1

What teaching methods are used by teachers to provide challenging curriculum to gifted and talented learners in regular primary schools?

**Table 1**

*Teaching Methods Used in Providing Challenging Curriculum*

Item statements	N	Mean	S
(a) Assigning them advanced level reading material	74	4.34	0.58
(b) Providing them support to enter competitions (allow learners to enter math and science fairs, and other subject competitions)	74	4.22	0.95
(c) Providing them a more advanced unit based on higher-level outcome statements	74	3.77	0.80
(d) Using specific computer software to develop their learning skills.	74	3.11	1.18
<b>Overall scores</b>	<b>74</b>	<b>M=3.8</b>	<b>0.57</b>
		<b>6</b>	

**Note:** \*N=74 \*Weighted mean =3.86 \*SD=0.57 \* CV = SD/M = 0.57/3.86 = 0.15 \*Decision rule for level of agreement is M=3.86

As shown in Table 1, all teachers (N=74) agreed that the teaching methods they employed to provide a challenging curriculum to GT learners are: (a) Assigning advanced-level reading material (M=4.34, SD=0.58); and (b) Supporting their participation in competitions by allowing learners to enter math and science fairs, as well as other subject competitions (M=4.22,

SD=0.95). The mean values of all these items exceed the weighted mean. The CV of 0.15, or 15%, indicates low variation. This suggests that the data points cluster around the weighted mean value of 3.86, implying consistency in the respondents' answers.

## Research Question 2

Which teaching methods are used by teachers to promote gifted and talented learners' critical thinking skills in regular primary schools?

**Table 2**

*Teaching Methods for Promoting GT Learners' Critical Thinking Skills*

Items	N	Mean	S
(a) Teaching them thinking skills in the regular curriculum through creative problem solving	74	4.39	0.70
(b) Providing them curriculum which includes investigation of real-world situations or problems	74	4.19	0.82
(c) Provide them with questions and activities based on higher level thinking skills which require students to explain their thinking and provide evidence of reasoning	74	4.38	0.70
<b>Overall scores</b>	<b>74</b>	<b>M=4.32</b>	<b>0.53</b>

**Note:** \*N=74 \*Weighted Mean=4.32 \*SD= .53 \*CV= SD/M= 0.53/4.32 = 0.12 \* Decision rule for level of agreement is M=4.32

As seen in Table 2, all teachers (N=74) were in agreement that the teaching method they used to promote GT learners' critical thinking skills were as follows: (a) Teaching them thinking skills in the regular curriculum through creative problem solving (M=4.39, SD=0.70); and (c) Providing them with questions and activities based on higher level thinking skills which require learners to explain their thinking and provide evidence of reasoning (M=4.38, SD=0.70). The mean values of all these items are more than the weighted mean. The CV of 0.12 which is 12% indicates low variation. This means that the data points are clustered around the weighted mean value of 4.32. This implies that there was consistency in responses of the respondents.

## Research Question 3

What teaching methods are used by teachers to provide choices in gifted and talented learners' learning programs in regular primary schools?

**Table 3***Teaching Methods for Providing Choices in GT Learners' Learning Programme*

Item statements	N	Mean	S
(a) Allow them to select their own instructional reading material (apart from formal curriculum reading material)	74	3.62	0.98
(b) Assigning them creative or expository writing activities on topics selected by the teacher	74	4.01	0.77
(c) Allowing them to select activities for response to reading material	74	3.72	0.91
(d) Making time available for them to pursue self-selected interests.	74	3.64	0.93
<b>Overall scores</b>	<b>74</b>	<b>M=3.7</b>	<b>0.65</b>
		<b>5</b>	

**Note:** \*N=74 \*Weighted mean=3.75 \*SD=0.65 \*\* CV= SD/M = 0.65/3.75 = 0.17 \* Decision rule for level of agreement is M=3.75

As shown in Table 3, all teachers (N=74) agreed that the teaching method they used to provide choices in GT learners' learning programs is: (b) Assigning GT learners creative or expository writing activities on topics selected by the teacher (M=4.01, SD=0.77). The mean value of this item exceeds the weighted mean. The CV of 0.17, which is 17%, indicates low variation. This means that the data points are closely grouped around the weighted mean value of 3.75. This implies that there was consistency in the respondents' answers.

**Research Question 4**

What teaching methods are used by teachers to modify the curriculum for gifted and talented learners in regular primary schools?

