Original Article

Promoting Equity in Education: How Teachers in a Public Primary School in the Indian Ocean Island of Seychelles Cater to Students' Learning Styles

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ABSTRACT

Equity in education demands that schools should cater to students' learning needs, including their learning styles. This research assessed how teachers in a public primary school in Seychelles cater to the learning styles of their students with a focus on how students' preferred learning modes are identified and categorised, the teaching approaches and methods teachers use to cater to the different learning modes, and the nature of the support teachers receive. Adopting the descriptive, single-case, cross-sectional research design, data were collected from the participants (n=7) through questionnaires and analysis of documents, namely lesson plans and assessment scripts. Approval to collect data from participants was obtained from the relevant education authority in addition to the informed consent of participants and pledging anonymity and confidentiality of data. Collected data from closed-ended items of the questionnaire were analysed with descriptive statistical techniques to produce frequency and percentage for each element of the variables being examined, and results were showcased in tables. Word-based data from open-ended items of the questionnaire and transcripts from analysis of documents were analysed interpretively, and results were presented as written summaries. Rather than using tested instruments to identify and classify students according to learning styles, the teachers relied on traditional strategies whose upshots are often prejudiced. Some of the teachers' teaching approaches and assessment techniques are incongruent with the student's learning styles. Albeit the teachers received support from their management and stakeholders, the support did not empower them to adequately cater to the learning needs of their students. A review of existing instructional models and monitoring mechanisms used by the school is recommended so that the management can easily detect areas where teachers need support and offer fitting professional development.

INTRODUCTION

Equity is one of the longstanding canons of education in many countries, but the degree to which it is practised is uncertain. In its basic connotation, equity is synonymous with fairness, impartiality, justice, and equality, but in its pragmatic meaning, equity entails providing opportunities to individuals according to their needs. In the educational jargon, equity refers to the institutional obligation of the government as well as the school to mitigate inequalities by providing each student with the opportunities he or she specifically needs to excel in their learning (Ismail, 2015; Castellia et al., 2012).

The concept of equity is reimagined in the Constitution of Seychelles (Third Republic) 1993 Section 33, where it is articulated as a cherished value in a society founded on the dignity of the person. There, equity encompasses the provision of equal educational opportunities to all citizens. This statutory declaration inspired the expression of equity into the country's mainstream education frameworks, including the policy statement of the Ministry of Education, the National Curriculum Framework, and the inclusive Education policy (Ministry of Education, 2015, 2013; Republic of Seychelles, 1993). These frameworks lend support to the Convention on the Rights of the Child Article 3(1), which provides that all actions concerning children, whether undertaken by public or private social institutions, must give attention to the best interests of the child (United Nations, 1989) which, in the Seychelles Ministry of Education parlance, entails not only equal opportunity to all but also creating conditions for optimum achievement according to individual circumstances (Republic of Seychelles, 2000).

There are various approaches to promoting equity in education, but one of the widely advocated strategies is catering to the different learning styles of students in the classroom. However, it is uncertain whether teachers in Seychelles are effectively promoting this value in the classroom. For teachers to effectively cater to the different learning styles of students, they must be able to identify and categorise their students' preferred learning mode(s) and adapt their teaching to accommodate those differences. To succeed in this educational enterprise necessitates that teachers must be adequately supported by their management and other stakeholders. Some recent studies have shown that when the learning style of students is congruent with the teacher's teaching approaches, students get actively involved in learning, and if sustained, this could lead to an improvement in

academic achievement (Cabual, 2021; Yin et al., 2020).

Among the goals of Primary Education in Seychelles is for the child to acquire a sound base in core academic subjects sufficient to support further learning at the secondary level (Ministry of Education, 2000). This goal may not be achieved without teachers who are dedicated to ensuring the learners are provided opportunities to excel in their learning according to their needs. It is reasonable at this point to assess how teachers in state primary schools in Seychelles promote equity by catering to students' learning styles. Since there is a paucity of empirical research done with samples from Seychelles, it is also reasonable to examine one school at this time, as doing so may give an insight into the situation in other comparable schools. Thus, this study aimed to establish whether the teachers in a public primary school in Seychelles adequately cater to the different learning styles in their classrooms. Its objectives were to find out how teachers identify and categorise students according to learning style, the teaching and assessment strategies employed by the teachers to cater to different learning styles, and the kinds of support the teachers receive to inspire them to keep on catering to the student's learning styles. The outcomes will provide insight into the professional development needs of teachers at School X regarding catering to students' learning styles, a value founded in equity.

