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## Teaching Strategies Leading to Success in Self-Contained Classrooms

Sonja Michelle Robinson-Madden

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# Teaching Strategies Leading to Success in Self-Contained Classrooms

by  
Sonja Robinson-Madden

An Applied Dissertation Submitted to the  
Abraham S. Fischler College of Education  
and School of Criminal Justice in Partial  
Fulfillment of the Requirements for the  
Degree of Doctor of Education

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## Approval Page

This applied dissertation was submitted by Sonja Robinson-Madden under the direction of the persons listed below. It was submitted to the Abraham S. Fischler College of Education and School of Criminal Justice and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Nova Southeastern University.

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## Statement of Original Work

I declare the following:

I have read the Code of Student Conduct and Academic Responsibility as described in the *Student Handbook* of Nova Southeastern University. This applied dissertation represents my original work, except where I have acknowledged the ideas, words, or material of other authors.

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Sonja Robinson-Madden

Name

December 18, 2020

Date

## Acknowledgments

This body of work is the result of hours of dedication and hard work. Its completion would not have been possible without the contribution of a number of individuals to whom it is my pleasure to convey my appreciation. First and foremost, I thank God for the strength and endurance to persevere even when things seemed insurmountable. At times I felt like giving up, but I now know that I am capable of more than I thought possible. I would like to thank my grandmother, Naomi Wilson. The values instilled in me at an early age brought me through so many difficult times. To my mother, Beverley Wilson-Meredith, every time I thought I could not go another step, your example of resilience pushed me farther. My stepfather, George Meredith, who always encouraged me to do my best, I thank you for your faith in me. You have both taught me the value of education, and, for that, I shall be eternally grateful. My cousin, Shanaloy Singh, who offered a listening ear and was my stress reliever, I say thanks.

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This body of work is a symbol of persistence, hard work, and high self-efficacy. As the first person in my family to be able to achieve this goal, especially coming from a background of poverty, it is also a representation of the inert possibilities in all of us once we start to believe in ourselves and take the time to put in the work.

## Abstract

Teaching Strategies Leading to Success in Self-Contained Classrooms. Sonja Robinson-Madden, 2020: Applied Dissertation, Nova Southeastern University, Abraham S. Fischler College of Education and School of Criminal Justice. Keywords: special education, educational strategies, special needs students, intellectual disability, special classes

This applied dissertation addressed the strategies used in self-contained classrooms that lead to the success of students with intellectual disabilities in Jamaica. The study was prompted by the poor performance of primary schools in teaching delivery as evidenced in the National Inspectorate Report. The views of successful teachers were collated in order to provide meaningful research data that can be used to improve the effectiveness of teachers regarding their teaching strategies and engagement of their students in the teaching-learning process. In addition, the research findings may be used to inform policies regarding the education of special needs students who are taught in self-contained classrooms in the island of Jamaica.

The researcher used a qualitative descriptive case study research design to analyze participant responses on teaching strategies that lead to success of students with intellectual disabilities. The study focused on factors that determine the strategies used, the models used to design the teaching strategies, and accommodations made to the teaching strategies that lead to the success of intellectually disabled students who are taught in self-contained classrooms.

Findings revealed that a constructivist approach was taken to teaching that allowed students to be more engaged in the learning process and created positive attitudes toward learning. Use of an individualistic approach allows teachers to accommodate students and target specific learning deficiencies. An implication of the research is the value of good relationships and with students and parents that can facilitate the holistic development of students with intellectual disabilities.

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## Chapter 1: Introduction

### Statement of the Problem

Research shows that the right teaching strategies have positive effects on the academic achievement of students (Blazar & Kraft, 2017; Darling-Hammond et al., 2017; Khalil & Elhider, 2016). Teaching strategies are behaviors and actions that lead to the growth and development of students (Blazar & Kraft, 2017). The process begins with a plan of what stimulus will be implemented in the classroom to manifest the behaviors desired. To achieve academic and functional goals, the right settings, along with high quality curriculum and instruction, are required because student outcome is heavily dependent on the level of planning, methods selected, and the types and varieties of activities for learning (Browder et al., 2020).

Intellectual disabilities (ID), also referred to as cognitive disabilities, fall under the umbrella of developmental disability. Some other accepted terms are developmentally delayed, learning disability, and mental handicap (Girimaji & Pradeep, 2018; Scior et al., 2015). ID refers to limitations in intellectual functioning and adaptive behavior that become evident before age 18. This leads to a need for support systems to enable typical human functioning (Tassé et al., 2016). The *Diagnostic and Statistical Manual of Mental Disorders*, International Classification of Diseases, and American Association on Intellectual and Developmental Disabilities (2019) explicitly stated that deficits in intellect and adaptive behavior are characteristics of ID. Tassé et al. (2016) noted that, over the years, three essential elements of ID have been arrived at: limitations in intellectual functioning, limitations in adaptive functioning, and evidence of limitations during childhood. Intellectual limitations refer to the inability to reason, solve problems, plan, understand, and use concepts appropriately. Adaptive limitations impact the ability

to perform everyday life activities (Girimaji & Pradeep, 2018). As a result of these limitations, students diagnosed with an ID will need individualized help and support that is available through special education and its related services.

For effective learning to take place, focus needs to be directed to having the right curriculum that will meet the needs of students, then delivering the content using differentiated instruction and assessing students in such a way that they are able to show what they have learnt (Crossfield & Osbourne, 2018). However, with special education (SPED) students experiencing discrimination in contrast to their peers in general education through the use of separate curricula, separate classes, and separate instructional techniques (Association for Supervision and Curriculum Development, 2018; Patterson, 2019), there is still a high degree of uncertainty of what the specific strategies are and how to implement them in the classroom (Park & Datnow, 2017).

Spencer-Ernandez and Edwards-Kerr (2017) conducted a study on teacher training for special needs education in the Caribbean. The researchers concluded that there is a shortage of trained teachers in all countries reviewed, including Jamaica. The research revealed that this lack of training was reflected in the teaching strategies used in the classroom and called for a need for coherence in the structure and delivery of the SPED curriculum. The report highlighted that most teachers are not equipped to identify and deal with the learning difficulties of SPED children. Additionally, teachers strongly agreed that they are provided with useful materials on how to use different teaching methods but shared that they lacked confidence in teaching students with learning disabilities. Ali, Barras, et al. (2015) postulated that teacher education can no longer be focused on simple training but must instead inculcate the lived experiences, histories, and realities of teachers. Teacher experiences must be explored to discover structures that can

lay a foundation for transformation (Crossfield & Osbourne, 2018).

### ***Phenomenon of Interest***

The problem addressed by this study involved the lack of research on successful teaching strategies for ID students who are taught in self-contained classrooms. The educational experience of students hinges on the attitude and beliefs of the educator (Blazar & Kraft, 2017). Student performance is largely dependent on the effectiveness of the teaching strategies used by teachers (Muema et al., 2018). Effective content delivery can help improve the performance of students, especially when they are learner-centered (Muema et al., 2018). Okwuduba and Okigbo (2018) lauded the value of knowledge of teaching strategies and an understanding of how to use them in enhancing student performance. The authors noted that, although mastery of a subject is essential, the teacher must know how to effectively understand that subject matter to promote learning.

The delivery of SPED is dependent on several variables and calls for more intensity and precision in the delivery of instruction than would be required in a regular classroom. These pedagogical differences are needed in order to motivate students and provide the context needed for successful learning (Kurth et al., 2016). Crossfield and Osbourne (2018) identified teacher quality and effectiveness as the primary factor impacting student success. Their study of at-risk students in Jamaica revealed that effective instruction driven by data was the number one factor needed to improve the learning experiences of students who are at risk. At-risk students in their study encompassed those who were not certified as literate in the Grade Four Competency Test and have also failed the Grade Six Achievement Test. The authors lamented the lack of an individualized education plan. The United Nations Educational, Scientific, and Cultural Organization (UNESCO, 1994) expressed that children with learning and

developmental delays or disabilities can be considered to be most at risk due to limitations in addressing their needs adequately. If there is to be equity necessary, accommodations need to be made (Ministry of Education, Youth, and Information [MoEYI], 2019a).

The delivery, curriculum, and environment must be modified to accommodate the ID child (UNESCO, 1994). Recent studies have found that this practice is not prevalent. Okyere et al. (2019), in a study on the experiences of ID children in Ghana in inclusive school environments, discovered that teachers were not accommodating and did not differentiate teaching or adapt curriculum based on the unique needs of the students. Masino and Niño-Zarazúa (2016) found that, in developing countries, interaction between teacher and student is low as a result of classrooms that are large in size, inadequate resources and services, and low wages.

Dorfner et al. (2018) identified classroom management, supportive climate, and cognitive activation as the three common dimensions of instructional quality. Other researchers have built on these dimensions adding teacher beliefs and assessment methods (Clavel et al., 2016; Coe et al., 2014). However, with differences in the profiles of ID students, the focus needs to be on finding the combination of teaching learning practices that can improve the social, emotional, and cognitive experiences of ID students. Consequently, support is required for teachers to help them develop both the skill and knowledge to address the SPED needs of students (Mader, 2017).

The pursuit of quality education that supports students with IDs is ongoing. Debates among the academic community continue in regard to what is the best way to ensure full participation of students with IDs who are taught in SPED self-contained classrooms (National Council on Disability, 2018). The provision of education to

students with IDs provides its own set of unique challenges, especially when accommodations and modifications of the curriculum are left to the discretion of the SPED teacher. Algahtani (2017) purported that, over the years, many scholars have put forward teaching strategies they deemed effective as it related to teaching students with IDS. Alnahdi (2015) proposed that a combination of strategies is needed for effective teaching. The selection of the proper strategies is the critical element.

Students classified as having an ID experience limitations in cognitive functioning, thus reducing their ability to reason, learn, and solve problems. They also experience limitations in conducting everyday activities, such as feeding or clothing themselves. These limitations in cognitive and behavioral functioning must be evident before age 18 (American Association on Intellectual and Developmental Disabilities, 2019). Creating a learning environment that is supportive and addresses the learning needs of ID students can be a challenge, particularly in low- and middle-income countries (Hayes et al., 2018). In Jamaica, students with moderate to severe IDs are served in segregated settings. There are 11 public SPED schools and five primary schools that house self-contained SPED classrooms (Searle, 2017).

In a self-contained classroom, students are taught either in a school solely for students with SPED needs or in SPED units where they are in separate classrooms from the general education students so that they gain access to special resources and a modified curriculum, as well as specialized instructions (Digital Information Gleaner, 2010; MoEYI, 2019b). With this study, the aim was to contribute to the current knowledge on teaching strategies that can assist educational practitioners and policy makers in creating learning environments that effectively meet the needs of students with IDs who are taught in self-contained SPED classrooms.

### ***Background and Justification***

Despite Jamaica's agreement with the Salamanca Statement and the United Nations Convention of Rights of the Child, as well as increased training and awareness, improvements in teaching strategies to enhance student learning has been dismal (Blackman, 2017). Special education in Jamaica is defined as "tailoring of the education program to suit the needs of students in a way that accommodates the students' individual needs and differences" (Digital Information Gleaner, 2010, p. 1). In Jamaica, there are five schools that are jointly operated by the Jamaica Association on Intellectual Disabilities and the MoEYI that accommodate ID students (Jamaica Association on Intellectual Disabilities, n.d.). These schools are located in the parishes of St. Ann, Manchester, Kingston, Westmoreland, and St. Catherine. What exists in other parishes are special education classrooms established at primary schools to cater to students with learning and developmental challenges (Campbell-Livingston, 2018). Thus, where many countries have gone the path of inclusion in catering to the needs of their special education students, Jamaica is mainly exclusive with only one inclusive school, located in the parish of Westmoreland, at the infant level (Stennett, 2018).

The MoEYI has seen a need to address concerns within special education and implemented a SPED unit (MoEYI, 2019a, 2019b). This unit supervises all government and government-aided SPED schools, offering assistance in training, curriculum supervision, networking, and assessment. There does not exist, nor has there ever been, a SPED policy. With the lack of a policy, the norm is that each institution is guided by its own operating standards. While members of the SPED Unit can advise, they have no specific regulations that hold these schools accountable. A draft policy was submitted to parliament, but, after 4 years, it is still being discussed (MoEYI, 2019a, 2019b). The

proposed policy was expected to provide a framework that would speak to protecting the rights of SPED students in the education system. The policy was expected to focus on placement, access to schools, and student-teacher ratio (Wilson, 2019). Dr. Bowes-Howell, Chairman of the Joint Board of Teacher Education, stated that it goes beyond a policy, and there needs to be emphasis on teachers and resources (Wilson, 2019). Even with the implementation of a policy, it can be so pervasive in its reach that there will still be inequality in the education system (O'Malley, 2016). There can be a vast difference in judicial announcements and the commitment that is needed for equality in SPED. Thus, the passing of a law or policy still calls for measures within the classroom to correct inequities. The National Council on Disability (2018) highlighted that, even in the United States, where there are many laws and policies to act as a guide in placement decisions, practices vary widely across states, with categories ranging from highly inclusive to highly restrictive. Regardless of policy, adequate resources, proper pedagogy, and the right belief, systems are needed for effective practices

In Jamaica, the National Education Inspectorate (NEI) is responsible for inspecting schools and reporting on their performance. Schools are assessed using eight criteria: (a) leadership, and management, (b) teaching in support of students' learning, (c) students' attainment, (d) students' progress, (e) students' personal and social development, (f) human and material resources, (g) curriculum and enhancement programmes, and (h) student safety, security, health, and well-being (NEI, 2017). Once inspected, an analysis is done and the schools are rated and classified as follows: (a) Level 5, exceptionally high; (b) Level 4, good; (c) Level 3, satisfactory; (d) Level 2, unsatisfactory; or (e) Level 1, needs immediate support (NEI, 2017).

The most recent report that has been published was in 2017. An inspection of 189

schools was conducted across the island between September 2016 and June 2017. An evaluation of the report showed schools ranged from exceptionally high to satisfactory in six of the eight areas. As shown in Table 1, the area of teaching in support of student learning and student progress had no school rating at exceptionally high. The area of teacher delivery had 31%, or 59 schools rating unsatisfactory. This amounts to 31% of the population inspected (NEI, 2017).

Table 1

*Inspection Ratings for Teaching in Support of Students' Learning*

Inspection rating	No. schools	%
Exceptionally high	0	0
Good	15	8
Satisfactory	115	61
Very good	59	31
Needs immediate support	0	0
Total	189	100

For schools rated as unsatisfactory, the report revealed that poor planning and ineffective teaching strategies were the major factors leading to this low score. A similar proportion of students was unable to progress academically, and the major factor reported for this outcome was teacher ineffectiveness. A look at the percentages for the past 4 years, as displayed on Table 2, shows teaching to support student learning was improving for 2014 to 2016 but had a decline in 2017. The student progress figures show that as teaching quality improved, there was a positive impact on students. The 2017 report concluded with the petition for further development and incorporation of various techniques and strategies to improve the learning experiences of students. Schools with proven success strategies need to share with others to foster a collaborative approach in



the education system (NEI, 2017).

Table 2

*Inspection Ratings by Percentage for Teaching and Student Progress, 2014-2017*

Inspection criteria	2017	2016	2015	2014
Teaching in support of students' learning	33	28	45	52
Student progress	33	38	53	53

The number of persons in Jamaica registered as disabled as of September 2017 was 32,065. The second largest recorded disability was ID at 30% (Committee on the Rights of Persons with Disabilities, 2019). For the 2015-2016 period, 3,402 students were enrolled in SPED institutions with 31% of that total being ID students (United Nations Children's Fund [UNICEF], 2018). A SPED project titled Child Find was done on the island during the period of July 2011 to November 2014. In this study, 7,628 students were assessed from 302 primary schools. These students were from the general education setting and all considered to be at risk for academic failure. From a sample of 4,323 boys and 3,305 girls, taken over the 4 years, most were found to be borderline (slow learner or mild to moderate ID) or at low levels of intellectual functioning. Based on the findings of the Child Find Project, seven recommendations were made that included training of teachers, increased facilities, and capacity-building activities for teachers (Ministry of Education, 2015).