**Table 4***Teaching Methods for Modifying the Curriculum for GT Learners*

Items	N	Mean	S
(a) Providing them with open-ended activities.	74	4.01	0.97
(b) Providing time within the school day for them to work on their independent research projects that encourage them to organise their own work schedule.	74	3.58	0.91
(c) Using pre-tests to determine if they have mastered the material covered in a particular unit.	74	4.15	0.99
(d) Eliminating curricular material that they have mastered and substituting different activities for students mastering regular material.	74	3.38	1.04
<b>Overall scores</b>	<b>74</b>	<b>M=3.7</b>	<b>0.6</b>
		<b>8</b>	<b>4</b>

**Note:** \*N=74 \*Weighted mean=3.78 \*SD=0.64 \* CV = SD/ M = 0.64/3.78 = 0.17 \* Decision rule for level of agreement is M=3.78

As seen in Table 4, all teachers (N=74) were in agreement that the teaching method they used to modify the curriculum for GT learners included: (a) Providing GT with open-ended activities, (M=4.01, SD=0.97), followed by (c) Using pre-tests to determine if GT learners have mastered

the material covered in a particular unit ( $M=4.15$ ,  $SD=0.99$ ). The mean values of all these items are more than the weighted mean. The CV of 0.17 which is 17% indicates low variation. This means that the data points are clustered around the weighted mean value of 3.78. This implies that there was consistency in responses of the respondents.

### Research Question 5

How do teachers group gifted and talented learners in regular primary schools?

**Table 5**

#### *Teaching Methods Used in Grouping GT Learners*

Items	N	Mean	S
(a) Using same-ability grouping for learning activities.	74	2.68	1.31
(b) Using mixed-ability grouping for learning activities (e.g. co-operative learning).	74	4.39	0.82
(C) Allowing students to choose between working in a group or individually.	74	2.59	1.01
(d) Sending them to a higher grade for a specific area of instruction.	74	2.86	1.14
<b>Overall scores</b>	<b>74</b>	<b>M=3.1</b>	<b>0.61</b>
		<b>3</b>	

**Note:** \*N=74 \*weighted mean=3.13 \*SD=0.61 \* CV =  $SD/M = 0.61/3.13 = 0.19$  \*Decision rule for level of agreement is  $M=3.13$

It was observed in Table 5 that all teachers ( $N=74$ ) agreed that the teaching method they used for grouping GT learners was: (b) Using mixed-ability grouping for learning activities (e.g. co-operative learning) ( $M=4.39$ ,  $SD=0.82$ ). The mean value of this item exceeds the weighted mean. The CV of 0.19, which is 19%, indicates low variation. This means the data points are clustered around the weighted mean value of 3.13. This implies consistency in the responses from the respondents.

### *Qualitative Results*

The findings from in-depth teacher interviews regarding the implementation of strategies for teaching gifted and talented (GT) learners are organized into four key themes: offering challenging activities, promoting critical thinking skills, providing tailored learning programs, and grouping GT learners into learning activities for collaborative engagement.

#### **Providing GT learners with a challenging activity**

One of the teaching methods that featured prominently was engaging GT learners in challenging learning activities by assigning them advanced learning material to meet their need for an accelerated curriculum. The motivation behind the use of this teaching method was the superior cognitive abilities possessed by GT learners which enabled them to comprehend concepts faster than the less gifted. Teachers revealed that learning and assessment activities provided in the normal curriculum are average and not challenging enough for the gifted learners. As a result, they provided advanced learning material to challenge the learners. Teachers perceived the use of challenging learning experiences as an effective strategy of managing disruptive behaviour that disturbs the less gifted learners. For instance, Teacher 4 remarked:

*eh, I can say that I prepare for the GT learners' advanced level of work beyond the activities for the whole class because they are very fast in understanding concepts and finishing their work.*

Another teaching method for providing challenging experiences that emerged mostly was allowing GT learners to participate in competitions where they competed with learners of the same abilities from other schools. This challenges them to work hard in order to prove their intellectual abilities. One of the teachers commented: "I encourage them to participate in national writing competitions to promote their creativity and critical thinking skills".