THEORETICAL FOUNDATION

A review of the myriad of recent publications and research on human learning reveals that not all children learn in the same way (Parker et al., 2022; Lamb et al., 2020; Magulod Jr, 2019; Singh, 2014; Xu, 2011). The concept of learning style became popular fifty decades ago and endures as an important topic of conversation amongst learning science researchers as yet. However, opinions vary regarding the meaning of learning style culminating in a range of definitions of learning style that exist in literature. Previously, the focus was on the relationship between memory and oral or visual methods (Sreeidhi & Chinyi, 2017), but with extensive research on this topic, new models of learning styles have been developed, and each model offers a different method of classifying students.

Learning style is described by Othmana and Amiruddin (2010) as the learning methods a person mostly uses in the process of learning. For Duff (2000), learning style is a composite of cognitive, affective, and psychological factors that dictates how a person interacts and responds to the learning environment. These views corroborate some scholars (e.g., Renner, 2010; Hawk & Shah, 2007; McAdams & Pals, 2006) who describe learning style as one of the unique features of personality. A more precise meaning of 'learning style' is offered by Davis (1993), who defined learning style as a person's preferred way of gathering, organising, and thinking about information (p. 185). However, caution must be exercised when defining learning style so as not to confuse it with 'multisensory learning, as both involve learning and the senses. One of the main current ideas about learning styles (preferred perceptual modes) is that information accessed with strategies aligned with a student's modality preferences is more likely to be understood and be motivating. However, many students show predilection in more than one learning mode. Specifically, underpinning multisensory learning is the assumption that students can learn through the objective faculties of their brain, allowing them to define the qualities or characteristics of what they see, hear, touch, smell, and taste (Fadeev & Milyakina, 2021; Taljaard, 2016; Morgan, 2009).

Neil Fleming's VARK learning style model (Fleming, 1987), for example, focuses on the different ways that students take in and give out information and classifies students based on their preferred perceptual modes of learning: visual, auditory, read and writing, and kinaesthetic. Visual learners prefer pictures and learn best with visual

images such as diagrams and videos; and also enjoy working in groups and use teachers' non-verbal cues, such as body language, to help with understanding. Auditory learners learn better through listening. They enjoy class discussions and lectures, are good at telling stories and jokes, and have tasks involving solving problems simply by speaking and analysing them. Read-write learners have a predilection for printed words and other forms of textual information. They are good at taking notes and thus learn best through note-taking during lectures or when reading printed materials. Kinaesthetic learners learn best when learning tasks involve conducting an experiment in which they are physically involved, field trips, exhibitions, case studies, real-life examples, role-plays, and applications. Over and above, the VARK model offers a perspective of thinking about strategies for teaching different groups of students, and in this way, the model could be helpful in promoting fairness in the classroom (Sabiston & Leung, 2020; Hussain, 2017; Othmana & Amiruddin, 2010). The VARK model categorising learning style was chosen to guide this study owing to its inclusiveness.

Since students' perceptual modes of learning vary, classroom teachers need to have the capacity to identify and label students according to their preferred learning styles. Acting in the best interest of the child will require teachers to carry out a needs analysis in the classroom at the beginning of the school year to help students identify their learning styles. Information obtained from the assessment should also be communicated to other teachers teaching those students(Jamulia, 2018). Such information will help those teachers, especially novice teachers and those who have been transferred from other schools or to new classes, to understand their students better. Various tools including the Vermunt's Inventory, Gregorc, Dunn, and Kolb learning style models, Fleming's Visual, Aural, Read/Write, and Kinaesthetic (VARK) Inventory, have been developed and used for identifying and classifying students according to

learning style preference, but the most widely used tool is the Flemings and Kolb models (Refugio & De Guzman, 2018; Guven & Özbek, 2007; Coffield et al, 2004). These inventories usually take the form of a questionnaire that focuses on the student's preferred mode of learning.