A well-planned comprehensive approach to education is needed that allows for modifications to meet students' needs (Muema et al., 2018). One goal of the Jamaican government is universal education for all students; thus, they advocate the mission: Every

child can learn, every child must learn (MoEYI, 2019b). For such school reform to take place, where all students are given the highest chance to learn based on their needs, there must be universalization within the education system. Shah et al. (2016) posited that universalization of primary education consists of five pillars: “universalization of provision, universalization of enrolment, universalization of retention, universalization of participation, and universalization of achievement” (p. 142). School reform has called for enhancement in the quality of education offered to SPED students (Neuville, 2017; Yettick et al., 2017). Yettick et al. (2017) elaborated by advancing that the ultimate responsibility of reform then lies on the teacher who must implement the required changes within the classroom. Therefore, while Jamaica boasts a 99.9% enrollment at the primary level (Planning Institute of Jamaica, 2019), the critical issue is as follows: How well are ID students being catered to?

### ***Deficiencies in the Evidence***

A plethora of information exists on teaching strategies, but much of the research is product driven rather than process driven. There are various dimensions of quality education inclusive of availability of teaching-learning materials, teacher quality, student-teacher ratio, and school leadership. Research shows that teaching strategies have direct effects on the academic achievement of students (Bellens et al., 2019; Blazar & Kraft, 2017; Darling-Hammond et al., 2017; Khalil & Elhider, 2016). The provision of education to students with IDs provides its own set of unique challenges, especially when accommodations and modifications of the curriculum are left to the discretion of the SPED teacher (Center for Parent Information and Resources, 2017a, 2017b).

Many teaching strategies have been considered effective over the years whether on its own or in combination with other strategies (Algahtani, 2017; Alnahdi, 2015). The

authors do not provide practical guidelines on how to arrive at the right combination. In Jamaica, reports of success from the NEI (2017) identified strategies that are used but do not outline how strategies are incorporated into lessons for effective learning. The dearth of information as it relates to research in Jamaica and the conditions that lead to high quality education within SPED schools make it difficult for the country to advance.

The research on teaching strategies for inclusive classrooms amass (Lawrie et al., 2017; Tichá et al., 2018) advocates that students bring unique contributions to the environment. Diversity exists within the self-contained classroom as well, and teachers must be equipped to meet those diverse needs. Students with IDs are classified from profound to mild, and they all have their specific needs (Carr et al., 2016; Sattler, 2014). In countries where inclusive education has not yet been fully embraced, research has left a gap on how teaching in an exclusive setting can still be effective (UNICEF, 2018).

### ***Audience***

The persons affected are as follows: the policy makers such as the MoEYI, SPED providers who will gain knowledge of the teaching strategies and their impact on students, parents of children with IDs who will be able to voice their concerns and contribute to policy building, and children with IDs who will benefit from the delivery of quality education. Overall, the Jamaican education system will benefit through offering equal learning opportunities to all children that can enhance the knowledge and skill set of the population. The needs of students with exceptionalities will also be met, as there will be a more research-based approach to methodologies and tools used within the classrooms.

The study considered the issue of policy and school reform, so the impact is far-reaching and must consider the parents and children of normally developing students

within mainstream education who may become affected. Regular education teachers and principals of mainstream schools would also be impacted, and it is hoped that this study will expose them to the needs of ID students so that they can access the training necessary to better facilitate them if they are included into general education classes.

A plethora of research exists on teaching strategies for specific subjects ranging from mathematics to the sciences. Research also focuses on teaching strategies in inclusive environments. Since the move to inclusion, research has focused on how the general and SPED teacher can effectively teach students. No recent research exists on how to use teaching strategies in a contained setting. Teacher effectiveness is an increasing concern in identifying factors that lead to school success. Though considered only a proxy for success, the effectiveness of teaching strategies directly impact student performance. For Jamaica, where training of teachers is considered on par with the United States, there is no study that looks at the success stories of teaching SPED.

### **Definition of Terms**

#### ***Curriculum***

Curriculum covers a wide range of educational and instructional practices and refers to the following:

The knowledge and skills students are expected to learn, which includes the learning standards or learning objectives they are expected to meet; the units and lessons that teachers teach; the assignments and projects given to students; the books, materials, videos, presentations, and readings used in a course; and the tests, assessments, and other methods used to evaluate student learning.

(Srivastava, 2019, p. 1)

***Disability***

This term refers to any incapacity or impairment that restricts the ability of an individual to perform an activity in the manner or within the range to attain autonomy (Eldergill, 2019; Retief & Letšosa, 2018).

***Grade Six Achievement Test***

This term refers to an exit exam used in Jamaica that determines placement of primary school students into secondary schools based on the pass rate (Campbell, 2018).

***Inclusion***

This term refers to the act of accommodating the needs of all learners, by providing differentiated instruction. The belief is that a general education teacher, with the right training, resources, and assistance of a SPED teacher, can provide the range of instruction necessary that all children can successfully learn (Logsdon, 2020).

***Intellectual Disability***

This term refers to a disability characterized by “significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills. This disability originates before age 18” (Tassé et al., 2016, p. 381).

***Least Restrictive Environment***

As much as possible, students with disabilities must be educated with their peers without disabilities, and this term does not connote a particular setting. The general education setting is, however, considered the least restrictive environment because this is the placement with the greatest opportunity for students to enjoy the ordinary flow of school life (Shin et al., 2014; U.S. Department of Education, 2017).

### ***Modification***

This term refers to changes involving what is taught to or expected from students with a disability, allowing them to participate in grade-level content and to show they are learning the material (Patterson, 2019).

### ***Self-Contained Classroom***

This term refers to a classroom with children who would benefit from special services within a structured classroom composed solely of children having special needs. In a self-contained classroom, students share similar academic requirements (Patterson, 2019).

### ***Self-Efficacy***

This term is defined as people's beliefs in their own competence to execute required behavior successfully to get expected results (Bandura, 1997).

### ***Special Education***

This term refers to education designed for individuals who may require additional support and adaptive pedagogical methods due to limitations in physical, behavioral, intellectual, emotional, and social capacities (UNESCO, 2020).

### ***Teaching Strategies***

This term refers to behaviors and actions that lead to the growth and development of students. They include the right methods to develop the learning capabilities of the targeted group (Blazar & Kraft, 2017).

### **Purpose of the Study**

The researcher of this case study explored the teaching strategies leading to success of the students with IDs who are taught in self-contained classrooms in Jamaica. Information for the study was gathered from SPED teachers regarding how they design

the teaching strategies and what modifications are made to the curriculum to meet the needs of the learners. Use was also made of documents that inform the planning process. These practices reflect strategies that can be adopted that may better serve the needs of students in self-contained classrooms. Schools and the government may be able to evaluate their current SPED policies and practices and seek to bridge any gaps that might be discovered. Variations in teaching strategies across school sectors may even capture differences in underlying realities and prove consequential in ensuring equity across institutions.

## Chapter 2: Literature Review

This chapter reviews relevant literature pertaining to teaching strategies and other pedagogical issues impacting the quality of teaching. The literature review takes a theoretical and thematic structure. The first section of the literature review provides an overview of the theoretical perspectives upon which the study was based. The second section looks at learning theories. The third section covers elements of successful teaching strategies specifically highlighting cognitive activation, supportive climate, classroom management, and assessment methods. The fourth section provides an overview of models of instructional design. The fifth section looks at teacher self-efficacy. The sixth section looks at issues with curriculum. The seventh section highlights SPED laws and practices, and SPED in Jamaica, and the eighth section looks at the instructional context, specifically the self-contained classroom.

### Theoretical Perspectives

The researcher considered a number of theories that focused on collaborative success and emphasized the environment in which learning takes place. The first theory selected was Bronfenbrenner's ecological systems theory that looks at the environment as a connectivity of systems. The second theory was Bandura's social cognitive theory, where learning occurs through reciprocal interaction and responds to stimuli to achieve desired outcomes (Lamorte, 2019).

The problem of teaching strategies and their impact on the success of intellectually disabled students is grounded in Bronfenbrenner's (1979) theory. The ecological systems theory was originally developed by Urie Bronfenbrenner and was primarily used to study child development and education in the fields of social work, sociology (Barton, 1988), and pedagogy (Lerner, 2005). The theory has also been used to



frame qualitative, quantitative, and mixed research (Onwuegbuzie et al., 2013).

Bronfenbrenner (1979) believed a study of children meant exploring experiences and interactions in their natural environment. Research highlighted that students are impacted by the environment around them and those with whom they come in contact (Ettikal & Mahoney, 2017). This means the interaction with the teacher can create a change in behavior and achieve desired learning outcomes. Consequently, looking at ecological systems theory, the interrelationship between a child and those in his environment, such as parents, teachers, and the community, reveals that, as they interact, each affects the other (Onwuegbuzie et al., 2013).

Ecological systems theory can be considered as a series of concentric rings with the circles getting larger and larger. Bronfenbrenner (1979) proposed that human development was influenced by different types of environmental conditions or systems:

1. **Microsystem**—the immediate relationships or organizations such as family, friends, classmates, teachers, and neighbors. The child has interacts within this system daily and directly contributes to the construction of this environment.

2. **Mesosystem**—the connections between the microsystem and broader environment such as parent-teacher conferences. Experience of one component, such as the family, will influence the interaction between other components such as teachers. A child for example who is abused at home may be shy at school and refuse to communicate with the teachers.

3. **Exosystem**—social settings that affect but do not directly include the child such as parents' workplaces. A child whose parent is overburdened by work life may become affected as the parent may not get the time to attend parent-teacher meetings. So though the workplace is external to the child, he is indirectly influenced by its activities.

4. Macrosystem—social and cultural values that forms identity. This also include the socioeconomic status of the family that influences the opportunities and experiences of a child.

5. Chronosystem—timing of events, and circumstances, and how it affects the individual's development. It involves life transitions that influence the child such as a divorce (Bronfenbrenner, 1979; Ettekal & Mahoney, 2017).

The nature of this study focused more on the microsystem and mesosystem. Ettekal and Mahoney (2017), however, advised that, when designing programs, one must consider that the subsystems impact each other, and the environment must be considered more as a network rather than as a nested system. Thus, as teachers design learning activities for their students, they need to consider the impact of their planned activities on student development.

The significance of the theory is that it highlights that individuals have their own nature interwoven from their home, school, and community, and the beliefs and attitudes they possess produce an outcome (Ungar et al., 2013). The characteristics of the different systems interact in what Bronfenbrenner and Evans (2000) termed proximal processes. Kamenopoulou (2016) argued that this makes the conceptual framework of ecological systems theory valuable when conducting research that explores learners in the SPED system because it helps the researcher focus on the relationship between the individual and his environment and how each impacts the other. Thus, cognitive development occurs as the individual perceives and responds leading to the acquisition of knowledge and skills.

The social cognitive theory is seen as an agentic approach where learning and development are influenced by personal beliefs and circumstances (Bandura, 2001). The

theory focuses on observing and modeling behaviors and attitudes, and it is applicable to this research that focused on teachers in self-contained classrooms who display excellence. There are four key components of human agency that emerge from this theory:

1. Agents are capable of intentionality—this involves creating an action plan with the proactive commitment to bringing about some form of change.
2. Agency involves forethought—forethought allows an agent to anticipate desired outcomes and select behaviors to achieve them.
3. Agents demonstrate self-reactiveness—this involves monitoring progress through self-regulation in order to gain motivation.
4. Agents demonstrate self-reflectiveness—this involves examining one’s own motivations and values and determining that your beliefs inspires actions that will produce a particular outcome (Bandura, 2001).

The social cognitive theory also proposed a model of causation termed triadic reciprocal determinism that can influence an individual’s actions (Bandura, 2001). This model looks at the interplay between the thoughts of the individual, referred to as personal factors, the environmental conditions that prevail, and how the individual acts. Motivation and behavior are, therefore, determined by these three factors, highlighting the view that, as interaction occurs between people and their environment, they plan, think and evaluate how they respond to these external stimuli (Bandura, 1989). The teacher would be seen as the agent of change, intentionally planning, anticipating, monitoring, and reflecting on the outcomes of lessons taught. The key notions are that a positive teacher-student relationship is necessary, and classroom activities must lead to engagement where students are taught in a supportive, nurturing, and flexible

environment (Darling-Hammond et al., 2019; Wecker, 2015).

The social cognitive theory is a useful model when analyzing the behaviors, motivations, and attitudes of teachers. It provides an understanding of human development, how individuals learn, develop, and acquire knowledge, and how this translates into the environment. The model emphasizes the triadic relationship of the person, behavior, and the environment (Bembenuddy et al., 2016). Additionally, the model explores self-efficacy, which is the belief that individuals have of how effectively they are performing their task. It explains the efforts, choices, and practices of an individual in attempting to accomplish a task. Furthermore, researchers have used the model to explain the role of physiological and emotional factors, such as fear and anxiety, on self-efficacy (Schunk & DiBenedetto, 2016). Bandura (1997) postulated that individuals are impacted by those in their environment through a process of modeling. Schunk and DiBenedetto (2016) agreed that there is a direct relationship between self-efficacy and academic achievement. Researchers have determined that self-efficacy impacts instruction quality, classroom management, and students' engagement (Aloe et al., 2014; Chestnut & Cullen, 2014; Dicke et al., 2014). This provides the opportunity to analyze the thinking patterns that impact success. The question is as follows: How does teacher self-efficacy help in selecting successful teaching strategies?

The social cognitive theory does have limitations, as it assumes that, once a stimulus is introduced, change becomes automatic. The theory also ignores biological factors that may influence behavior (Lamorte, 2019). Studies show that the right stimuli are required to engage students in the learning process. Graetz (2020) called for positive emotional responses. Darling-Hammond et al. (2019) proposed “well-vetted strategies that support the kinds of relationships and learning opportunities needed to promote

children’s well-being, healthy development, and transferable learning” (p. 97). Darling-Hammond et al. called for integrated but differentiated approach that included (a) productive instructional strategies, (b) social and emotional development, (c) supportive environment, and (d) support systems.

### **Learning Theories**

In approaching teaching of ID students, a constructivist, cognitivist, or behaviorist view may be held (Algahtani, 2017). The more traditional behaviorist view holds that positive or negative behaviors can provide opportunities for students to learn. Learning involves a stimulus, a response, and then reinforcement. The learner reacts to his environment. The teacher’s job is to determine the appropriate cue, identify the practice situation, and organize the environmental conditions that will trigger the appropriate response. Through repeated practice and reinforcement, the learner will eventually illicit the appropriate response (Algahtani, 2017; Sidney, 2015).

The behaviorist view applies the principles of applied behavioral analysis in seeking to understand how the environment impacts learning and behaviour. Applied behavior analysis focuses on improving specific behavior by applying “science principles based on the work of B. F. Skinner, J. B. Watson and others to teach and reinforce the acquisition of socially significant adaptive behaviors” (McNiven & Blevins, 2016, p. 1). Evidence shows that applied behavior analysis is successful in addressing learning deficits (Leach, 2014; Makrygianni et al., 2017).

Durwin and Reese-Weber (2018) considered the behaviorist view a teacher-centered approach, with the teacher manning the content and the pace at which it is absorbed by the learners. Educators endorsing the behaviorist theory exercise a direct strategy, accomplished through controlled practice, guided practice, independent practice,

and distributed practice (Durwin & Reese-Weber, 2018). Instruction is structured and includes more of a lecture or demonstration with the use of a video or film. The strategy may even consist of packages of resource materials that outline how to teach the content (Hammond & Moore, 2018).