### **Promoting GT learners' critical thinking skills**

The study discovered that most participants promoted advanced thinking skills of their GT learners by; engaging them in problem solving activities and providing all learners questions and activities based on higher level thinking skills which required the learners to explain their thinking and provide evidence of reasoning. The teachers mentioned that giving learners problem solving activities benefited the GT learners more than the less gifted. Teacher 4 responded by saying:

*I promote the learners' critical thinking skills by giving them problem solving activities that require critical thinking beyond just giving solutions. During assessment I do not just give them recall questions but high order ones that are investigative and demands further understanding of the question*

In providing all learners with questions and activities based on higher-level thinking skills, only a few high-order questions were deliberately prepared by the teachers to ensure that the less gifted learners were not disadvantaged. Teachers revealed that there were fewer GT learners in their classrooms compared to those with different learning needs. Teacher 1 explained that she used this teaching method to "make sure that GT learners think outside of the box thus promoting their problem-solving skills." However, the critical thinking skills of GT learners are addressed through an inclusive approach, raising concerns that they are not adequately supported.

### **Providing choices in GT learners' learning programme**

Results revealed that teachers assigned GT learners creative or expository writing activities on topics they had selected, providing them choices in their learning program to enhance their autonomy and sense of responsibility. The cited creative or expository activities included allowing learners to choose from English or siSwati composition topics of their preference. Teacher 1 hesitantly remarked: "Mmm... I allow them to choose, for instance, in English, topics that they want to write about when teaching them compositions." Another prevalent teaching method for offering choice was engaging learners in research work. The teachers noted that GT learners, alongside less able learners, had the freedom to research information on assigned topics, and they were then given chances to present this information to the rest of the class.

### **Grouping GT learners into learning activities**

The study found that teachers used mixed ability grouping to group learners in their classrooms. The motivation behind using this strategy was that the teachers wanted to promote peer tutoring and collaborative learning between learners of different abilities for collaborative engagement.

The teachers mentioned that mixed ability grouping allowed gifted learners to assist less able learners and those who experience learning difficulties. They noted that there are large numbers of struggling learners in their class rooms. GT learners are mainly used to overcome these challenges rather than as a strategy to nurture their unique needs. For instance, Teacher 7 had this to say: “I use mixed ability grouping due to the large numbers in the classrooms. Gifted learners help me in facilitating group discussions and helping struggling peers”. This implies that gifted learners are used as teaching assistants by teachers in regular classrooms.

## Discussion

The main aim of the study was to explore the strategies used by teachers in teaching GT learners in regular primary schools in the Hhohho Region of Eswatini. The study hoped to uncover how regular teachers in Eswatini assisted GT learners to achieve their full potential. It was in that backdrop that the study was underpinned by Gagne’s Differential Model of Giftedness and Talent (DMGT) of 2015 because it enlightens how natural gifts are nurtured and systematically developed by individuals such as teachers to be transformed into talents (competencies) through a developmental process (Gagne, 2015).

Generally, the study found that GT learners are inadequately catered for in regular classrooms in the Mbabane primary school cluster in the Hhohho region of Eswatini. This implies that less attempts are made by teachers to nurture and systematically develop GT learners’ gifts, hence the gifts do not manifest into talents. This may be attributed to the fact that the development process of gifts is negatively affected by the inadequate intervention from teachers. The DMGT model posits that if the catalysts (intervention strategies used by teachers) affect the development process negatively, it becomes poor and hinders the gifted learners from becoming talented (Gagne, 2015). Both quantitative and qualitative results indicated that few teaching methods were used by teachers to implement strategies used in teaching GT learners. One of the teaching methods that was found to be used by teachers is provision of challenging learning experiences when teaching GT learners by assigning them advanced level reading material and providing them support to enter subject competitions like math and science fares, Religious Education poem writing and English Language letter writing. The motivation behind the use of challenging learning experiences was found to be the superior cognitive abilities possessed by GT learners which enable them to comprehend concepts faster than the less gifted. The findings of this study concur with those of Ariss (2017) in America who states that there is positive feedback toward differentiated instruction when gifted learners are provided with a challenging curriculum.

Another teaching method used by teachers in regular primary schools was promoting critical thinking skills of GT learners through creative problem solving and providing them with questions and activities based on higher level thinking skills (high order questions) which require students to explain their thinking and provide evidence of reasoning. Likewise, a study conducted by Kettler (2014) concluded that much of the curriculum for gifted learners should be directed towards developing critical thinking skills. It emerged that these activities were provided to the whole class irrespective of the learners’ intellectual abilities which raises concern that GT learners are inadequately catered for. Teachers believed that giving learners problem solving activities benefited the GT learners more than the less gifted.