Aside from the use of questionnaires, students' preferred learning styles can be detected by the teacher through observation during the lesson (Jamulia, 2018; Al-Khayat et al., 2013; Smith & Dalton, 2005). Parents can also be a valuable source of information about the way their child prefers to learn new skills or gain new knowledge (Al-Khayat et al, 2013). However, these traditional strategies of identifying and labelling students according to learning mode preferences do not always yield reliable results. So, it is important that teachers use validated instruments if they are conversant with their application. Once a student's learning style has been identified, teachers will support them to tailor their learning process in that direction. This will not only help to make their learning process easier and faster but also enable them to become more successful learners in terms of accomplishments (Wan, 2017; Hawkar, 2014). Therefore, to achieve effective teaching, the teacher must have the capacity to respond to recognise differences among the students and provide each learner with the kind of support they need to excel in their learning, including catering to their learning styles in the classroom. This research seeks to establish the techniques teachers at School X use to identify and categorise their students according to their learning styles.

Planning a lesson that caters to the different learning modes of students involves making germane choices, such as how learning experiences, environment, and activities should be organised and presented while also facilitating critical and creative thinking. Teachers should also make choices of instructional strategies that will help the students to understand and apply meaning to given learning tasks (Singh, 2014). Although teachers have their

own preferred learning modes, they should be able to adapt theirs to meet the needs of the learning styles of their students (Zhou, 2011). During lesson execution, teachers should endeavour to match teaching with students' learning styles as well. An effective way of doing this is differentiated instruction, a philosophy of teaching which upholds that students learn best when instruction accommodates their individual needs. It involves the modification of four key elements of instruction: content, process, product, and *learning* environment. Differentiating a lesson would involve ensuring that learning activities and teaching methods match the different learning styles in the class (Malacapay, 2019; Tomlinson, 2005). Similarly, differentiating assessment would involve using a mosaic of techniques such as traditional paper-pencil exams, performance tasks, and other hybrid assessment techniques to cater to the different learning modes of the students. Tasks that involve participation in discussion and oral presentation can be appropriate for auditory learners, whereas traditional paper-pencil exams can be appropriate for read-and-write learners. For visual learners, assessment formats such as posters, illustrated presentations, photo essays, or web pages can be of immense benefit. Kinaesthetic learners can be assessed by employing a checklist to grade their performance while completing specific allocated tasks. All these highlight the significance of having a wide range of activities and resources that facilitate the learning process for all students regardless of their learning styles (Demir, 2012; Franzoni & Assar, 2009). Therefore, the second objective of this study is to understand the teaching and assessment strategies and methods the teachers at School X employ to accommodate the different learning styles of their students.

For classroom teachers to succeed in promoting equity in their classrooms, they must be supported. They need support from the school management and parents. The school management should ensure that resources for teaching and learning at their school are varied, appropriate, and adequate to cater to the

different learning styles. Teachers have to be creative when planning lessons to ensure the resources suit their students' needs. Teachers can also bring some materials from their homes and turn them into useful instructional resources. In addition, building an effective relationship with parents can be of immense benefit to teachers as the parents of the students can also assist with providing some instructional resources for teachers and students to use. School management can support teachers through coordinated, coherent, adequately resourced, and quality-assured professional development (Niemi, 2015). The use of a variety of resources during lessons offers opportunities for multisensory learning, described by Fadeev and Milyakina (2021) as an educational strategy that stimulates learning by engaging students at multiple levels. Thus, the third objective of this study was to understand how teachers at School X are supported to cater to their students' preferred learning modes.