Typically, there are six steps. The teacher does a review of the most recent lesson and then introduces the lesson. The new material is then presented in the form of a lecture or demonstration. Next is guided practice, followed by independent practice and finally evaluation or review (Renard, 2019). The strategy is very organized and focused, essentially having an opening, body, and closing as it engages the students, prompts them, and then checks for understanding. Assessments are in the traditional form of multiple choice, true or false, short answer, or essay items (Ahmad et al., 2020).

Hammond and Moore (2018) made a distinction between direct instruction and explicit direct instruction. While both are teacher centered, the variable is the unscripted nature of explicit instruction placing emphasis on maximizing student achievement. The teacher will be selective in the delivery of the content but considers the needs of the students rather than the recommendations of the curriculum. There must be repetition of key concepts, scaffolding, guided practice, and timely feedback.

Though the direct strategy has negative associations among some educators, claiming the method is outdated and leads to passivity in students (Hammond & Moore, 2018), it is considered effective for students with specific learning disabilities (Fairbrother & Whitley, 2014). A total of 328 studies was analyzed on the effectiveness of the direct strategy on general academic achievement, as well as specific subjects, measures of ability, affective outcomes, and teacher and parent views. Effects were consistently positive (Stockhard et al., 2018).

İlik and Sari (2016) concurred that direct instruction is effective with ID students in the teaching of science and technology. In their study of three students attending different primary schools, each requiring SPED services, they found that participants were able to retain information up to 6 weeks after the lesson. A study of 40 years' worth of research on direct-explicit instruction also confirms its efficacy in comparison to minimally guided instruction (Wheldall et al., 2014). Lenjani (2015) suggested the direct approach is appropriate for students with SPED needs as the direct instruction allows for monitoring by the teacher with appropriate feedback at each step with the desired reinforcement. While appropriate when there is a core curriculum that needs to be taught, it may inadvertently serve the goal of impinging on the learner a world according to the standards set by the curriculum, and to which they cannot relate (Ahmad et al., 2020).

The cognitivist view is considered more applicable for 21st-century learners through the application of critical thinking and discovery learning practices. This view relies on learning theories and models that promote thinking, conceptualization of ideas, problem solving, processing of information, and communication. The learner becomes an active participant in the process and is guided by explanations, demonstrations, and examples. Unlike the behaviorist theory, it is not just knowledge that is being gained. The thoughts, attitudes, and values of students are impacted, allowing them to apply a strategy to how they learn. The teacher looks to the learner to determine instructional design, building on previously learned concepts and allowing for scaffolding, exploration, and reflection (Algahtani, 2017; Durwin & Reese-Weber, 2018; Sidney, 2015). The teacher understands the students do not come into the classroom as a blank slate but possesses prior knowledge and thoughts about the world in which they live. Opportunities are provided for students to apply that knowledge and acquire new competencies. Practice is

then given to use those new competencies and feedback provided. Teaching methods of discovery learning and exploratory teaching can achieve this approach (Durwin & Reese-Weber, 2018). Word association tests represent an example of an assessment technique (Ahmad et al., 2020).

Constructivism theorists state the learner learns based on his experience and those with whom he interacts. The content and the context are important as it is the prior experience that the learner uses to decipher the new situation. The learning must be done within the environment that will facilitate its relevance and understanding. This view borrows ideas from philosophy and psychology opining that humans create meaning rather than acquire it. The concept of one right answer does not exist since the students' experience and understanding of the world determines their reaction. The teacher is not encouraged to teach in isolation or break apart the knowledge for hierarchical analysis of relationships. Real-world contexts must be used through coaching, modeling, use of multiple perspectives, debates, and discussions. The learner must go beyond the realm of absorbing information to problem solving, identifying patterns, and providing evidence. Transfer of skills and competencies to new situations and problems allows the teacher to assess the level of achievement or expertise (Durwin & Reese-Weber, 2018).

Cognitivism and constructivism are considered student centered, with the students allowed to participate actively in their learning and collaborate with peers as opposed to the behaviorist view in which the teacher dispenses the information (Durwin & Reese-Weber, 2018). Instead of a direct strategy, indirect strategies to learning are used. The indirect strategy encapsulates the Bloom's taxonomy, making use of inquiry and higher order questions. Inquiry and collaborative learning are examples of this approach (Durwin & Reese-Weber, 2018). Mind maps, concept maps, and brainstorming serve as



assessment measures (Ahmad et al., 2020; Lenjani, 2015). It is student centered, and the teacher facilitates the process using advanced organizers, group discussions, examples and nonexamples, and student self-evaluation (Durwin & Reese-Weber, 2018). A combination of deductive and inductive reasoning is employed (Pedaste et al., 2015). Based on the old adage, “Tell me and I forget, show me and I remember, involve me and I understand,” the strategy moves from knowledge-seeking behavior to knowledge integration through incorporation of past knowledge and current experiences (Chowdury, 2017). Durwin and Reese-Weber (2018) outlined stages inclusive of questioning, exploration, assimilation, inference, and reflection making scaffolding is an important aspect of the indirect strategy. Affective teaching behavior is also vital in this strategy. Positive relationships with the teacher increase motivation, pushing students to develop confidence in their problem-solving capabilities (Mesquita et al., 2015).

The indirect strategy helps to develop the self-esteem of SPED students and reduce the repeated rate of failure (Lenjani, 2015). The Lee and So (2014) study, involving six teachers who implemented the inquiry-based learning strategy with ID students diagnosed with mild to severe ID who were taught in self-contained classes, resulted in positive effects in the rate of learning. The authors affirmed the benefits of this inquiry-based form of learning for ID students through the interaction with peers, teachers, and materials. They cautioned that difficulties in dealing with complex situations mean the teacher would need to allot more time to the student to replicate the skill and provide more guidance. The limitation was the small-scale nature of the study as only two lessons were used. Consideration needs to be given to the impact of this strategy over an extended period to determine the elongated period of success. Learner experience and mastery of skill may vary (Ahmad et al., 2020; Durwin & Reese-Weber, 2018).

A combination of the strengths of behaviorist, cognitivist and constructivist theories is considered essential in helping students with ID to learn effectively (Algahtani, 2017; Benitez & Domeniconi, 2015). Effective teachers should consider the following: (a) the objectives to be learned, (b) how to assess the students' learning, and (c) the content to be shared (Durwin & Reese-Weber, 2018). Students are diverse, so differentiated instruction should be used to address particular student needs. The instruction must also match the learning style of the students (Durwin & Reese-Weber, 2018). Algahtani (2017) suggested that a unique approach needs to be taken to bridge the gap and reduce deficiencies in academics for students with ID. The author asserted the limitations in functioning and adaptive behavior indicated tasks should be structured for active student participation.

### **Elements of Successful Teaching Strategies**

Unique approaches to teaching are required for students who suffer from IDs (Algahtani, 2017). Browder et al. (2014) exalted the use of systematic instruction driven by data. Through the use of data-driven instruction from ongoing assessments and strategies such as goal setting, students are given the opportunity to progress academically. The science behind effective teaching remains a mystery, though research has been done on factors such as experience, years of teaching, and school environment. Over the years, researchers have identified characteristics such as knowledgeable about content, thoughtfulness in teaching practices, good communication, and clarity on goals as factors that improve teacher quality and lead to student success (Mupa & Chinooneka, 2015).

Effectiveness is a heavily contested term when addressing issues such as time frame, objectives, and for whom (Ko et al., 2016). One thing that can be ascertained is

that the impact that teachers have occurs through instruction, so the type of classroom practices bear heavily on student success. Darling-Hammond et al. (2019) proposed that teaching strategies should involve an approach that supports the whole child through a high level of integration. Components of effective teaching common to researchers are cognitive activation, supportive climate, classroom management, effective assessment methods, and teacher self-efficacy (Coe et al., 2014; Darling-Hammond et al., 2019; Schiefele et al., 2013).

### ***Cognitive Activation and Student Performance***

Effective instruction that appeals to different senses of special needs students is important (Myers et al., 2017). Strategies and methods such as questioning, collaborating, explaining, demonstrating, and modeling can be used to ensure that cognitive activation takes place, as these methods appeal to different senses of the students, exposing them to the taxonomy of educational objectives based on the way the lesson is framed (Pooja, 2017). Cognitive activation strategies allow students to accomplish the following:

Detail their understanding of how they solve complex problems, solve problems in more than one way, provide written explanations of how they solve problems, work together to solve problems, and connect concepts taught in class to uses outside of school. (Organization for Economic Cooperation and Development, 2016, p. 7)

A research study conducted by Korom et al. (2017), involving 237 classroom teachers and 4,010 Grade 4 primary school students, showed that the most commonly used teaching strategy is teacher-directed instruction ( $M = .80$ ,  $SD = .09$ ), followed by the cognitive activation method ( $M = .73$ ,  $SD = .09$ ). The results showed that overall frequent use of cognitive activation led to better student performance (Organization for Economic Cooperation and Development, 2016). Thus, the use of student-led methods of problem

solving, discovery learning, games and simulations, cooperative or group learning, questioning techniques, and computer-assisted instruction can lead to a more engaged classroom in that students are challenged and able to develop (Gengle et al., 2016). The study did not discuss how they were used in the classroom to bring about success.

### ***Supportive Climate and Student Performance***

Osher et al. (2018) purported that student-teacher relationships that are warm, caring, and supportive lead to better academic performance and social integration. Three proposed relationship characteristics that can lead to cognitive activation are as follows: (a) strong interpersonal relationships within the school environment that engender learning, (b) supportive home environment, and (c) positive perceptions of these experiences (National Scientific Council on the Developing Child, 2015). Wecker (2015) related that a supportive climate is rated very high by school social workers as ultimately leading to academic success.

When characteristics related to a supportive climate are displayed, the emotional, social, behavioral, and cognitive competencies desirable for learning and development are inculcated. Over time, the knowledge, skills, and competencies learned combine to provide a rich environment promoting well-being and success in learning and life (Nagaoka et al., 2015). A meta-analysis was administered on 54 random and nonrandom classroom management programs that revealed that most approaches had minimal positive effects (overall  $ES = 0.22$ ). In contrast, the most effective interventions were those focused on the social-emotional development of students (Korpershoek et al., 2016).

García-Carrión et al. (2018) promoted the use of an interactive classroom, stating this is possible even in self-contained classrooms because students share different characteristics in their disability. Three criteria that can be used to organize groups are as

follows: (a) level of achievement and ability to contribute to others, (b) communicative power and ability to interact with others, and (c) student behavior. Such supportive interactions allow students to get to know each other and develop friendships. García-Carrión et al. conducted a case study involving 36 students from 6 to 14 years old with different disabilities, including ID, cerebral palsy, and autism. The research found that students were able to reach individual goals due to the interactive climate that existed. Skills such as listening, paying attention, taking turns, helping, and task completion are developed. From the study, teachers were also able to report an improvement in behavior due to group influence. The teachers reported an improvement in their expectations of students and even in the way they communicate with the students, which has led to a higher level of satisfaction in their work. The literature did not explain how the lessons were planned to incorporate the high level of interaction.

### ***Classroom Management and Student Performance***

Effective classroom management is crucial in ensuring the highest levels of academic achievement, social competencies, and classroom climate for special needs students (Myers et al., 2017). Korpershoek et al. (2016) saw classroom management as a prerequisite for learning. Che Ahmad et al. (2017) related that classroom management has three aspects: content management, conduct management, and covenant management. In addition to these elements, time management is also an important consideration (Grapragasem et al., 2015).

Content management considers the environment, materials, and modules that will be taught. It looks at the movement of people and the lesson with a focus on sequencing and integration. As a good content manager, the teacher needs to match the instructional goals, classroom activities, and characteristics of students. Conduct management looks at

skills used to resolve conflicts and disciplinary issues within the classroom. This is crucial to prevent distraction within the classroom as such issues can disrupt the entire class. Conduct management skills may include timeout, written or verbal warnings, reward for good behavior, and controlled seating arrangements. Covenant management looks at the social system in the class, taking into account interpersonal relationships that can impact the teaching learning process. Finally, time management looks at the skills and techniques used to ensure tasks are accomplished within the allotted time frame. Examples include delegating, monitoring, prioritizing, or setting time limits (Che Ahmad et al., 2017; Grapragasem et al., 2015).

Güner-Yildiz (2017) conducted a study that investigated the impact of classroom management on student achievement in an elementary school. Five classes were studied with approximately 29 to 30 students each. One requirement was that the class have at least one SPED student. Factors observed in the study included rewards used, use of individualized care, placement of students, and effective use of time allotted. The study revealed teachers tended to use few rewards and focused more on disruptive habits. The study revealed that teachers showed disapproval three times more than approval. The study also revealed that in a 40-minute period, 8 minutes on average were wasted in nonlearning-related tasks.

In analyzing the teaching methods, Güner-Yildiz (2017) found that only one teacher modified the lesson to ensure that all learners were catered to. When the Scheffe test was applied, the results showed that the teacher who earned the highest score in classroom management was the one who modified the learning strategy. The students of this teacher achieved significantly higher test scores than those in the other classrooms (Güner-Yildiz, 2017). This outcome attests that classroom management plays a leading

role in student achievement and that the more opportunities students are given to participate in lessons, the better the outcome.

### ***Assessment Methods and Student Performance***

There are different types of assessments in the classroom. The most common ones are diagnostic that occur before teaching takes place to assess what knowledge the student already has, formative to provide feedback during the teaching process, and summative to determine what the student has grasped from the instructions given (Teach Thought, 2019). Regardless of the assessment, the main purpose is to collect data.

An effective assessment method should have specific objectives and fulfill certain features (Poza-Lujan et al., 2016) that include the following:

1. Allowing students to participate in setting learning objectives as well as monitoring their learning and assessment activities.
2. Regularly supplying students and parents with constructive feedback so that improvements can be made.
3. Being data-driven data, and using the results of that data to support instruction, and intervention activities to improve student achievement.
4. Accommodating of student needs and experiences, as well as matching the curriculum and the learning activities to those needs and experiences.
5. Using continuous assessments that are varied and that allow students to demonstrate diverse learning capabilities without being overwhelmed.
6. Keeping multiple samples of work that can be used as evidence of student progression, and areas for intervention.
7. Using predetermined standards and exemplars as assessment and evaluative tools.

Research lauds the value of continuous assessment at all levels of the education system (Abejehu, 2016; Iqbal et al., 2017; Poza-Lujan et al., 2016). Iqbal et al. (2017) purported that it is effective when observation and information are collected during class, based on specific tasks given to students during the learning process. In a study of 60 students in Grade 8, it was found that continuous assessment had significant effects on low achievers and influenced student achievement positively. However, the method needs to be used effectively. Abejehu (2016) conducted a study with 72 teachers and found that many teachers used continuous assessment for summative purposes rather than formative, they frequently did not share objectives, and they had feedback systems that were inconsistent. A more harmonized approach is needed for continuous assessment to have the full impact. A combination of formative and summative assessments is needed. Nortvedt and Buchholtz (2018) found in their study that combining and integrating formative and summative assessments led to better evaluation of learning opportunities. By integrating a formative portfolio with a summative oral exam, they were able to assess different aspect of learning. There are, however, limitations of combining and integrating assessment forms as the indicators of learning must be clearly identified beforehand.