Furthermore, integrated findings revealed that teachers provided GT learners with limited choices in their learning programs by assigning them creative or expository writing activities on topics selected by the teacher. Additionally, research work was offered to increase the

autonomy and sense of responsibility of GT learners in their education. Taylor (2016) confirms that providing gifted learners with choices in their learning programs caters to individual learners' interests and personal learning styles. The provision of choices in the learning programs of GT learners is necessitated by their strong desire for topic selection, resources, product, grouping arrangements, and pace of work (Taylor, 2016). GT learners were given inadequate choices in the regular learning program due to the significant amount of work and time required to prepare curricular activities that would allow learners to make choices. Another possible explanation is that teachers adopt a teacher-oriented teaching style, which denies learners the opportunity to choose their research topics.

Furthermore, both quantitative and qualitative results showed that teachers modified the curriculum for GT learners by: providing them with open-ended activities; using pre-tests to determine if they have mastered the material covered in a particular unit; and providing them with challenging learning experiences by engaging GT learners in advanced content that builds on learners' previous knowledge because the curriculum at primary level is spiral. According to Taylor (2016), open-ended activities may be a particularly appropriate differentiation for the regular classroom, as they may be easily integrated with a regular class programme.

Lastly, teachers used mixed ability grouping to organize learners in their regular classrooms because they believed it allows gifted learners to assist those who are less able and those experiencing learning difficulties. Gifted and Talented (GT) learners were primarily used as teaching assistants in regular classrooms. This finding agrees with Valiandes (2015), who states that mixed ability grouping offers GT learners opportunities for group interaction that enable them to develop cooperative working skills and leadership skills. However, Tomlinson (2017) argued that mixed ability grouping must be used with caution because it may lead to reduced motivation and achievement for gifted learners when they feel they have to do most or all of the work in the heterogeneous group.

It is evident that teachers used relatively few teaching methods (42.12%) out of the 19 selected from literature which were provided in the questionnaire. One of the possible reasons is that most teachers (55.4%) who participated in the study lacked training in gifted education. Consequently, teachers possibly lacked knowledge of giftedness and gifted pedagogy that can be used in teaching GT learners to help them realise their potential. This finding corresponds to De Angelis (2017) in Portugal who found that 80% teachers did not change their teaching approach in teaching gifted learners because of the lack of knowledge in the field of gifted education. Similarly, in South Africa, Mhlolo (2014) surveyed 15 Sub-Saharan African countries and found that none offered teacher training specifically for teachers of GT learners. However, van Wyk (2018) found that 64% of teachers feel competent to teach gifted learners in South African regular classrooms and 88% teachers agreed that there is inclusion of gifted education content at higher Education Institutions. This implies that South Africa, a sub-Saharan African country with a big economy, is currently on the right track regarding pre-service training of teachers on gifted education.

It is acknowledged that the data collection method of the quantitative data created difficulties in terms of the return rate of questionnaires. Only 74 (94.78%) out of 78 questionnaires were returned. Schools in the same cluster were sampled for the study to enable the researcher to hand-deliver questionnaires to improve the return rate. It was also recognised that interviews that were used to collect qualitative data tend to produce subjective responses which may reflect social desirability rather than true results. The use of quantitative and qualitative methods triangulated the data to ensure they complemented each other to overcome this problem.

## Conclusions

It is evident from the teachers who participated in the study that GT learners are not effectively catered for in regular primary schools in the Hhohho region of Eswatini. Teachers used relatively few teaching methods to implement strategies used in teaching GT learners compared to those available in literature. This is attributed to the fact that most teachers who participated in the study lacked training in gifted education and direct technical support for assistance with provision for the diverse learning needs of learners, including the GT. Consequently, the teachers lacked knowledge of giftedness and gifted pedagogy that can be used in teaching GT learners to help them realise their potential. Additionally, informants believed that GT learners did not need help because of their superior intellectual capacity.

It is recommended that MoET should consider improving practicing teachers' knowledge of giftedness and gifted pedagogy through increased professional development during their teaching career. With regards to pre-service teacher education, increased information about gifted education should be considered by all teacher training institutions for all teachers during their undergraduate course to ensure effective provision for GT learners. It is equally recommended that MoET may have to consider developing a policy thrust on special programming for GT learners and culturally responsive assessment tools for early identification of GT learners that teachers can use. This would ensure that even learners with hidden gifts are identified to realise their full potential because under the current situation more learners with hidden gifts stand to be obscured.