REVIEW OF EMPIRICAL STUDIES

Some recent studies have investigated how teachers identify and categorise students' according to learning styles; among them, Kharb et al. (2013) conducted with a sample from India, and Navor (2022) used a sample from the United States. No empirical research on the topic of this study conducted with samples from Seychelles was found after an extensive literature search. Using a sample of 100 first-year students in an Indian University, Kharb et al. (2013) examined their preferred learning styles as well as their preferred teaching approaches. Students' preferred learning modes were identified with the VARK questionnaire, version 7.1. They were also asked to rank their teachers' teaching strategies in order of preference. On the other hand, Navor (2022) examined the daily lesson logs of English teachers in a high school in the United States to ascertain the learning style preferences of the students and the instructional strategies used by the teachers based on classroom activities listed in the teachers' lessons. The aim was to ascertain whether there is congruency

between the learning style preferences of the students and the teacher-implemented activities as described in the teachers' lesson plans. Using the mixed approach, the quantitative component surveyed students' learning style preferences, and the qualitative component perused teachers' daily lesson plans. With an adapted version of the VARK Learning Styles Self-Assessment Questionnaire, the learning activities and procedures were categorised according to the learning style being catered to. A common feature of the two studies is that both used the VARK instrument to assess the learning styles of students, although their samples varied in terms of the level of the students.

Concerning the results, Kharb et al. observed that 61% of the students had a mixture of learning styles, and among them, 41% had two major preferences, 14% had three preferences, and 6% had a mixture of all four modes of learning. 39% of the sample had one preferred mode of learning. Regarding teaching approaches, 39% have a preference for practical, while 12% have a preference for tutorials. The study concludes that a single approach to teaching does not work for every student; therefore, teachers must be aware of the various learning styles in the class and make an effort to achieve a balance between their teaching and students' learning styles. On the other hand, Nasor observed that the students differ in learning style preferences, but the teachers' instructional strategies are not congruent with the student's learning styles. Hence, professional development focusing on training on matching students learning styles with teachers' instructional strategies is recommended. The purpose of the present study was to assess the extent the teachers in a public primary school in Seychelles cater to the different learning styles in their classrooms. The methodology of the study is described in the next section.

METHODOLOGY

The Context

Seychelles has 24 public primary schools located on the three inhabited islands - Mahe, Praslin, and La Digue. Among the 24 public schools, 21 are located on the main island, Mahe. All the schools are mandated to promote equity as enshrined in the Policy Statement of the Ministry of Education (Ministry of Education, 2000) with the hope that doing so will improve academic performance and achievement. All public primary and secondary schools in the country are superintended by the Principal Secretary and the Director of Schools, and all have used the LES (Learning Evaluation Structure) for lesson planning since 2017. English Language and Mathematics are recognised as core subjects in the National Curriculum Framework. The school where this study was conducted is a two-stream public primary school located on the western side of Mahe, with a population of 30 teachers and 235 students at the time of this study. Teachers at the school vary in qualifications and experience. Over the years, the school has been labelled 'underperforming' based on the results of nationwide assessments. This study was conducted in 2021 during the COVID-19 outbreak in an atmosphere of restrictions.

Research Design

A descriptive, single-case, cross-sectional design is deemed appropriate to examine how a sample of teachers at School X caters to the learning style preferences of students. Thus, the study's unit of analysis is School X, and the conclusion will not be generalised to other schools. The sample was selected purposively. The participants were 3 English Language teachers and 4 Mathematics teachers teaching Primary 3 to Primary 6, which represents 23% of the population of teachers at the school. The selected classes were those where the physical dependency of early childhood is assumed to be over, and the students are much more independent. The focus is on English Language and

Mathematics because these two subjects are regarded as the cornerstone of the primary education curriculum. At the time of this research, one of the authors seconded to assist the Manager of the President's Village, which is a state-funded children's residential care home, and some of the residents of the home were attending School X. A warm working relationship existed between the managements of the home and School X which, coupled with the low rating of the school, motivated this study.

Data Collection: Tools and Procedure

Data were collected with two methods: a self-completion and a semi-structured questionnaire and document analysis. The questionnaire, containing open and closed questions, had four sections - A to D. Section A contained eight items and collected background information about the participants, such as gender; age; educational qualification; teaching experience, teacher education/training programme completed, training on how to cater to the different learning styles of students, class mostly taught; class size; and favourite teaching subject. Each item had categories. The assumption is that these background details of the participants could influence how they cater to their student's learning styles. Sections B, C, and D of the questionnaire focused on the main research variables.