### **Instructional Designs**

Teaching is an intentional process, and lessons need to be planned and constructed based on the environmental setting (Schott & Seel, 2015). Part of designing for instruction is selecting the teaching strategies that will be used to convey the content. Materials and activities must be developed and evaluated to determine if they will achieve desired outcomes (Brown & Green, 2016). There are different approaches that can be taken when designing instruction. Instruction can be designed systematically by considering components of the learner and the environment or traditionally where the



burden is placed on the learners to grasp what they can, and little attempt is made to cater the different learning styles. Several models have been proposed for use, including the ADDIE Model, Bloom's taxonomy, Gagne's nine events of instruction, and Merrill's principles of instruction (May, 2018).

The ADDIE model is considered the most recognized model. The first phase is analysis, which encompasses targeting the learner's existing knowledge and the learning environment. Objectives are then identified based on the needs of the learner. The second phase is design, which is a systematic process of developing and selecting learning objectives, assignments, lessons, and media. Third is the development phase that involves developing the content and identifying the appropriate technologies. The fourth stage, implementation, is where the content is delivered using different strategies. The fifth phase is evaluation and consists of formative and summative assessments to gather feedback from learners (Apostolopoulos, 2018; Sharif & Cho, 2015).

Kurt (2018) viewed designing instruction as an intentional iterative process. However, in choosing the design process, there is no method that is best. Each model has its place and, when designing instruction, draws from all models (Mind Tools, 2015). How then do you select the model that is most relevant to the learner and the context? Researchers agree that each method has its strengths and weaknesses, suggesting that familiarity with each model should help in delivering quality instruction (Kurt, 2018; May, 2018). Brown and Green (2016) contended that the models are complex and focused mainly on observable behaviors, and they cautioned that a focus on the design should overlook the learner. This makes the process an intense one and calls on the knowledge and skills of teachers. Without a full understanding of the different methods and the steps involved, teachers may have trouble designing lessons.

## Teacher Self-Efficacy

Teacher self-efficacy was identified as the sole factor in improving cognitive activation strategies (Lavigne & Bozack, 2015). In assessing pedagogical beliefs, determining the varying influences on teacher self-efficacy becomes crucial as teachers' self-efficacy beliefs have repeatedly been identified as predictors of the level and quality of interactions with students, and students' achievement. Klibthong and Agbenyega (2018) highlighted teachers' attitudes toward students with disabilities influenced the teaching practices in the classroom and impacted learning. Lavigne and Bozack (2015) shared that a loss of self-efficacy may occur from demands to meet the learning needs of students and added that most new teachers felt the challenges outweighed the successes especially when teaching special needs students.

Theoretical support for the influence of contextual factors on teacher self-efficacy as provided by Bandura (1997). Bandura (1986) defined self-efficacy as follows:

Peoples' judgments of their capabilities to organize and execute courses of action required to attain designated types of performances. It is concerned not with the skills one has but judgments of what one can do with whatever skills one possesses. (p. 391)

Bandura believed that the teachers' belief in their capability influenced motivation. Therefore, teachers with no confidence in their ability to teach students effectively will produce a negative outcome.

Bandura (1997) noted that self-efficacy takes time to develop as the individuals gain competence from their experiences and achieving goals. Bandura highlighted that four sources of self-efficacy beliefs are mastery experience, vicarious experiences, verbal persuasion, and emotional and psychological states. Studies confirm that instructional

quality can be affected by teacher efficacy. Nie et al. (2013) conducted a study to determine the relationship between teacher efficacy and instructional innovation. A sample size of 2,139 teachers from 40 primary schools in Singapore was used. An 11-item teacher efficacy survey was administered, and the results determined that teachers used more didactic rather than constructivist instruction. Interestingly, the study further revealed that teachers with high efficacy tended to use more constructivist instruction than those with low efficacy. This suggests the higher the efficacy, the more willing the teacher is to use more innovative practices.

Notable characteristics of self-efficacy include dedication, high level of emotional intelligence, extraversion, ability to work with others, and willingness to try new things (Guntern et al., 2017). Gangloff and Mazilescu (2017) established a positive relationship between self-efficacy and performance. With past performance being a characteristic of self-efficacy, persons who were successful continue to develop self-efficacy, while those who failed experience the reverse. This has a lasting impact on student competence.

Stamatious-Antoniou et al. (2017) stated that self-efficacy among SPED teachers is determined by the school and class structure. Under the right conditions, the teachers are able to achieve their goals and exude a high level of self-efficacy. In contrast, when the teachers are unable to achieve their goals, the level of self-efficacy is reduced. Based on the study, the teachers displayed a high self-efficacy due to (a) applying alternative instruction strategies, (b) using a range of assessment strategies, (c) creating an enriched learning environment, and (d) successful class management. This shows a high correlation between self-efficacy and the teaching-learning process.

### **The Curriculum**

Curriculum can be classified under three categories: overt or explicit, hidden or

implicit, and null curriculum (Srivastava, 2019). Teachers often feel bounded to implement the curriculum rigidly, feeling they are not allowed to make any changes. For countries with national exams that are content loaded, this is the norm as student passes are the measure of success. Alsubaie (2015) reviewed literature on hidden curriculum and concluded that teachers need to consider the value of the hidden curriculum as expressed through the attitude and behavior of the teacher as manifested by words and actions. Care needs to be shown as the teachers cannot know whether there will be a negative or positive impact from their actions. Sulaimani and Gut (2019) conducted a study on the hidden curriculum in SPED and suggested that structural and cultural practices can be integrated into the formal curriculum to increase student performance. Social practices include technology-aided instruction, peer mentoring, prompting, and differentiated reinforcement for positive and undesirable behaviour. Mitchell et al. (2014) proposed cultural strategies, such as creating an open and welcoming environment, where the needs of the student rather than the weaknesses and deficits are the focus, along with the use of non-normative pedagogies. Sulaimani and Gut recommended the use of paraprofessionals for additional support and integration of the hidden curriculum.

The null curriculum involves content that is not taught or intentionally removed and considered unacceptable based on the mindset of the students (Gholami et al., 2016). Children learn from the absence of certain experiences and interactions that indirectly tell them that teachers are fine with the status quo or accepting of what society considers normal (Milner, 2017). The hidden curriculum impacts the choices available to students, their perception of situations, and issues they may face (Gholami et al., 2016). Gholami et al. (2016), in their study on factors affecting the null curriculum, discovered segregation, attitudes of decision makers, policies, society, technology, and the economy directly and

indirectly impact curriculum design. Teachers need to be aware of the different parts of the curriculum and the role they play in the development of students.

The use of alternate curricula is a major barrier impacting the short-term and long-term development of ID students, especially in light of questionable alignment to the general education curriculum. In the United States and Sweden, this practice has consistently presented a challenge to teaching ID students (Hanreddy & Östlund, 2020). Kleinert et al. (2015) pointed out that the extent to which students with disabilities have access to the general curriculum is unknown by both researchers and practitioners. They alluded, however, to significant losses from lack of exposure to the general setting, such as incidental and imitative learning. Little academic and social progress is made by students in segregated settings, leading to crisis (Cipriano et al., 2016). The authors suggested that, within such settings, the focus should be on ensuring that high-quality teacher-student interactions occur along with high-level interaction between teachers.

There is the need for modifications through accommodations and adaptations of the curriculum based on the interests and learning styles of the child. While the terms accommodations and adaptations are often used interchangeably, they do have differences in meaning. A modification involves altering content, goals, difficulty, and teaching methods to build a bridge between the existing curriculum and the strengths of the learner, while acquiring new competencies (Hall et al., 2014). Hall et al. (2014) elaborated that curriculum modification can be categorized into four types: “(a) accommodation, (b) adaptation, (c) parallel curriculum outcomes, and (d) overlapping curricula” (p. 5). Accommodations assist the student in working around the disability by using specially designed instructions without changing the content or difficulty.

Adaptation, however, slightly changes the difficulty and the teaching strategy. Examples

of adaptations include using picture cards for a story or verbalizing an answer for a test rather than writing (Hall et al., 2014). Parallel outcomes result in a significant adjustment to the difficulty due to the severity of the disability. On the other hand, students may be provided opportunities to meet individual and educational goals through cooperative learning or peer interaction. This strategy is considered overlapping curricula as the SPED student learns the same content as the general education student, but the goals and teaching methods may be different from those set for the general education students (Hall et al., 2014).

Adewumi et al. (2017) conducted a qualitative study with a sample of eight primary school teachers, 10 primary school principals, four education district officials, and one provincial official. The study revealed that lack of training resulted in issues adapting the curriculum to the needs of the learners. Teachers noted the curriculum was not flexible and adaptable enough for them to facilitate students based on their diverse learning needs. The district officials noted that teachers saw adaptation of the curriculum as extra work. Sellami (2018) affirmed that schools need to create a curriculum that brings about total education by addressing individual, social, and global needs. The effectiveness of the curriculum is measured through continued growth and the application of that knowledge. The ultimate goal of school inclusive of the curriculum is to achieve a change in behavior and meet the interest of the public.

### **Special Education Laws and Practices**

Bateman and Cline (2020) outlined four characteristics of SPED: individualized, necessitates modifications, should be systematically monitored, and requires related services. This indicates that SPED involves delivering specially designed instruction that considers the disabilities of students and seeks to develop their strengths and minimize

weaknesses. While these are the requirements, it may not be the practice. Many SPED students do not experience the benefits of SPED and related services because separate curricula, separate classes, and separate instructional techniques are used (Association for Supervision and Curriculum Development, 2018; Patterson, 2019).

A study of SPED laws reveals that its roots are entrenched in “federal and state laws, regulations, and litigations (i.e.) hearings, state level rulings and court cases” (Yell et al., 2019, p. 83). The search for equality of educational opportunity began with the *Brown v. Board of Education* decision of 1954 in that the U.S. Supreme Court decided that separate public schools for Blacks and Whites was unconstitutional. It asserted that segregation was unlawful, education must be defined by outcomes, and also implied equal access to educational resources (Kaplan, 2019; McLaughlin & Burho, 2019). Over time, the decisions arrived at by this case led to effective changes in school policies and the approach to students with disabilities (Yell et al., 2017).

Twenty years after this ground-breaking ruling by the U.S. Supreme Court, it was estimated that only 20% of students with learning disabilities were being educated in public schools in America, with approximately 200,000 persons with disabilities being housed by state institutions (U.S. Department of Education, 2010; Yell et al., 2017). By leveraging the *Brown v. Board* decision, lawsuits were brought against school districts by parents whose children were excluded or segregated due to their disabilities. The parents considered this form of exclusion discriminatory and felt that children with disabilities should have the same opportunities as their peers without disabilities (Kaplan, 2019).

Numerous laws have since been passed in an attempt to improve the lives of persons with disabilities. The Bill of Rights Act of 1975, Education for All Handicapped Children Act of 1975, Civil Rights of Institutionalized Persons Act of 1980, Omnibus

Budget Reconciliation Act of 1987, Americans With Disabilities Act of 1990, and Individuals With Disabilities Education Act of 1990 are some of the major ones (Yell et al., 2019). SPED laws state that all children have a right to a free appropriate public education. This created the room for inclusion, giving SPED students the opportunity to attend general education schools and still receive SPED services. Despite many gains, ID students remained largely segregated from students without disabilities (Kleinert et al., 2015; U.S. Department of Education, 2010). Even with the passing of SPED litigation, some parents believe that schools are inappropriately meeting the needs of their children, highlighting that there are weaknesses in existing policies (Werner & Abergel, 2017).

The focus of the Jamaican education system since its independence in 1962 has been on ensuring that appropriate skills, competencies, and attitudes are developed to assure economic and social development (Ying, 1997). Notable achievements have been made in accessibility, teacher quality, resources, parental involvement, and educational partnerships (UNICEF, 2018). The school system is divided into public and private schools, with the MoEYI forming policies and monitoring implementation in schools. In the public education system, progress is made from early childhood education to primary school and then secondary school. Currently, education at all three levels is free. While progression from elementary to primary is based on parent selection, entrance to secondary schools is based on national assessments. Students go through a series of national assessments, including the following: (a) Grade One Individual Learning Profile Test, (b) Grade 2 Diagnostic Test, (c) Grade 4 Literacy and Numeracy Test, (d) Primary Exit Profile (PEP), and (e) Grade Nine Achievement Test. The quality of the final results of PEP, proximity to school, and student selection are used to determine placement at the secondary level (MoEYI, 2020b).



The Jamaican government made a move toward a formal SPED program in 1975. This was done in partnership with the Dutch government and facilitated the development of the first SPED teacher training program, and an assessment, and research center (Anderson, 2014). There have, however, been limitations in providing the care and opportunities to persons with disabilities (Searle, 2017). In 2004, a Task Force Report on Education Reform was commissioned as a result of the poor performance of students in the national assessments. The task force recommended that institutions be held more accountable for the performance of their students. Most notable to the development of SPED, they suggested there was a need to identify students between the ages of birth and 18 years old who were undiagnosed with special needs within the regular classroom (Crossfield & Osbourne, 2018).

In 2006, UNICEF reported an approximate 37,000 children with disabilities in Jamaica, with only an estimated 10% attending a government-funded school. In March 2007, Jamaica signed and ratified the Convention on the Rights of Persons with Disabilities, signaling its intention to focus attention on the rights of persons with disabilities (Committee on the Rights of Persons with Disabilities, 2019). The ambitions of the government were, however, stalled by a lack SPED teachers and special services for students with disabilities. In 2013, there was a reported one SPED teacher to 92 students (Radio Jamaica News, 2013). The government recognized the difference in educating students with special needs and made a commitment to increase training opportunities with the goal to have at least one SPED teacher by the start of the 2018 school year in each school (Committee on the Rights of Persons with Disabilities, 2019; Lewis, 2016). In 2017, sensitization and training sessions were conducted with over 2,000 teachers and school principals from 600 primary and 150 secondary schools.

Education officers were sensitized about the new Alternative Pathways to Secondary Education program aimed at providing tailored curricula and improved instruction to maximize the potential of ID students (Jamaica Information Service, 2016).

In spite of attempts to improve SPED, teachers are still plagued with the uncertainty of how to effectively stimulate and motivate students. Van Geel et al. (2019) elaborated on the complexity of differentiated instruction that leads to teachers often feeling they have not mastered the art. There is still a high degree of uncertainty of what the specific strategies are, and how to implement them in the classroom (Park & Datnow, 2017). Teachers, therefore, need to know the process that is involved in selecting the right strategies to achieve success.

### **The Self-Contained Classroom**

The philosophy of exclusion within public schools was once the rule rather than the exception. The *Brown v. Board of Education* decision determined that racial segregation went against equal educational opportunity, and this launched into persons with disabilities also having a right to a public education (Yell et al., 2017). The placement of students in self-contained classrooms supported specialized intervention in order to enhance the progress of students with cognitive challenges who were performing below the required rates in standardized tests (Chen, 2020). The practice increased after the passing of the No Child Left Behind Act of 2001. The focus of No Child Left Behind was on improving underperforming schools through a variety of incentives and penalties, without regard to the socioeconomic status of the students attending a particular school. Under No Child Left Behind, schools were required to demonstrate adequate yearly progress toward academic proficiency goals established by each state, with an emphasis on math, reading, and science (Chen, 2020). Segregation allowed schools to protect the

high test scores of specific classes by placing them in self-contained classrooms (Chen, 2020).

The passing of a free appropriate public education, as part of the Individuals With Disabilities Act of 1990, gave SPED students the opportunity to be educated in the least restrictive educational environment, in that students are removed from general education environments only when a disability is so severe that such classes and the use of supplementary aids are not effective (Zirkel, 2017). This concept can be interpreted in two ways, the first meaning in a general education classroom and an inclusive environment (Center for Parent Information and Resources, 2017b; Morin, 2014). The second view is an environment that is best suited to the educational needs of the student that could be a self-contained classroom.