## Acknowledgement

We thank Eswatini Education Research Association (ESWERA) who made it possible to communicate this research through monetary assistance and the ESWERJ Publisher's Office via Publication Fund.

## Conflict of Interest

We declare that there is no conflict of interest regarding the publication of the paper or otherwise.

## Authors' Contributions

MASEKO, S.D: Conception/design, development of data collection instrument, analysis, interpretation of data, revised manuscript (30%)

MASEKO, S.D: Conception/design, data collection, analysis, interpretation of data, editing and first draft (30%)

THWALA, S. K.: Conception/design, development of data collection instrument, analysis, interpretation of data, revised manuscript (10%)

FAREMI, Y.A.: Development of data collection instrument, analysis, interpretation of data, revised manuscript (10%)

THWALA, S. K.: Interpretation of data, first draft and revision (10%)

FAREMI, Y.A.: Interpretation of data, first draft and editing (10%)

## References

Ariss, L. D. (2017). *Differentiated instruction: An exploratory study in a secondary mathematics classroom* (Unpublished doctoral dissertation). University of Toledo.

- Babbie, E. & Mouton, J. (2010). *The practice of social research*. Cape Town: Oxford University Press.
- Bushra, N. (2018). *Perceptions of multiple stakeholders on the effectiveness of ability grouping of gifted and talented*, Master of Philosophy in Education thesis, School of Education, University of Wollongong. <https://ro.uow.edu.au/theses1/616>.
- Chawler, D. & Sodhi, N. (2016). *Research Methodology: Concepts and Cases (2nd Ed.)*. New Delhi: Vilkas Publishers House PVT Ltd.
- Combs, J.P. & Onwuegbuzie, A.J. (2010). Describing and illustrating data analysis in mixed research. *International Journal of Education*, 2(2), 1948-5476. <https://doi:10.5296/ije.v3i1.618>.
- Creswell, J.W. (2017). *Qualitative inquiry and research design: choosing among five approaches (5th Ed.)*. Thousand Oaks, CA: Sage Publications.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods Research (3rd ed.)*. Sage Publications.
- De Angelis, B. (2017). Inclusion and gifted education: pre-service and service educators' and teachers' perspectives]. *Journal of Educational, Cultural and Psychological Studies*, 16(4), 177-205. <https://doi:10.1080/09718923.2013.11893133> 21
- Erin, D. (2021). *Challenges facing gifted learners: How you can help!* <https://www.familyeducation.com/school/coping-giftedness/9-challenges-facing-gifted-learners-how-you-can-help?slide=4#fen-gallery>
- Eşsizoğlu, G., & Çetin, S. (2022). Impact of differentiated teaching in distance education practice on gifted and talented primary learners'. *International Online Journal of Primary Education (IOJPE)*, 11(1), 187-204. <https://doi.org/10.55020/iojpe.1100221>
- Gagné, F. (2015). From genes to talent: the DMGT/CMTD perspective. *Revista de Educación*, 368:12-37. <https://doi:10.4438/1988592X-RE-2015-368-289>
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide reference. 11.0 update (4th ed.)*. Boston: Allyn & Bacon.
- Gunawan, J. (2015). Ensuring trustworthiness in qualitative research. *Belitung Nursing Journal*, 1(1), 10-11. <https://doi:10.33546/bnj.4>
- Houghton, C. (2014). Capturing the pupil voice of secondary gifted and talented students who had attended an enrichment programme in their infant school. *Gifted Education International*, 30(1), 33-46. <https://doi:10.1177/0261429413480421>.
- Johnston, B. & Christiansen, L. (2012). *Educational research; quantitative, qualitative and Mixed Approaches*. Los Angeles: Sage Publications.