Section B focused on the strategies employed by the teachers to identify and categorise students according to learning styles. The questions asked include: i) Is it proper for a teacher to know a student's preferred learning style? Support your opinion with reason; ii) How did you identify the preferred learning style of the students in your class? iii) In which category of learning style do most of the students in your class belong? Section C focused on the teaching approaches/methods applied by teachers to cater to the different learning styles of their students. The questions asked are: i) Do you consider student-learning styles when planning lessons? If 'Yes, state at least two decisions you make that show you consider their

learning styles when planning lessons. ii) Do you consider student-learning styles during lesson delivery? If 'Yes', state at least two decisions you make that show you consider their learning styles during lesson delivery. iii) Do you consider student-learning styles during the assessment of learning? If 'Yes', state at least two important decisions you make that show you consider their learning styles during the assessment of learning. Section D focused on the types of support teachers receive to cater to the different learning styles of their students. The questions asked are: i) Do you receive support from the management of your school to cater to the different learning styles in your class? If 'Yes', list the types of support you receive. ii) Describe the nature of the support. iii) Do you receive support from any other individual or group? If 'Yes', list the sources.

Before data collection, written approval to access the school was obtained from the Principal Secretary of Education. In addition, informed consent from the participants was obtained by requesting them to sign a consent form, and their anonymity and confidentiality of information were guaranteed. Following that, this study was conducted during the COVID-19 outbreak; the questionnaire was distributed to the participants via e-mail in compliance with the Ministry of Health's regulations. The participants willingly provided their email addresses and phone number so that they could be reached since person-to-person contact was forbidden at the time.

The participants were allowed two days to complete it and return the questionnaire. The reason for allowing the participants a short time to complete the questionnaire was to reduce the risk of missing the questionnaire, which often happens when participants are allowed a longer time, as experience has shown. Three out of the 7 participants voluntarily provided copies of their lesson plans and assessment scripts for Mathematics and the English Language. From each subject, three samples of lesson plans and assessment scripts were selected

randomly from the pool. Analysis of the collected documents involves finding, selecting, making sense of, and finally synthesising the content of the document (see Bowen, 2009; Labuschagne, 2003). Analysis of the lesson plan was guided by this question: Does the teacher consider student-learning styles when planning lessons? Provide evidence showing they do or not – consider the learning activities, the resources, and how students are grouped. Analysis of the assessment scripts is guided by the question: Does the teacher consider student-learning styles during the assessment of learning? Provide evidence showing they do or do not – consider the mode of assessing and types of items. Thus, the analysis of both documents focused on variable 2: Teaching approaches/methods used by teachers to cater to the learning styles of their students, which corresponds with Section C of the questionnaire.

Data Analysis Techniques

Completed questionnaires and transcripts from the analysis of documents were checked and coded according to the sources of the data and the variables being examined. Numerical data from closed-ended items of the questionnaire were analysed with descriptive statistical techniques to produce the frequency and percentage for each element of the variables being examined, and results are presented in tables. Word-based data from open-ended items of the questionnaire and transcripts from document analysis were analysed interpretively and presented in short written paragraphs/summaries, as shown in the next section. Results of the analysis of questionnaire data established how the preferred learning modes of students are identified and categorised, the strategies that the teachers employ to cater to different learning styles during lessons and assessments, and how the teachers are supported. Results of the document analysis data establish the strategies that the teachers employ to cater to different learning styles during lessons and assessments and supplement results from the analysis of questionnaire data.

RESULTS

The Sample Characteristics

When the data from Section A of the questionnaires were analysed, the results indicated (see Table 1) that all 7 teachers were females and (n=2) taught in P3, P5, and P6, respectively, and only one taught in P4. Among the 7 teachers, 3 were aged less than 30, and 4 were 30 years and above. The majority (n=4) had a diploma level qualification, one had an O' Level certificate, and 2 had the Advanced Diploma. Additionally, the majority (n=4) had more than 10 years of teaching experience and the other three had less. All 7 participants had less than 30 students in their class. The subject preferred by the majority of the participants (57%, n=4) was Science, while English was their least preferred subject. Most of the teachers (57%, n=4) had completed teacher education/training during which they were taught how to cater to the different learning styles in the classroom.