UNESCO has spearheaded the drive toward inclusive education worldwide, including in Jamaica with the signing of the Salamanca Statement and Framework for Action in 1994. Though the agreement was that “schools with an inclusive orientation are the most effective means of combatting discriminatory attitudes” (Blackman, 2017, p. 9), efforts to provide SPED services have remained compartmentalized, lacking in coordination and continued effort and suffocating from the continued stigma and negative attitudes toward persons with disabilities. Twenty-six years later, segregation is still a common practice. It can, therefore, be argued that, based on these issues, the goals of inclusion would encompass a radical reconceptualization shaped by national policy (Richards Mayo, 2017).

Over the years, there have been developments in the approach to educating SPED students. It is, however, still considered a parallel system to general education that makes it difficult for SPED students to access the same opportunities as their counterparts

without disabilities. This system has found support in teaching strategies, educational infrastructure, government policies, and societal norms (National Council on Disability, 2018).

Though research points to the many advantages of inclusion, as well as exposure to the general education curriculum, there are still advocates for self-contained classrooms, especially among general education teachers who argue that this type of homogeneous setting is best suited to cater to the specific deficiencies experienced by the student (Monje, 2017; Samms, 2017). It is important to note that the Individuals With Disabilities Education Act does not mention the term inclusion.

Many educators have the view that self-contained classrooms lead to improved academic and personal development of students. A highly trained teacher is better able to offer the support needed to students. Self-contained classrooms are typically smaller in size usually containing a maximum 10 students. This results in greater attention to each child (Dudley-Marling & Burns, 2018). Kleinert et al. (2015) emphasized that students with significant cognitive disabilities may not benefit as much from inclusion. This is because a large portion of instruction time is usually for group learning or lecture. The general education teacher would lack the skills and training to meet the needs of such students.

Students with ID spend the majority of their time in self-contained classrooms in comparison to other disabilities (National Council on Disability, 2018). This occurs despite research showing multiple benefits of inclusion to ID students, such as improved social skills, improved competencies in subjects such as math, language, and literacy, and improved transition to adult life (Hehir et al., 2016; Kleinert et al., 2015; Olson et al., 2016). Villegas (2020) believed self-contained classrooms make promises they just

cannot fulfill. Cipriano et al. (2016) identified the condition as a crisis not only for the teacher, but also the students. Kleinert et al. (2015) studied 39,837 students across 15 states in the United States to determine the outcome of alternate achievement standards on student outcome. The result showed a positive correlation between expressive communication and reading and math skill levels for the 7% who were served in general education classrooms, while a negative correlation was shown for the 93% served in self-contained classrooms, separate schools, or home settings. The conclusion is that the needs of the child are better served in the general education setting. The cultural context, however, overrides the needs of the individual child, especially in countries where educational reform is still underdeveloped (Tetzloff & Obiakor, 2015). Accommodative learning should be the goal of educators, “whether they are teaching in general or SPED settings,” to ensure that the fullest potential of all students is maximized (Tetzloff & Obiakor, 2015, p. 77). The reliance is on teacher effectiveness and the improvement of classroom practices (Ko et al., 2016).

### **Conclusion**

There is need for teachers who both possess and apply the skills required to actively engage SPED students (Mader, 2017). Connecting teaching strategy with student needs is critical. This chapter pointed out the discrepancy between what is required and the current condition. It showed that, while research has covered the end product, little is said on the process. While the concept of teaching strategies is not new, literature has not fully explored implementation in different settings.

There are also considerations pointing to the importance of quality curriculum and delivering instruction and assessment that are specialized. Collaboration among professionals must also be considered as individuals learn from each other. This allows

individuals to share expertise leading to intentional teaching (Bhatnagar & Das, 2014). Adding actual teacher experience to the discussion can only lead to improved outcomes. While there is a tug of war between expectations and outcomes, the lack of certainty in implementation of teaching strategies warrants further investigation (National Council on Disability, 2018).

### **Research Questions**

This qualitative study was guided by the following core research question: What are the teaching strategies used by SPED teachers in self-contained classrooms? In addition, the following subquestions guided the research:

1. As a teacher who works with ID student in a self-contained classroom, what decisions do you make to determine the strategies you use to help your ID students be successful?
2. What models have you used to design the teaching strategies that lead to the success of ID students who are taught in self-contained classrooms?
3. How are accommodations made to the teaching strategies that lead to the success of ID students who are taught in self-contained classrooms?

## Chapter 3: Methodology

### Aim of the Study

The purpose of this study was to explore successful teaching strategies for ID students who are taught in self-contained classrooms. The study addressed what teaching strategies were used, the factors that influenced the strategies, the models used to design the teaching strategies, and how the teachers accommodated the curriculum to meet the needs of students within the self-contained setting. The analysis of the data collected led to a better understanding of the complexities involved in the teaching-learning process within self-contained classrooms.

This study was significant as it provided meaningful information on the teaching strategies that successfully impact students who are taught in self-contained classrooms. Another significance stemmed from the contribution to improving the practices of teachers through the creation of a learning environment that is supportive and addresses the learning needs of ID students, particularly in low- and middle-income countries, where there are significant challenges experienced by teachers (Hayes et al., 2018). The delivery of special education “lies at least partially in the contextual variables including structure, intensity, precision, and relentlessness with which teachers deliver, monitor, and adapt instruction” (Kurth et al., 2016, p. 228). An adoption of the results may assist teachers in incorporating more effective practices in their delivery (Creswell, 2015).

### Qualitative Research Approach

In this study, the researcher employed a qualitative design in order to collect and analyze data. Qualitative research serves the purpose of explaining the complexities of one’s social environment and offers the chance to explore the meaning and experiences of the people interacting in those environment (Creswell & Creswell, 2017). Khan (2014)

described qualitative research as systematic and subjective allowing researchers to “deeply explore behaviours, different perspectives, and life experiences to discover the complexities of the situation through a holistic framework” (p. 300). Haradhan (2018) opined that qualitative research has grown in the area of social sciences as a way to describe life experiences and gain meaning from it.

Factors inherent in qualitative studies that this study fulfilled were as follows: (a) use of multiple views and perspectives derived from multiple study participants, (b) use of an inductive approach, (c) explored the phenomenon in its natural environment, and (d) made sense of the phenomena based on meaning the participants brought to it (Creswell, 2015; Schoch, 2016; Yin, 2018). The educational environment faces a plethora of issues that require exploration through qualitative interpretative research (Tilly, 2019). The historical view of the positivist-postpositivist paradigm through quantitative methodology and methods no longer serve the important educational questions being asked. The qualitative perspective was needed to support the deep explorations required to support data-driven decision making by administrators and policy makers. Research questions were, therefore, explored with the view that there were multiple truths giving credence to the experiences of participants. By using qualitative research, the value of context in the study of educational processes and settings was also acknowledged (Tilly, 2019). Little is known about the teaching strategies being used in self-contained classrooms for ID students, and the data collected and analyzed in the current study described the perspectives of the research participants.

### **Case Study Approach**

A case study approach was taken for this research. Case studies serve disciplines such as medicine, law, education, and business, and they have increasingly been used to



study the lives and cultures of people around the world in order to gain insight into how they interpret and attribute meaning to their experiences (Harrison et al., 2017). Case studies are used in the description and analysis of real-life situations, history, special needs, or groups of people such as a school department or teaching staff (Haradhan, 2018). Yin (2018) defined case study as an empirical inquiry in which real-life context is used to investigate a phenomenon with the use of multiple sources of data.

Yin (2018) proposed five components of case study designs: (a) a study's questions, (b) its propositions, (c) its unit(s) of analysis, (d) the logic linking the data to the propositions, and (e) the criteria for interpreting the findings. In this case study, the research questions were an epistemological query into the teaching methods that lead to success of ID students. Specifically, the researcher delved into the how and why in investigating the phenomenon. Interview questions represented the propositions that led to gathering rich data about the phenomenon. The teachers who were considered successful in teaching ID students were the unit of analysis.

A single-case design was used for this research (Creswell & Creswell, 2017). A single-case design "is common in clinical psychology, medical research and even education on specific population (example: children with special disabilities)" (Ishak & Bakar, 2014, p. 31), as well as where the researcher seeks to examine the phenomenon at a "fine-grained level of detail" (Ozcan et al., 2017, p. 114). This study was holistic as the focus was on only one unit of analysis and the examination of one phenomenon that is the perspective of teachers who teach in the self-contained classroom where students are diagnosed with an ID (Ozcan et al., 2017).

This study was explanatory in nature as it sought to gather information through open-ended questions that allowed for deep examination of the case (Yin, 2018). The

research paradigm was interpretivism and based on the framework of seeking to explain the frame of reference of the participant with the understanding that actions are value laden and not just theoretical. Reliance was based on total immersion into the setting (Ponelis, 2015). The exploratory nature of the study can be seen as a hermeneutic circle that involved an iterative process of moving from one data to the next to develop an understanding of the different viewpoints and experiences of participants until saturation was achieved (Miskon et al., 2015). The use of an interpretivism paradigm sought to discover meaning and understanding of experiences based on the natural setting of participants. The researcher was interactive and participated in the study. Once data were collected, the information was coded and themes developed that allowed for creative interpretation (Harrison et al., 2017).

Taken together, the study was qualitative in nature and involved looking at the actual experiences of the research participants. Meaning was applied to those experiences based on themes and patterns that developed. The explanatory case study method was used because of the nature of the research questions (Yin, 2018). Yin (2018) proposed that the case study is also used when the researcher has no influence over the participants. In this study the researcher had no control over the environment. In fact, it is not only the phenomenon that was of interest but also the uniqueness of the environment. Yin pointed out that the case study deals with both the phenomenon and the context, offering insight into how and why an intervention worked.

### **Participants**

Korstjens and Moser (2018) embraced the view that, when selecting a sampling strategy, consideration must be given to the one that is consistent with the methodological approach and will yield rich information. The case study design focuses more on how the

small sample, or case, paints a picture of the phenomenon being studied, and so nonprobability techniques tend to be used (Ishak & Bakar, 2014). The nonprobability techniques denote that not all members of the research population have a chance of being selected. In order to obtain the views of the teachers of ID students in self-contained classrooms, the nonprobability technique of purposive sampling was used by the researcher. In this purposive sampling, participants were homogeneous and were selected because of their expertise and experience about the phenomenon (Creswell & Creswell, 2017).

Yin (2018) spoke of the components of case study research design and proposed the importance of unit(s) of analysis that in essence is the case. Kumar (2018) defined unit of analysis as the individual, group, or organization from which the researcher intends to collect data. The case study method involves the characteristic of being bounded to indicate the depth and breadth of the study (Harrison et al., 2017). In this study, the characteristics of the participants were as follows: (a) trained in special education, (b) possessed at least 3 years of experience in teaching special education students, (c) currently teach in self-contained classrooms for students with ID, and (d) willing to commit the time required to participate in the study. Schoch (2016) stated a case study can have a sample size of one, but more persons can be used if the researcher wants to have an information-rich analysis. For this study, four teachers were used. The sample consisted of three females and one male, who were all trained in special education and had been teaching at the study site for a period of 12 to 17 years.

The site of the study was a highly recognized primary school in Jamaica that has a special education unit attached. The MoEYI oversees the operation of all public schools and ensures that resources and policies are in place. Schools are graded from 1 to 5 with 5

being the highest. Schools are graded using eight criteria inclusive of school leadership, teaching strategies, student achievement, and curriculum and enhancement programs (National Education Inspectorate, 2017). The Ministry has a Special Education Unit that supervises schools with students who are physically and/or intellectually disabled. There are 59 schools of this nature on the island that may be special education only or have a special education unit on campus (Statistical Institute of Jamaica, 2017).

The school where the study was conducted is ranked at Grade 5, meaning it effectively fulfills the eight criteria for effective schools. The special education classes are separated from the general education classes by the administrative building and are also closed off with a gate. The unit has eight classes divided from low-functioning to high-functioning students. Each class has a special education teacher as well as an assistant. The building has all services required, inclusive of a lunch and play area, so neither the teacher nor students leave the unit until school is over for the day. There are between 12 and 15 students in the classrooms. Students in the unit are placed based on recommendations from the general education teacher or diagnosis from specialists. The researcher had no affiliation or association with the site other than an interest to conduct this study.

The researcher possessed no power or authority over the participants of the study. Currently, the researcher coordinates a skills-training program for students who were unable to attain the acceptable level of proficiency within the secondary system that would qualify them to matriculate to tertiary education. Through this program, students are able to gain a vocation and become work ready. The government has, therefore, provided a place for them at community colleges where they are able to gain a skill and be eligible for gainful employment. The nature of the program allows the individual to

interact frequently with the MoEYI and specifically the SPED unit since this education pathway was born from that unit.

Additionally, the instructors on the program the researcher coordinates are not trained in SPED delivery and at times find teaching these students challenging. As the coordinator, it is the researcher's job to ensure that these teachers are equipped with the necessary knowledge and competencies for effective delivery. Having sent the teachers of the program to a number of trainings, and becoming aware of the prevailing issues, the researcher's interest was piqued by the challenges that the SPED unit in the vicinity of the college may be experiencing. However, the researcher has never worked with, nor is affiliated with, any SPED institution within Jamaica.

### **Data Collection and Instruments**

There are various mechanisms that can be used to collect data for qualitative research (Creswell & Creswell, 2017). Multiple sources of data are required for case studies (Schoch, 2016). The methods for this study that allowed for indepth analysis were document analysis and semistructured interviews. The core instrument was the interview protocol, while the documents were used to provide additional evidence.

#### ***Interview***

The first instrument that was used to collect data for this study was the interview protocol. This instrument was used to interview individual teachers who made up the sample. The interviews filled the need for indepth information required for qualitative research that can lead to a thorough understanding of human behaviour and perception. The participants were able to give a holistic view of the phenomenon in their own voice (Alshenqeti, 2014). Interviews can be structured, unstructured, or semistructured. When interviewing for research, the semistructured interview method is best because preset

open-ended questions are used to guide the process (Jamshed, 2014). The use of the semistructured interview allowed participants to elaborate on their points and provided rich data to the benefit of the study.

Castillo-Montoya (2016) warned that the researcher must ensure alignment of the interview questions with research questions. This will also ensure that the interview protocol critically engages the literature and theoretical framework to assure relevant and meaningful conclusions (Nowell et al., 2017). To fulfill the concept of a matrix, the researcher ensured that she wrote the interview questions using the research questions as subheadings. This allowed the researcher to visualize the relationship between the research questions and the interview questions and resulted in a complete interview protocol (see Appendix A).

A pilot test of the interview was done to validate instrument trustworthiness (Creswell, 2015). The pilot test was done with two teachers of students who were ages 16 to 18 with IDs at a leading skills training institution in the parish of Montego Bay, Jamaica. These teachers have been teaching students with IDs for over 5 years and have been able to achieve success rates of 80% or more. The pilot test helped in determining what terms needed further clarification, what questions were ambiguous, and if the questions were phrased in such a way to illicit a clear response from the participants.

### ***Document Analysis***

Frey (2018) defined documentary analysis as the examination and interpretation of documents in order to find answers to research questions. It can be used in triangulation to refute, confirm, or expand findings with other data sources (Ozcan et al., 2017). Documents that were analyzed included lesson plans, curricula, a ministry paper with notations about the use of the curriculum, and a curriculum analysis guide. These

documents contributed to the research in a number of ways. The ministry paper provided a rationale for the National Standards Curriculum (NSC) that is used by all schools. The curricula and curriculum analysis outlined content and objectives to be achieved in accordance with the national educational goals and also suggested teaching strategies to be used based on the content. The lesson plans provided information on the design strategies used by teachers as they prepare for their students and also allowed the researcher to get a sense of how the curriculum impacted the strategies used. The documents were used as a way of contextualizing information as another form of communication.