- Kaya, N.G. (2021). Effective classroom management qualifications for teachers of gifted students. *Electronic Journal of Social Sciences*, 21(82), 94-168. <https://doi:10.17755/esosder.1017473>
- Kettler, T. (2014). Critical thinking skills among elementary school students: Comparing identified gifted and general education student performance. *Gifted Child Quarterly*, 58(2), 127-136. <https://doi:10.1177/0016986214522508>
- Magableh, I. S. I., & Abdullah, A. (2020). On the effectiveness of differentiated instruction in the enhancement of Jordanian students' overall achievement. *International Journal of Instruction*, 13(2), 533-548. <https://doi:10.29333/iji.2020.13237a; 28.o1.2020>
- Maguire, M. & Delahunt, B. (2017). Doing a thematic analysis: A practical, Step-by-Step guide for learning and teaching scholars. *All Ireland journal of teaching and 22 learning in higher education AISHE-J*, 8(3), 335. <https://ojs.aishe.org/index.php/aishe-j/articleview/335>
- Mhlolo, M.K. (2014). Opening up conversations on the plight of the mathematically talented students in sub-Saharan African countries. In G. Howell, L. Sheffield & R. Leiken (Eds). *Proceedings of the 8th international conference of Mathematical Creativity and Giftedness*. Denver, Colorado, USA pp.77-81.
- Ngara, C. (2017) Gifted education in Zimbabwe. *Cogent Education*, 4:1, 133-284. <https://doi:10.1080/2331186X.2017.1332840>
- Ngara, C. (2017). Educating highly able students from an African perspective: A focus on indigenous cultures' views of giftedness and talent in Southern Africa. In M. Jennex (Ed.), *Handbook of research on social, cultural and educational considerations of indigenous knowledge in developing countries (pp. 161–180)*. New York, NY: IGI Global. Available from: <https://doi.org/10.4018/AKATM>
- Ngara, C., & Al-Mahdi, O. (2016). An exploratory study of teachers' perceptions of giftedness and talent among students in Bahraini primary schools. *Journal of Teaching and Teacher Education*, 4, 17–29. <https://doi:10.12785/JTTE/040103>
- Onyemaechi, N.P., Boh, S.A., Isiaku, W.B., Dede, C., Okpala, E.A. & Victoria Chikodi Onu, V.C. (2022). Contemporary issues and challenges of teaching special education for gifted and talented children. *Journal of Critical Reviews*, VOL 08, ISSUE 02, 2021
- Plano Clark, V. L. & Ivankova, N. V. (2016). *Mixed methods research. A guide to the field*. Sage Publications
- Schoonenboom, J., & Johnson, R. B. (2017). How to construct a mixed methods research design. *KZfSS Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 69(2), 107-131. <https://doi:10.1007/s11577-017-0454-1>
- Shenton, A.K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22 (4), 63–75. <https://doi:10.3233/EFI-2004 22201>

- Taylor, T. (2016). *Gifted Students: Perceptions and Practices of Regular Class Teachers*. <https://ro.ecu.edu.au/theses/1933> 23
- Thwala, S. K. (2018). Parents of children with disabilities in Swaziland Challenges and Resources in a Resilience Perspective. *International Journal of Humanities Social Sciences and Education*, 5(12), 28-40. <https://doi:10.20431/2349-0381.0512004>.
- Thwala, S. K., Ntinda, K., & Hlanze, B. (2015). Lived experiences of parents“ of children with disabilities in Swaziland. *Journal of Education and Training Studies*, 3(4), 206-215. <https://doi:10.11114/jets.v3i4.902>
- Tingzhao, Z. (2019) *Pedagogical approaches: a study of gifted readers in the primary classroom in Guangzhou, China and East Ayrshire, Scotland*. PhD thesis. <https://theses.gla.ac.uk/73022/>
- Tomlinson, C. A. (2017). *How to differentiate instruction in mixed-ability classrooms*. 3rd ed. VA: ASCD.
- Valiandes, S. (2015). Evaluating the impact of differentiated instruction on literacy and reading in mixed ability classrooms: Quality and equity dimensions of education effectiveness. *Studies in Educational Evaluation* 45: 17-26. <https://doi.10.1016/j.stueduc.2015.02.005>
- Van Wyk, M.G. (2018). *Teacher perceptions on mathematically gifted: A survey of mathematics teachers in Motheo and Xhariep districts' primary schools of Free State Province*. Free State: Central University of Technology. <https://hdl.handle.net/11462/1953>
- Zwane, S. L., & Malale, M. M. (2018). Investigating barriers teachers face in the implementation of inclusive education in high schools in Gege branch, Swaziland. *African Journal of disability*, 7, 391- 402. <https://doi:10.4102/ajod.v7i0.391>