Table 1: Demographics of the participants based on data from the questionnaire

Variable	Grouping		n	%
Gender	Male		0	0
	Female		7	100
	Others		0	0
Age	Less than 30		3	43
	30 and above		4	57
Qualification	School Certificate/O' Level		2	29
	A' level/Post-Secondary Diploma		4	57
	Advanced Diploma		1	14
	Bachelor's Degree		0	0
	Master's Degree		0	0
Teaching experience	Less than 10		4	57
	More than 10		3	43
Professional training	Attended teacher education/training	Yes	4	57
		No	3	43
	I was taught how to cater to different learning styles during teacher education and training.	Yes	4	57
		No	3	43
Level of students you teach	P3		2	28.6
	P4		1	14.2
	P5		2	28.6
	P6		2	28.6
Size of the classes	Less than 30 learners		7	100
	30 and above		0	0
Most preferred teaching subject	English		1	14
	Mathematics		3	43
	Science		4	57
	Social Studies		3	43
	Others		0	0

How Teachers Identify and Categorise Students by Learning Style Preference

Table 2 shows that all the participants (100%, n=7) were of the view that it is appropriate that a teacher knows the preferred learning styles of their students to prepare and execute their lessons in ways that suit the students. When the participants were asked how they identify a student's preferred learning style, the majority (71%, n=5) said through discussion with the students and observing them while they are on task. Some others said they do so through feedback from parents (42.8%, n=3), one said feedback from other students, and none enquired from the students about their preferred learning style. When the participants were asked what are the different categories of learning styles in their class, the majority (71%, n=5) said they had a mixture of the different types of learning styles: visual, auditory, kinaesthetic, and read-and-write. One participant said she had mostly visual, and the other participants said she had mostly kinaesthetic learners. From their responses, none had auditory and read-and-write learners.

Table 2: Opinions of the participants gathered through questionnaires on the strategies they use to identify and categorise their students according to learning styles.

Elements	Response categories	n	%
Knowledge of the preferred learning style of your students	Yes	7	100
	No	0	0
How students' preferred learning styles are identified.	Engaging the student in discussion	5	71.4
	Observing the students when they are performing a task	5	71.4
	Asking the student about their preferred learning style	0	0
	Feedback from other students	1	14.3
	Feedback from parents	3	42.8
Types of learning styles you have in your class.	Visual	1	14.3
	Auditory	0	0
	Kinaesthetic	1	14.3
	Read and write	0	0
	A mixture of different types	5	71.4

How Teachers Consider Student's Learning Style Preferences in Their Teaching

Table 3 shows all participants (100%) take the students' learning styles into account when planning and executing lessons. When they were asked to state at least two main decisions they commonly take that prove they consider students' learning styles when planning lessons, some of them remarked 'different learning activities' while others remarked 'researching to gather materials such as pictures and videos that relate to the lesson', 'group work', and 'real-life activities'. For lesson execution, some remarked that they use a variety of strategies to engage students, use different resources such as pictures and videos, and differentiate. When it comes to assessment, 86% of the participants (n=6) remarked that they consider the learning style preferences of their students during assessment by providing tasks that involve the use of pictures alongside written items, tasks of different levels of difficulty, and a mix of written and oral tasks.

Table 3: Opinions of the participants gathered through the questionnaire on whether they cater to students' learning styles during lesson planning, execution, and assessment

Elements	Response categories	n	%
Lesson planning	Yes	7	100
	No	0	0
Lesson execution (delivery)	Yes	7	100
	No	0	0
Assessment	Yes	6	86
	No	1	14

When the data gathered from the analysis of lesson plans for the two subjects were examined, it was found that all lesson plans had lesson objectives that cater to all the learning needs of the students. Mathematics lesson plans specified the teacher and the learners' activities clearly, but the statement of students' prior knowledge was not well formulated. However, instructional resources were varied and appropriate for the learning activities, and individual and group work was planned. Written tasks were always given, but one of the lesson plans lacked the resources to cater to visual and kinaesthetic learners. English Language lesson plans were more detailed than Mathematics; however, none of the three lesson plans had a statement of students' prior knowledge. All three

lessons began with a motivational activity aimed at inspiring and engaging the students. The motivational activities were varied too. Regarding resources, visual learners were catered to as students were to use worksheets, pictures, and charts during lessons. Auditory learners were catered to through learning activities involving explanation and discussion. Read-and-write learners were also catered to through activities involving dictations and writing, but kinaesthetic learners were not catered to as a few resources and activities were planned for them. Assigned tasks were mostly individual work, unlike mathematics lessons that incorporated group work. In the final analysis, mathematics lessons cater to auditory and read-and-write learners more than the other learning style categories; English Language lessons give more attention to visual, auditory, and read-and-write learners.