In analyzing the documents, consideration was given to what was included in the document, what was left out, and what patterns were evident in the production of the documents. O’Leary (2014) stated the document can be treated like an informant providing relevant information. The inclusion criteria for documents were that they should be no older than 5 years and should be guideline documents available in the public domain or created by the participant teacher. The researcher collected documents that were original and that were developed by the research participants as well as curriculum documents provided by the school.

### **Procedures**

The first step in the process was to obtain approval from Nova Southeastern University’s Institutional Review Board. The approval ensured the rights of participants were not infringed upon (Creswell, 2015). The researcher had already gained approval from the site to conduct the investigation. Once approval was granted, an approach was made to the principal to access documents to be used in the analysis process. In seeking permission, the researcher outlined the rationale for the study and the requirements for

the selection of teacher participants and documents. The researcher then proceeded to contact the teachers identified by the principal. Consent forms were then delivered by the researcher to the participants outlining information about the study, their rights as a participant, and seeking their commitment (Creswell, 2015). After 1 week, the researcher visited the institution and collected the signed forms.

The researcher started the interview by showing respect and appreciation to the participants and letting them know they could ask questions. The interviews were done online using Zoom. At the beginning of the interview, the participants were reminded of the terms and agreements as outlined in the consent form to ensure full understanding. One interview was done per participant lasting for periods between 47 minutes to 1 hour and 33 minutes. The interviews were audio recorded on the researcher's personal laptop. The recordings were then transcribed using the free transcription software, TEMI. Pseudonyms were used on recordings and transcribed documents in order to maintain anonymity.

During the interviews, the researcher ensured that there was a natural flow to the conversation and that the participants did not feel interrogated. Following the interview, participants were thanked for their cooperation and willingness. Once each interview was completed, all notes were typed and saved in password-protected files on the researcher's personal computer that no one else could access. The audio recordings were also stored on flash drive that was password protected and was stored at the researcher's home in a password-protected safe that no one else has access to.

The researcher compared the transcription with the recording to ensure accuracy. The transcript was then reviewed in totality by the participants to fulfill the validation of the data collection process (Yin, 2018). The transcribed interview was delivered by the



researcher to the respective participant for member checking. Participants were instructed to review the documents and make any changes or clarifications they deemed necessary.

Each participant accepted the transcript as presented.

### **Data Analysis**

Data analysis involved organizing the data and repeated readings to identify themes in order to arrive at an interpretation of the phenomenon (Creswell, 2015).

According to Yin (2018), there is no specific way of analysing data for case studies.

Cohen et al. (2018) proposed four stages in the analysis phase: (a) clustering units of meaning, (b) organizing the units according to themes, (c) describing the content, and (d) interpreting the data.

A systematic and rigorous analysis was done starting with the use of coding techniques for finding the underlying meaning of the data (Vaismoradi & Snelgrove, 2019). In order to arrive at the different codes, a column was drawn to the right of the transcript. The column to the right of the transcript listed the initial codes assigned to the text. Coding “provides a means of purposefully managing, locating, identifying, sifting, sorting, and querying data” (Vaismoradi & Snelgrove, 2019, p. 7). References to the codes listed demonstrated the style of coding used in the initial data analysis. From the codes, broad units of information were amalgamated to arrive at categories (Yin, 2018). Further analysis led to the development of overarching themes formed from analyzing the codes and not the data alone (Vaismoradi & Snelgrove, 2019). Themes are clusters of seemingly unrelated codes that after being grouped share similar characteristics to show meaning or a pattern (Yin, 2018).

As the information was collected, labels with dates, participants, circumstances, and initial interpretation were used to organize and categorize the vast amount of data

collected. A qualitative analysis software, NVivo, was used to help sort and analyze the data. NVivo was selected as it is able to process different data formats and allows documents to be processed as a single data file making analysis easier. The software assisted with the task of coding texts based on the themes defined by the researcher (Dollah et al., 2017). The case report was linked back to the data through a chain of evidence to include vignettes, tables, or sample documents (Patton, 2015). The analysis was then done and organized according to the research questions in order to ensure coherence (Cohen et al., 2018). All information from the different data sources was collated to provide answers to the research questions. This approach to the presentation of data gave a more cohesive storytelling reporting (Cohen et al., 2018).

### **Ethical Considerations**

Privacy of information was a major concern for the researcher. A pseudonym was given to each participant that was known only to the researcher. All documents were then stored using password protected measures known only to her. File names were also developed that gave no indication of the information that is in the file. Finally, files were stored on the researcher's password-protected personal computer. All physical documents were stored in a locker that is in the researcher's home, and she possesses the sole key (Cohen et al., 2018). All these conditions were outlined in the consent form that the participant signed. The participant was also sent a personal copy of this signed consent form. The terms of agreement on the consent form were read before the interview. The purpose of the study was clearly outlined to participants (Cohen et al., 2018).

Respect for the site where the study was conducted was a major ethical consideration (Creswell, 2015). Permission was sought from the school board to conduct the study at the school. The principal signed the site form consenting to approval for use.

Adequate notice was given to the school regarding the conducting of the study and the time period within which the study would take place. The researcher also ensured that there was no disruption to the regular activities of the school and teaching hours were not affected. Participants were also allowed to select times that were convenient for them to participate in the interview (Creswell, 2015).

### **Trustworthiness**

In order to validate the credibility of the data, triangulation of data sources was done. Use of multiple methods of data collection such as interviews and document analysis helped improve the quality of information. Use was also made of multiple coding that involved the cross checking of coding strategies (Cohen et al., 2018). Such exercises encouraged thoroughness in how the analysis was developed. The researcher ensured that the way questions were asked did not influence responses. She maintained a high level of professionalism throughout the entire process.

Another strategy that was employed was member checking that involved cross checking interim research findings with respondents. It gave the participants the opportunity to add information, provide summaries, and check the completeness of the analysis (Cohen et al., 2018). Data documentation was also critical to the study and an audit trail was done. Once collected, information was stored and coded (Korstjen & Moser, 2018).

### **Potential Research Bias**

The researcher coordinates a program for students with IDs at the tertiary level. Because of personal and professional experience with this study topic, caution was taken to ensure there were no personal biases during this study. The researcher was mindful to put aside any presuppositions about effective teaching strategies that she has (Creswell,

2015). Notably, the researcher has no experience in teaching students with intellectual disabilities and so her interest was focused on fact finding. The researcher has no affiliations nor will benefit in any personal way from conducting the study. This means there was no conflict of interest or programmatic bias in conducting the study.

### **Limitations**

The case was a single case, meaning it was limited to one institution. As a result, the conclusions are not generalizable. Individuals in one setting may interpret a phenomenon differently from those within another setting as context can influence perceptions preventing findings from this study being transferable (Ercikan & Roth, 2014). In addition, Yin (2018) pointed out that there is no specific method of analyzing a case study. Starman (2013) pointed out that analytic induction rather than statistical induction is used to make inferences. This means the findings are heavily dependent on the researcher's interpretation of the information acquired.

## Chapter 4: Results

This chapter presents the results of the qualitative descriptive case study regarding successful teaching strategies for ID students who are taught in self-contained classrooms. The purpose of this study was to gather information from teachers who are considered successful to discover what factors influence their selection of teaching strategies and find out how accommodations are made in order to achieve efficacy. An unveiling of these efficacious practices may lead to widespread success within self-contained classrooms once teachers are educated about them. Improved SPED policies and practices may be implemented which can bridge gaps evident in the pedagogical process.

The core research question guiding the study was as follows: What are the teaching strategies used by SPED teachers in self-contained classrooms? The following subquestions guided the research:

1. As a teacher who works with ID student in a self-contained classroom, what decisions do you make to determine the strategies you use to help your ID students be successful?
2. What models have you used to design the teaching strategies that lead to the success of ID students who are taught in self-contained classrooms?
3. How are accommodations made to the teaching strategies that lead to the success of ID students who are taught in self-contained classrooms?

The analysis of data has been presented under each research question. A review of the demographic characteristics of the participants is first presented. Themes and subthemes that became event from the analysis of the data are then outlined. Each source of data was presented separately followed by a triangulation of the data to address the patterns

evident from all sources of data.

### **Demographic Characteristics**

The sample for this study included special education teachers at an elementary school with a special education unit. There were four participants in this study who are all considered successful teachers of students with intellectual disabilities. Participants were identified by the principal of the school who acted as gatekeeper. Table 3 provides the demographic characteristics of the participants. Of the four participants, all have qualifications in special education, three at the bachelor's level and one at the master's level. All have vast experience teaching at the institution, ranging from 11 to 14 years. Participants were given pseudonyms by the researcher based on characteristics they displayed during the interview.

Table 3

#### *Participant Demographics*

Participant	Education	SPED certification	Years of experience
Ivy	Master's	Yes	13
Dahlia	Bachelor's	Yes	17
Lilac	Bachelor's	Yes	12
Corey	Master's	Yes	14

*Note.* SPED = Special education.

Ivy has been a teacher for 13 years and expressed that she considers herself a good teacher. She described herself as a lifelong learner. Ivy has a bachelor's degree in education from the University of the West Indies/Edna Manley College of Visual and Performing Arts where she specialized in Arts, Technical, and Vocational Training. As a professed lifelong learner, she pursued her master's degree in special education at the

Mico Teachers' College. She added that she regularly attends professional-development sessions in order to mold her craft. When relating why she considers herself a good teacher, Ivy responded:

I endeavour to inspire my students to get them to express themselves as freely as possible. However, the key reason why is because I try to be a role model to my students and to ensure that learning takes place in both ways. So they teach me, I teach them. I really just get results I get results in terms of the holistic student, in terms of their behavior, in terms of not just the book work but in terms of them aspiring to be someone greater than they think of themselves. I am a disciplinarian as well, I was a cadet officer as well, so I try. I am a coach as well, I am assistant coach, I coach basketball, football, I am also a sports person. So I look at the whole student instead of just them getting ABCD so that's what I do.

Ivy also shared her commitment toward continuous self-development:

So my expectation is to continue learning in a system that is far ahead of me. So that is really my expectation of myself. To keep learning, going to work shops, I go to a lot of workshops. If I see a workshop with that particular topic, I take it. So I aim to learn and do my best as it relates to these students. So yes, it is a focus on continuous self-development because you never know who will enter the class and the students are different and have different challenges and so it can be daunting. You have to do research as well.

Dahlia has a bachelor's degree in special education and is currently pursuing her master's degree in Leadership. She has been teaching at the school for 17 years and declared that she was a good teacher. Dahlia shared her idea of who a good teacher is:

A good teacher for me is one who is reflective and is willing to go back to the

drawing board to see what could have been done to improve lesson delivery, improve the development of students, because for me it's not just about the test scores, but their social growth is a part of education. So when I can take a child from the average that I got him or her and improve upon that, see a change in their attitude, I can say that something would have been achieved.

Lilac has been teaching at the institution for 12 years and has a Diploma in Special Education from Sam Sharpe Teacher's College and a bachelor's degree in English Language Education. She displayed an outgoing personality for the entire period of the interview:

I'm a good teacher, but in terms of working with my kids, I know I have a good relationship with them. You know you are not great 'cause you're gonna learn something each day, so I am not going to say I am a great teacher. But I am good at what I do, so I'm not great yet, but eventually you know. I'm a veteran, I guess. Twelve years, 12 years is a good while, yes.

Corey possesses a bachelor's degree in Special Education and a master's degree in Theology. He has been teaching for 14 years. Corey laughed when asked if he considered himself a good teacher:

Sometimes we don't compliment ourselves, but I would consider myself a good teacher. I listen to the students who have passed through my hands by teaching, and when I meet them on the road they often say to me, Sir, you were very rough, but I know you wanted the good out of us, and you know it just rolls from their tongues the many things that they have learnt from me. It's always nice when they can come back and say the impact you have had.



### **Description of the Analytical Process**

The researcher began the data analysis process by looking for themes. The transcript was read, and the researcher noted thoughts and ideas that came to her mind as she did so. Notes were made in the margins of the printed transcript along with any comments the researcher thought pertinent. Lesson plans, and curricula were also analyzed, and notes taken. These processes were necessary to effectively absorb the information gathered (Yin, 2018). The researcher identified themes and used the NVivo software to assist in coding information from the transcripts, lesson plans, and curriculum. She later compared the notes from NVivo with her own notes. While the NVivo software aided in separating the data into related parts and assigned descriptive codes, the researcher found that she had to keep going back to her hand made notes. Thus much of the analysis is from the researcher's viewpoint. The researcher combed through the transcript to highlight any quotes or statements considered significant. There was a process of segmenting and labelling in order to arrive at broad themes (Creswell, 2015).

### **Presentation of Findings**

The analysis of data from the transcribed interviews and documents elicited a total of 20 themes. The list of themes and the total references to those themes from the interview are attached as Appendix B. Each theme is presented below and examined in depth with the support of evidence from the research participants and selections from the documents collected. Each theme is discussed under the relevant research question. The discussion begins with the participant responses, followed by document analysis and then the triangulation of the data.

### **Teaching Strategies for Success**

The core research question asked the following: What are the teaching strategies

used by SPED teachers in self-contained classrooms? The indepth interview allowed participants to share the teaching strategies that lead to success of ID within their classroom. It was determined by the researcher that numerous strategies are used. Seven themes emerged that signified strategies identified by the participants, as illustrated by Table 4: peer teaching, questioning, homework, field trips, self-expression, modeling, and teacher-designed strategy.

Table 4

*Teaching Strategies for Success of Students With Intellectual Disabilities*

Strategy	Corey	Dahlia	Ivy	Lilac
Peer teaching	x	x	x	x
Questioning	x	x	x	x
Homework	x	x	x	x
Self-expression	x	x	x	x
Field trips	x	x	x	x
Modeling	x	x	x	
Teacher designed	x	x	x	x

***Peer Teaching***

The respondents believed that peer teaching served as a good strategy for responding to the needs of students and the interaction was a way of meeting individual needs. Collaboration in the form of peer teaching was a preferred strategy for Ivy:

A key one I always use is peer teaching. I love that one because it causes them to be more sensitive and more open. So I will put them in groups maybe according to their learning style, different abilities, I will strategically put them in groups or allow them to go into groups by themselves. Let them feel involved. So you don't go on as if you are the sage on the stage and you are the dictator, you are Fidel

Castro. So you basically allow the child to lead the class sometimes.

Dahlia noted that information was very accessible and students can learn from each other by doing research and sharing their thoughts. Dahlia stated, “They are technology inclined, technologically inclined. They can press Google and do some research. And then they can now report what they have learnt. So peer teaching is important in the process.” Corey felt this method is advantageous:

You are doing team building exercise because then you can group them in similar, how do you put it, similar groups where they understand at certain level or similar levels and formulate your lessons around that so that they can understand.

Lilac believed it is a good way of relieving the frustration students sometimes experience in class:

Sometimes I even have to group them so that they can learn at their own pace or the group in which they are in. I would allow them to work in groups for the most part, working groups with persons who are at their pace and learning abilities, and this will help them to move at their own pace, so they would learn.

### ***Questioning***

All participants saw value in questioning as a strategy for success among ID students. They believed that students enter the room with some prior knowledge. Corey, in describing what he referred to as the Socratic sessions, shared the following:

I find out when we question students, and we pull from them what is inside of them the others learn, and the others respond freely. Because you know, the knowledge is within them and so from the Socratic questioning I usually have students teach each other while I move around them. I find that they learn better or a bit better from each other than if I were to stand before them for 30 minutes

or full session and just be talking, talking, talking. They are now owning their knowledge and they are honing the skills of teaching and learning.

Corey shared a success story of one of his students who was able to benefit greatly as a result of the Socratic Method:

Yeah, one young man, if I may tell a story, as I indicated that I love stories.