Analysis of the assessment papers focused on the mode of assessment and the assessment items. When the Mathematics scripts were analysed, it was found that the questions were varied, including multiple-choice, number sequence, calculations, problem-solving, completion, and answering questions. Some of the items required the students to use diagrams to illustrate concepts when answering the questions. One exercise in the

Primary 3 paper required the learners to physically count squares on various diagrams to find the area, and another in the Primary 5 paper to derive the length of different lines, which catered to the kinaesthetic learners. For the English Language, the assessment papers catered to read-and-write learners. In one paper, the learners were required to produce a paragraph to describe their favourite sport and construct a story using given pictures. The other two papers consisted of exercises such as multiple choice, true/false statements, direct questions, matching, and cloze text. In the final analysis, only written assessments were given, which catered mostly to the visual and read/write learners.

Types/Sources of Support Teachers Receive to Cater to the Different Learning Styles in Their Class

Table 4 shows that all participants (100%) claimed that they received support from the management to cater to the different learning styles in their class and that the support received was adequate. The majority (71.4%, n=5) reported that they also receive support from other individuals and groups apart from their school management. 28.6% (n=2) of the participants reported that they do not receive any additional support aside from their school management.

Table 4: Opinions of the participants gathered through questionnaires on the kinds of support they receive to cater to their student's learning styles.

Items	Response categories	n	%
Receive support from the school management.	Yes	7	100
	No	0	0
Description of the support receive	Adequate	7	100
	Inadequate	0	0
Support received from other individuals/groups	Yes	5	71.4
	No	2	28.6

Furthermore, when the participants were asked the types of support they receive from the school management, they listed team teaching, team planning on how to develop concepts effectively and the planning of learning activities, and advising

on the choice of teaching strategies appropriate to the different learning modes. When asked who are the individuals and groups that support them, they listed teachers/colleagues at their school and from

other schools, parents, members of the community, and university lecturers.

DISCUSSION

The results presented in the preceding section correspond with the objectives of this case study. The seven teachers in School X who took part in the study understand the need for classroom teachers to know the preferred learning modes of their students, a positive development that could be attributed to the fact that the majority (57%, n=4) had completed a teacher education/training programme and were taught how to cater to a student's learning style in the classroom. The fact that the majority had been in teaching for more than ten years is also an advantage for understanding how students learn, behave, and think. When the participants were asked to indicate their favourite teaching subjects, most of them expressed a preference for Science (57%), followed by Mathematics and Social Studies (43%). Only one participant expressed a preference for the English Language (see Table 1). There is a shared belief that attitude is infectious. Consequently, the attitude of a teacher toward a subject may influence the attitude of her students toward that subject and may also influence the energy and time the teacher invests in planning and executing lessons and designing assessment tasks. Students taught by enthusiastic teachers are more likely to perform better at school than those taught by less enthusiastic teachers, and this could explain why the school is underperforming in national assessments.

Among the seven participants, one reported she had visual learners, and another reported she had kinaesthetic learners. The majority (n=5) had a mixture of different types of learning styles – visual, auditory, kinaesthetic, and read-and-write which corroborates Kharb et al. (2013), who, with a sample from India, found that most students had a mixture of learning styles but contradicts Narso (2022) who, with a sample from the United States found that most high school students are visual learners. Remarkably, most participants used terminologies applicable to Fleming's VARK model, such as visual, kinaesthetic, and read-and-write, when describing how they categorise students. The fact that the majority (n=4) passed through teacher education and were taught how to identify students' preferred learning modes and yet said they had only visual or kinaesthetic learners in the class raises questions on the validity of the categorisation strategy. Probably they were not taught how to apply some learning style inventories. This finding could explain the participants' reliance on traditional strategies to identify the learning styles of their students.

Results shown in *Table 2*, coupled with analysis of documents, revealed that some of the lessons and most of the assessment tasks are not entirely differentiated. Even though all 3 Mathematics lessons included written tasks for the students, only one lesson catered to visual and kinaesthetic learners. Most of the Mathematics lessons catered to auditory and read/write learners, a contrast to English Language lessons that mostly catered to visual, auditory, and read/write learners. The most common mode of assessment was written tasks, mostly in the English Language, which favoured read-and-write learners who preferred printed words and texts. Some assessment tasks involved illustrating concepts with diagrams, and none involved posters, presentations, and photo analysis. The fact that most classes had less than 30 students could have enabled differentiation of instruction as articulated in the National Curriculum Framework, but that was not the case. This finding corroborates Narso (2022), who observed a mismatch between the student's learning style preferences and the teachers' instructional strategies.

Regarding support provided to teachers, all seven participants said they received support from their school management team members, colleagues, parents, some members of the community, and lecturers from the University of Seychelles. Most of the support target team teaching and team planning of lessons and selection of appropriate teaching

strategies for lessons (see Table 4). However, a closer look at the kinds of support provided to teachers reveals a mismatch between the support teachers receive and what they need to be able to effectively cater to the different learning needs of students. Probably the teachers are unaware that they are not adequately catering to the learning needs of their students or that offering support to the teachers is not sure exactly the kinds of support teachers need to adequately cater to the different learning needs in the classroom. When it comes to materials for teaching and learning, it is important to emphasise that teachers can use locally available materials rather than relying on commercial items. To reduce pressure on the school and teachers, students can be encouraged to bring some locally available materials from their homes for their learning. The use of a variety of resources during lessons offers opportunities for learning through multiple senses, particularly for students who may have more than one preferred learning mode.

Using a sample drawn from Primary 3 to Primary 6 coupled with multiple methods of data collection helped to provide rich data aligned with the study's objectives which also reflects the situation at the school. Although the findings cannot be generalised to all 24 state primary schools because of the non-representativeness of the study's sample, they may offer an insight into how the learning needs of students are met in other small public schools in the country. Given the paucity of research on how teachers cater to the different learning styles of their students done with samples from Seychelles, this study makes an important contribution to knowledge and research.

CONCLUSION

For a small island state like Seychelles, founded on the dignity of the person, providing opportunities to students in accordance with their learning needs is critical. This case study assessed how teachers at a public primary school cater to their student's learning styles. Findings indicate that the teachers, on no occasion, used validated instruments like the VARK questionnaire that yield dependable upshots. Instead, they relied on traditional strategies such as observation and parent reports which have been extensively criticised for being prejudiced. Some of the teaching and assessment strategies employed by the teachers are not differentiated. Over and above, the support provided to the teachers was inadequate to empower them to effectively cater to the learning needs of the students. Putting into perspective the theoretical assumption that students' engagement in lessons and academic achievements are enhanced when their learning style is congruent with the teacher's teaching strategies and methods (see Cabual, 2021; Yin et al., 2020), it is logical to infer that ineffective teaching at School X may perhaps account for the poor performance of the students which led to the school being labelled by the Ministry of Education as 'underperforming'. Against this backdrop, the school management should re-evaluate existing instructional models and tools used by teachers and recalibrate instructional monitoring mechanisms to be able to easily detect the difficulties teachers encounter vis-à-vis catering to the learning styles of their students so that appropriate support can be provided.

It is significant to note that this study was conducted in 2021 in an atmosphere of restrictions announced by the Ministry of Health in compliance with the World Health Organisation's directives during the COVID-19 outbreak. The restrictions in place at the time did not permit direct observation of lessons and face-to-face group discussions with the teachers and students, which could have yielded some valuable data that could add some dimensions to the findings. We recommend that future research should incorporate direct observation of lessons as a strategy of data collection in order to ascertain whether there is congruency between what the teachers stated in their lesson plans and their actions in the classroom.

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Declaration of Conflicting Interests

There is no conflict of interest between the authors.

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