There's a young man who I taught at the Grade 5 level, he's now in his second year becoming a medical doctor, and when he came to me he wasn't talking, and I usually take them out for their Socratic sessions twice per day, and in the Socratic sessions they had to talk. They had to respond to questions and they had to ask questions. So they prepared their questions, prepared their answers, asked their questions and respond to the students because they were the teachers. Of the Socratic seminar one of the parent came to me of this child and said Sir, I don't know what kind of Socratic something you do, but I cannot stop my child from talking at home, and he's just a busybody. Tell me a little bit more about it. That awesome spirit that I've had with that group of students is, it is just phenomenal in terms of the students have gotten hold of themselves and they spoke freely...and I've used Socratic seminars in other places so that method does help.

Lilac also believes that by questioning the students, she is able to bring out the best in them. In reference to her preferred strategy, she stated the following:

Questioning and answering is the main one. I try to bring out their prior knowledge, have them discuss stuff. If you wanna have your class, going, buzzing, you know stuff like expressing themselves. I tell them read the story and then I give them the questions and I said OK, were you able to find this question in the story? If they say no I ask, "What did you use to get your answer and then

say from the story and from what I already know, you know, put two and two together. This is what I understand, right?” The other day I was using the example with my kids, where I say in this story you might know the name of the character which is so and so, you know that. So and so is going to a party, which is by so and so, all those answers are in the book. In the story how do you think the person is feeling? They say excited, happy. I said, why do you think? Why do you think that the person is feeling happy? They say well when I go to a birthday party I am happy. And from the games that they were playing or from maybe things that they're doing, it shows that you're happy. I said OK.

Dahlia noted, in reference to the students, that it is important to ask “questions to ensure that they have received what you are saying.” She added that she also encourages her students to ask questions:

I often tell students I would rather you answer the question and get it wrong, now, so that you won't get it wrong after today. I tell them the day you realize you don't know something must be the last day that you don't know it.

Ivy pointed to the value of using the questions as a way of getting students to think more critically:

For example, if I should ask a question to a student and they didn't get it right, I wouldn't out rightly tell them all you're wrong. I would try to maybe ask questions surrounding that topic so that it guides their thinking and this normally develops a positive learning experience for them.

### ***Homework***

Participants indicated homework as a teaching strategy. The involvement of the home was paramount as a strategy for success of students with IDs. This strategy does

not just emanate from the teachers but is part of the culture of the school. Corey spoke of this practice:

There is a homework policy at my school that the children must get homework at least three times per week and the homework must be marked. So many go home with homework Wednesday and on Fridays they go home with a little bit more.

So it's a little challenge for them. Teaching and learning is not just taken up in the classroom in the 5 hours that you're there, but when you go home it continues.

Ivy outlined that this strategy is considered helpful to the students as a way of solidifying what has been learnt in the class and also to identify areas of misunderstanding:

How do you want them to process what they have learned? Meaning how do you want them to be able to know if they have not grasped the concept? To realize that they have or haven't grasped the concept they must be willing to retry in terms of doing work at home.

Lilac advised that, when a lesson is taught, "try to add take home assignments to it as well to see how the students would understand the topic in their own space."

Interview participants noted the necessity of parental involvement in the effectiveness of this strategy and added that a relationship with the parents is vital. Corey spoke out that homework is an expectation of parents:

The homework policy was clearly explained to the parents and that it is not the responsibility of the parent to do the homework for the child. The parents are learning, you know. Surprisingly the parents ask when their child does not get homework. Anytime the child does not go home with homework, I hear the concerns of parents when their child has no homework.

Dahlia noted:

I always record their parents' details in my mark book. Phone numbers, addresses. Even on report day I provide individual comments, letters to the parents that tells them what I have observed, how I would recommend that they deal with it and there's a follow up time there.

Corey advocated this view by stating the following:

One of the things that I have used when I identify students not performing at the level what I do I call parents to my office and I have a chit chat with them and so the love and care its overall. It's all encompassing.

### ***Self-Expression***

All participants noted that they encouraged the learners to express themselves in different ways and created an environment in which students are able to share their ideas and inspire each other. The mode of expression varies depending on the teacher. Lilac stated, "You have to get them to be expressing. You might even have them go up and do a dance, they love it." Dahlia acknowledged that she likes when her students write and speak out in class:

You have to allow them to write. And after they write, you need to allow them to explain what they've written and what they've heard to make sure that what they have received is what you intended, 'cause you haven't been communicating if what you intended is not received in that way. Many times you think that oh they are students who don't have a voice, wrong! They have a voice but it's just that many times they don't know how to use the voice. No! We need to free them, that mental slavery we need to free them from it, let them realize that they can speak up but know how to put their thoughts together.

Corey admitted that students are different and may need different ways in which to

express themselves:

I try to ensure that whatever the students are able to write about, they can do it. So I try to set both practical and written assessments for them. They have different ways of expressing themselves, some of them they will express themselves well when talking, and some they would have to write it down. So they have different ways of expressing themselves.

Ivy voiced, "I endeavour to inspire my students to get them to express themselves as freely as possible." She advocated journaling as a mode of self-expression, emphasizing that, through art, students have been able to develop their self-esteem:

Journaling is one that I use. Why I use journaling? Right now even in my digital space the students have to maintain what is called a digital art journal where they are given like maybe tasks. Three things you learn, one thing you would change. So you have to get them to be expressing. Sometimes you get them to open up to be honest, sometimes you open up somethings you don't really, you have to be open to hearing somethings you don't really want to hear, but it helps because it helps them grow. A child was journaling and said I really love doing this work because it challenge me to do this and it makes me want to cause I wasn't so for example I love to do portraits because it allows them to look at themselves and a child had an issue with her nose and as simple as we think, she said it allowed her to look at herself different.

Dahlia added that this form of self-expression when extended to assessments must be fair to all students and so a common rubric is needed:

So if you're asking, if you're doing an assignment I now understand that the one size assignments doesn't bring out the best in everybody. So if I'm asking you to



explain something I may say to you, write a paragraph. I may give somebody the option of doing a diagram on cartridge paper, somebody else might want to record their voice. Somebody else might want to do a video. So now I get persons who can choose which modality they use, which method they use, all using up a rubric, common rubric because the person who writes a paragraph might feel that they'll get less than the person who did a video, but you have to make sure that you have a common rubric, standard rubric that is balanced.

### ***Field Trip***

The ability of students to explore their environment was seen as a great strategy. The opportunity for students to learn outside of the classroom and outside the school location was felt to optimize the ability of students to learn. Ivy advocated that the school environment can be used as a field excursion:

Let them get up and move around, go outside. Use the environment for learning. Sometimes you do a trick and it's not working. Let's go outside, you have to change, look at the reaction. Sometimes they are not in the talking thing or doing thing so you have to change the environment, so you have to be able to grab interest.

Dahlia shared the following:

For example, you're doing the topic family and you're explaining family tree. All classrooms should have full view of the outdoors if they are properly constructed. You can use a tree outside to explain the family tree. If it is that you're in a low lying area and you see a pumpkin vine, you can use the pumpkin vine to explain what the family tree is. So now you have planned the lesson to meet your environment, and to meet the kids that are visual, and kinetic.

Corey added, “We have the field experiences even on the school campus. We go outside in the bush. Doing this, doing that.” Lilac concurred by stating, “I bring them outside and then try to do something fun, put them in the elements.”

Corey pointed out that field trips were also done away from the school campus stating that there are visits to places based on the topic being done. He added that this provides exposure to the students outside of their immediate environs:

There is an activity or excursion relating to the topic they are doing. So what we did last time, we went to the fire station and then we did a bus tour of the town, where we tried various historical buildings and to be honest with you some of these students are from home to school and they don't even know the town. And so whatever is learned in terms of the curriculum, there is an expression outside of the classroom. They have their field trips.

### ***Modeling***

Three of four participants indicated that modeling is an important strategy. Ivy believes this is an essential strategy if a teacher does not wish to fail the students:

So if you want the child to go through a process, say you are teaching maths. You show the child from the beginning of the class this is what is expected. If it is a drawing you must have a model, you must model, this is what I want, so they will work toward that. Sometimes we assume that the students know the standard but they don't. So we fail sometimes because we don't put it out, and say the toe must be down here, and the finger up here but we expect them to do well, and so that is the thing with students with intellectual disability, they don't think like us, and we assume that they do. We need to realize the child does not have the same thinking as us so we fail them.

Dahlia stated, “I don’t just give instructions to the class, because they still don’t understand. I would always be available to show them what to do and explain in simpler terms to them.” Corey pointed out, “For example, you show them what to do and then maybe class activities as well to see how the students understand the topic.”

### ***Teacher-Designed Strategy***

The participants have used their experiences in the classroom and in their daily lives to develop what would be categorized as their personal teaching strategy. Strategies include Ivy’s Approach, Jesus Approach, the Beatitudes, and use of fun. Ivy’s approach focused on developing affective behavior in students:

So I mix what I call the theories with experience to come up with what I call Ivy’s approach. You have to make them do a little affective where they debate, talk to each other, learn how to relate, learn how to function as a human being more than remember that a dog is that or two plus two is four. That is one aspect of their being. In order to make it interesting you have to make the lesson relatable. Then we reflect, go over the steps, so you can see if they missed out a step or is misguided in a step.

Corey used the “Jesus approach” that involves learning through telling of stories: “I usually use a lot of stories and I call that the Jesus approach in his preaching, 'cause what I find is that we are cultured to listen to stories or dramatization or to watch dramatization.”

Dahlia ensured students are aware of the rules that govern a topic and believed that once students are repeatedly made aware of those rules they will apply them:

Teaching strategies for me? So for example, I call them the beatitudes that sets the framework. So when I go in, if those beatitudes have been exposed to them for a

period of time, we go through the beatitudes in maybe 2 minutes and as we go through the session, if someone makes a mistake, I could say to them you have violated beatitude so and so.

Lilac uses fun as a method and believed that the students should be having fun while they are learning:

I ensure that the lessons are fun that we are learning so it impacts. I have a lot of fun with my kids. I try to be enthusiastic about the lesson and try to maintain a positive attitude because if as the teacher, I'm not enthusiastic about the lesson for areas that are, let's say boring or very hard to understand, they won't grasp it. So I try my best to have a positive outlook on the lesson.

### **Document Analysis in Relation to Core Research Question**

The sample lesson plans and curricula received from the teachers show that the strategies being used in the classrooms are also suggested by the curriculum. Below are excerpts from curricula and lesson plans that show evidence of the seven teaching strategies identified.

#### ***Curricula***

The curricula that were procured by the researcher were the NSC Grade 4 Exploratory Core, NSC Grade 3: Integrated Studies, Language Arts, Mathematics, and NSC Grade 2: Integrated Studies, Language Arts, Mathematics (MoEYI, 2016, 2018).

One curriculum included:

The National Standards Curriculum (NSC) takes a constructivist approach which is based on the belief that learning occurs when learners are actively involved in a process of constructing meaning as opposed to passively receiving information (Bruner, 1966; Vygotsky, 1978). Constructivist teaching fosters critical thinking,

and creates motivated and independent learners. This was also the basis of the existing curriculum but this curriculum places greater emphasis on generic skills, such as critical thinking, problem solving and independent learning in order to better prepare students for their future in the twenty-first century as indicated by Ananiadou in 2009. (NSC Grade 2, p. XX11)

The Grade 4 curriculum emphasized a move from traditional methods to more expressive ones:

The methodology also suggests a moving away from traditional exercises such as filling in the blanks, to placing greater emphasis on having pupils use language to express ideas in speech and writing. It is hoped that the explicit teaching of the features of language enables students to see how language works, and be able to use language to make meaning as they read and write. Most of the activities give students an opportunity to practice specific language skills. The teacher may need, however, in some cases to explicitly teach rules, structures and strategies prior to these activities. The content outline for Grade 4 may therefore be consulted for details on the scope of content/skills to be delivered. (p. 12)

The curriculum has a section that provides suggestions on teaching and learning activities. The range of suggestions included engage in pair reading, work in groups, engage in discussion, do a presentation, brainstorm sessions, engage in research, and participate in field trips. Specific examples of activities outlined throughout the respective curricula are as follows:

1. Peer group:

- In small groups, research food nutrients and balanced diet using online/offline sources. Make a journal entry showing a plate with drawings depicting a

balanced diet. Use vox pop to share the information orally with the rest of the class (NSC Grade 3, p. 33).

- Work in pairs to read grade level text. Select a character or event to which they can relate or have had a similar experience. Discuss connections with their partner. Draw picture(s) to reflect the similarities and differences between their experience and that of the character or event in the text. (NSC Grade 4, p. 19)

## 2. Questioning:

- Brainstorm the types of schools/agencies (e.g. orphanages, places of safety, day-care centers, after-school care centers, children's hospital, clinics, toy and clothing manufacturers, baby food companies, voluntary organizations such as youth clubs, camp and UNICEF) that exist to meet the needs of children and discuss the special needs that these institutions meet (NSC Grade 2, p. 30).
- Formulate questions about a particular musical form in a Caribbean country, excluding Jamaica. Write brief responses to your questions and share with the whole class (NSC, Grade 4, p. 14).

## 3. Homework:

- Make additional rules and observe them in order to be safe. Interview parents or family members about accidents caused by fire and earthquake. Encourage parents to have a first-aid kit at home. Assist in selecting items for the kit (NSC Grade 2, p. 27).
- In their journal, write a letter (a) telling a friend what they learnt in class about maintaining good relationships with other countries. (b) What is likely to

happen if these ties are broken? (NSC Grade 3, p. 89).

#### 4. Self-expression:

- Sing/create songs about the types and functions of teeth. Select any tune/melody of their choice and use body percussion and classroom instruments to accompany singing. Count and clap steady beats to the song. Keep in time with each other (NSC Grade 3, p. 22).
- Work in groups to skim and scan assigned texts to extract information relating to specific topic. Present their findings in a creative format (NSC Grade 4, p. 21).

#### 5. Field trip:

- Participate in a field trip to the school/community/parish library. Observe the layout of the library focusing on the various sections such as: fiction, non-fiction, reference, children's literature, etc. (NSC Grade 4, p. 21).
- Take a tour of the school yard, identify things in the environment that they consider useful in satisfying basic and other needs. Where possible illustrate these things. Create a flier about how the environment satisfies our needs. Write a well-constructed paragraph about each item mentioned and place it beside its corresponding illustration in the flier (NSC Grade 3, p. 39).

#### 6. Modeling:

- Demonstration by teacher to investigate the temperature at which pure water boils.
- Teacher will bring to the boil several samples of water (including pure water), each measuring 50 ml. Record the temperature at which each sample boils and

complete a list (NSC Grade 4, p. 193).

- Teacher will explain the following terms to students: • pitch (high or low), dynamics (loud or soft) and timbre by describing the timbre by naming the instruments used in the song (NSC Grade 3, p. 104).

7. Teacher-designed strategies: The curriculum encourages innovation by teachers:

In delivering the curriculum, teachers will ensure that it is based on the child's interests as well as the principles of child development and best practices - this will mean that both the teacher and the child enjoy the learning experience and have fun while teaching and learning. Teachers have the opportunity to plan learning creatively for students within the Units of work. They are able to be flexible to cater for the learning development and holistic needs of children through a well-planned, vibrant interlocking curriculum that will ensure children learn and develop physically, emotionally, morally, socially, intellectually and culturally. (NSC Grade 2, p. XX1X)

Suggestions include:

- Make lessons enjoyable and exciting for children and use other ideas and strategies that they may have to compliment the integrated curriculum (NSC Grade 2, p. XXX1).

### ***Lesson Plans***

Lesson plans from participating teachers in the subject areas of mathematics, language arts, and social studies were analyzed. Lesson plans were for the period 2019-2020. Evident in the lesson plans were different strategies used by the teachers.

1. Peer group:



- Students will be placed into groups. Each group will be given a different number of fractional pieces representing different fractions, e.g. thirds, fourths, fifths, etc. as revision. Each group will then be asked to use their fractional pieces to make as many wholes as possible. For example, students with thirds could make 1 whole with three thirds.
- In small groups, students will use the internet to research information about ways in which human activity, such as those identified on the school tour, affect the environment. Having gathered the information, students should brainstorm possible solutions that can be used to address the problem.

## 2. Questioning:

- Engage students in a discussion about the need for renaming when adding two-digit numbers. Suggested questions included: 1. When does it become necessary to rename? 2. Can you think of some addition problems where renaming would be necessary (or not necessary)?
- Ask students if they think we can change from one unit to another unit in the family such as grams to centigrams? Or kilograms to grams? Or grams to milligrams? Why or why not?

## 3. Homework:

- Students will complete activity on page 18 of Language Tree.
- Complete pages 17 - 20 of The New Primary English 6 on Nouns
- Go through the class discussion questions with you parents/guardian.

## 4. Self-expression:

- Students will observe the picture below that depicts a 100 metre final. They

will listen while the teacher reads the story, “The Race,” recorded below. The students will be later engaged in a discussion about the outcome of the race.

- Students should then design a presentation to show their solutions. The presentation should involve all members of the group and can be visual presentations, skits, songs, etc.

#### 5. Field Excursions:

- The entire class will be taken outside in a controlled area. Several items (such as a leaf, a stone, a stick, a bottle cover, or a bottle) will be strategically placed for five students to find. All five students will return to the starting point with the objects.
- Students will be taken on a tour of the school compound and asked to observe areas where damage to the environment is evident e.g. burning areas, littered areas, waste water flow, etc. Upon return to class, students will discuss their findings and use the Connect, Extend, and Challenge routine to apply its implications to the state of the global environment.
- One group of students will take a field trip to National Environment and Planning Agency (NEPA) to get a first-hand view of the processes involved in recycling. Another group will take a trip to a farm and observe how the farmer uses food scraps to create compost and then use in his farming.

#### 6. Modeling:

- Teacher will do examples to help students understand converting from smaller to bigger.
- The teacher will demonstrate left to right progression in reading by running her

fingers or pointer along the line of print-beginning at the green dot and ending at the red dot.

#### 7. Teacher designed:

Analysis of the individual lesson plans submitted by teachers showed use of the strategies they have developed. No strategy was mentioned by the name submitted by the teachers when interviewed, but analysis of the lesson plans showed elements of the strategy as outlined by the teachers in the interview:

- Lilac: The plans used games as the strategy. Specifically, one plan pointed to having an “I spy” and another to students doing a word search. Games were geared toward the lesson:

Students will participate in a game of "I spy, with my little eye, objects that.” They will be taken outside and asked to look for words that begin with “b.” The other students will guess and be given hints whether hot or cold. The one who guesses gets to go next.
- Ivy: Ivy’s strategy was not clearly outlined in her plans. While whole class activities were being done, she noted in the lesson plan that students who had difficulties would be facilitated. One activity for example stated:

Students will each be given a Post-it. Students will write one thing they understand and one thing they do not understand about the lesson. Students will share in peers and this will be followed by whole class discussions. While students do a follow-up worksheet, the teacher would call up individual students to discuss their questions.
- Corey: The plans analysed had stories interjected at different points during the learning process. They were used as a way of introducing the lesson, in the middle

of the lesson and even at the end of the lesson to get students engaged. One example was:

Students will listen Louise Bennett “Colonization in Reverse.” Students will discuss migration, expectations when people migrate, impact of migration using the story and personal experiences.

- Dahlia: Dahlia had reciting of the rules as a part of her lesson plans. A lesson on Capitalization had students reciting rules which seemed to be constructed in the form of a jingle:

Things we capitalize-Names, titles, dates, months, first word of sentence.

Holidays, cities and towns, languages, events.

### **Triangulation of Information for Core Research Question**

Seven strategies were identified that lead to success of students with ID who are taught in self-contained classrooms. The strategies are peer teaching, questioning, homework, self-expression, field trip, modeling, and teacher-designed strategies. Through the interviews, all strategies were identified by all participants with the exception of modeling that was identified by three of the four participants.

The curriculum and lesson plans show agreement with the teaching strategies stated by the participants. It must be noted that a comparison of the lesson plan and the curriculum shows that teachers did not strictly abide by the suggestions given to teach a particular topic. For example, one suggestion in the 2018 Grade 4 NSC curriculum for English language was for the teachers to have students “Listen to/watch an advertisement online or offline for a product that claims to do wonders for one of/or the three sense organs (the tongue, skin, and nose) (the advertisement can be teacher created).” The teacher instead had the students create their own advertisement and then elicited

responses from peers about the claims made in the advertisements. This method allowed the students to be more expressive and involved in the learning process. The teacher outlined in the lesson plan that students would be able to probe their classmates on the claims made and elicit responses from their peers. Together, the students would be able to address concerns in the advertisement and suggest how they would have modified any outrageous claims. In another lesson on speaking and listening that asked that students listen to individuals as they speak, the teacher had the students do a choral speech which brought out the same skills, but students were being more expressive and involved in a process that could have led to the development of a number of speaking and listening skills.

### **Factors Influencing the Choice of Teaching Strategies**

Research Question 1 asked the following: As a teacher who works with ID student in a self-contained classroom, what decisions do you make to determine the strategies you use to help your ID students be successful? Participants were asked questions regarding the factors they believe influence the choice of teaching strategies they use. A variety of factors influence the strategy selected. Table 5 shows the four themes that emerged: student characteristics, the curriculum, the teacher's learning style, and objectives. It can be seen from the table that the one factor stated by all participants is consideration for students. Objectives and curriculum were suggested by three of the participants while teacher learning style was indicated by two participants.

#### ***Student Characteristics***

The factor that mainly influenced the choice of strategy was the students. All participants stated that you have to consider that students are individuals with their own personalities and preferences. They learn differently and so your strategies must be

geared at reaching each need. Characteristics of the students that the participants identified were their personality, demographic characteristics, experiences, and preferences.

Table 5

*Factors Influencing the Choice of Teaching Strategies*

Factor	Corey	Dahlia	Ivy	Lilac
Student characteristics	x	x	x	x
Objectives	x	x	x	
Teacher learning style	x		x	
Curriculum	x	x		x

Dahlia noted that demographic characteristics in terms of age and gender are considerations. The personality of the students and prior knowledge are also considered. Important consideration is given to those students who may not grasp the information as quickly as others:

I have to take into consideration their age, their gender, their prior knowledge.

Have to take into consideration their personality. I have to take into consideration even their co-curricular activities. Is my favorite troublemaker going to get this?

Is a child who is very much exposed to undesirable circumstances going to

appreciate this? Am I using examples that are going to unearth negative feelings

in them? How can I use their neighborhood experiences to reach them? So you're

basically taking like an individual approach thinking about each student. Yes,

because one size does not fit all. I do a behavioural outline of each student. For

one class I have, let's call her Kay. Kay is very outspoken, sometimes to the point

where she doesn't know when to stop. But I have to consider the things she talks

about. She likes politics cause in her community, garrison community, politics is a way of life that influences everything, right? So what am I going to avoid discussing so that she doesn't lose concentration or mash up the class. What would I need to include? She also likes cooking and she thinks that's very calming. So what am I going to use now to get her to settle down? One young man, he has difficulty reading. How is it that I'm going to move on with the content and make sure that this young man is able to understand because of his difficulty in reading?

The prior knowledge of students also played a significant part in strategy selection, and Dahlia believed this should be capitalized on:

There must be something within their own experiences, their previous knowledge that I can use to bring them from where they are to where I want them to be. If I am teaching a class of males, whether all males, dominated by males or with some males in it, I have to make sure I include examples of sports or TV games or something, because that is primarily what they lean towards.

Ivy considers the technical needs of the students especially when there are physical impairments that must be attended to. She considers that a social approach is sometimes needed, and that in selecting strategies teachers must do checks, and balances to ensure that all needs of students are being covered:

When you plan, you have to take student X into consideration. So if the student needs audio you have to put audio, or if they need to have visuals in terms of learning style, or do you need to have social approach in terms of learning style.

Student ability plays a key role for Corey. He considers how the students learn, and formulates his lessons around the skills, and abilities they already have:

It would be my duty as a teacher to understand and not to highlight their disabilities, but to formulate my lessons around the skills and abilities that they might have so that learning can take place...when developing a lesson I would normally think of different learning skills of the students.

Lilac considers each strategy to determine the impact they will have on student understanding. She seeks to fill any gaps in learning and draws on the experience of the students as a vehicle for learning:

I have to learn about the gaps in their knowledge. Thoughts are, will my kids be able to get this? Will they understand it? You know, will there be able to read it for themselves? You know stuff like, wonder if he's gonna be frustrated by what I'm doing right now? You might have to divert to take in their experience but at least they learn.

### ***Objectives***

Three of four participants considered the learning objectives as an important consideration. Participants looked at where the students were, and where they want them to be. Ivy commented, “The learning outcomes, what we call the standards. What do I want this student to learn? The standards lead to your objective. The objective must be real life, relevant.” Dahlia believes the students must know their destination and must be told the objectives before the lesson begins. She informed, “You have to point out to them the objectives you will be working with. If they don't understand where they're going, you can be there for an hour and nothing happens.”

Corey was specific on the manner in which the objectives were stated. He discussed that they should be specific, measurable, achievable, realistic, and time-bound if they are to be efficacious. Corey stated, “Normally when I'm planning my lessons, I try



to set SMART objectives and to ensure that the standard for each lesson matches that of the school or the Ministry.”

### ***Teacher Learning Style***

Two of the participants utilize their own personal learning style, reminiscing on their own days in the classroom and what strategies they found effective. Ivy indicated that she was a visual learner and so she uses visuals in her lessons. Ivy stated, “I remember in school I learned from teachers who were presenting using visual so I go back again to my learning experience and know I failed in some of my classes just because teachers were not practicing certain things.”

Corey was in agreement with Ivy expressing that he places himself in the place of a student and considers what he expected from his teachers as a learner. He then incorporates these preferences into his teaching. Specifically, he identifies the teacher talking and moving around as his preferences:

I usually think about myself. How did I learn? And I for me, you know, children learn differently, so I learn I think I learned when I hear my teachers talking and when they move about and when I remember, I know I remember this clearly whenever I'm doing an exam. I kind of visualize the teacher teaching that topic. And I do a walkthrough in my mind and I try to remember everything that was said at the moment.

### ***The Curriculum***

Three participants stated that the curriculum is a definite consideration. Corey explained that, while he considers the objectives, an important aspect is to “ensure that the standard for each lesson matches that of the school or the Ministry.” Lilac was in agreement outlining that it is a policy by which teachers are expected to abide:

I use my curriculum, they say you must teach the curriculum. I might step off the curriculum for a while, but it's for the kids benefit right? I teach off the curriculum, but sometimes like some of the stuff that might come up, you know, might switch it a little bit from the curriculum.

Dahlia gave credence to the curriculum due to its guidance and suggestions on how to deliver the lesson. She elaborated that she at times rearranges the recommended order to deliver the content, to suit the needs of her students:

I ensure that the standard for each lesson matches that of the school or the Ministry. The curriculum order affords guidance in terms of the content. It also gives examples of activities that you can do. I find that the curriculum, if you pull it apart you can actually get a flow that your students will understand better and how you pull apart for one class you might not be able to do it like that for the other class.

### **Document Analysis in Relation to Research Question 1**

#### ***Curricula***

The curriculum and lesson plans showed evidence of student consideration and objectives. The curriculum itself being a policy document must be a consideration in the development of strategies as this is the document from which the content for delivery of instruction is derived. The importance of the curriculum in the teaching process is undeniable: “There is need therefore for a vibrant and dynamic curriculum that will inspire and provide greater opportunities for all learners as an inclusive approach is used to cater for the needs of all students” (Ministry of Education, 2016, p. 1). The curriculum advocated a multidisciplinary approach and emphasized the benefits to students (see Item 1 in Appendix C). Throughout the curriculum are categories that displayed what the

students would do showing, how activities matched the objectives, and the content to be learned.

There is a clear avocation for consideration of the students and the objectives from all MoEYI documents that were analyzed. The Curriculum Analysis: Grades 4-6 presented a list of steps in the unit planning process that included the following:

- Classify student attributes: Identify commendable characteristics and challenges/concerns using the profiles
- Align identified students; attributes with learning Pathways- ready, near Ready, Not Ready
- Unpack/Unwrap the Essential Objectives
- Align the Objectives with the Learning Pathways
- Identify relevant learning activities and assessment criteria
- Select Differentiation methods. (MoEYI, 2020a, p. 4)

The curriculum also emphasized the importance of considering the characteristics of the learner, identifying specific factors that teachers should consider.

The learner is, therefore, at the core of all teaching/learning experiences and the objectives, skills, activities, assessment criteria and learning outcomes of all units are written from the learner's perspective. The learner's full engagement and differences are taken into account and the dimensions of ability levels, interests, learning styles and gender are critical factors that were given great consideration during the development of the teaching units. (NSC Grade 4, p. 3)

Item 2 in Appendix C shows a structure that connects the curriculum with the objectives and teaching strategies. From the diagram, an additional consideration that was

not emphasized by the teachers is the learning outcome or assessments to determine the level of students' understanding. One teacher mentioned learning outcome but used it synonymously with the standards or attainment target. This illustrates that there may be some confusion in the use and importance of these terms. Apart from the objectives that stated what students would do to learn the concept, the curricula included assessment criteria to provide evidence that the students have learnt the concept. Examples of assessments that could be used were also provided. Participants did not place emphasis on assessment.

### ***Lesson Plans***

Lesson plans show that objectives are an important consideration in determining strategies to be used. Plans analysed showed a connection with the objectives and the strategy used to achieve the stated objective:

1. After working in small groups, students will be able to discuss ways in which human activity affect the environment and suggest possible solutions that can be used to address the problem.
2. After listening to the story entitled "The Fruit Basket," students should be able to give different examples of ratio.
3. After viewing the demonstration by the teacher, students should appreciate the need for standard ways of measuring liquid.

Assigned work was also included in the lesson plans to determine if the students have learned. Assessment activities were seen throughout different aspects of the lesson and especially as a culminating activity. The assessments also varied in terms of worksheets, presentations, and creative pieces.

### **Triangulation of Information for Research Question 1**

Four themes emerged from the data pertaining to factors that are considered when selecting strategies: student characteristics, objectives, teacher learning style, and the curriculum. Analysis of documents show agreement with three of the factors, teacher learning style being the exception. The curriculum also placed emphasis on assessment as a factor when selecting strategy, a factor that the participants did not identify. Lesson plans however showed assessments to be done. What was not elaborated on in the curriculum was the type of assessment whether it is formative or continuous. While the teachers had their teaching strategy linked to the objectives in the lesson plans, they did not link the objectives to the assessments given.

The curriculum itself is a policy document outlining what content should be covered by schools and must be considered when developing strategies. It also contained the objectives that should be covered based on the content recommended. The curriculum suggested that teachers consider the students when selecting strategies. Lesson plans were based on the curriculum provided and highlighted the objectives to be covered.

### **Models Used to Design Teaching Strategies**

Research Question 2 asked the following: What models have you used to design the teaching strategies that lead to the success of ID students who are taught in self-contained classrooms? Numerous models are used in designing lessons. The participants pointed out three approaches that are made in planning lessons for successful delivery. Table 6 shows that the models used are Bloom's taxonomy, integrated approach, and student learning style.

#### ***Bloom's Taxonomy***

Bloom's taxonomy with its six levels of objectives and three domains of learning

was integral to the design of teaching strategies. Ivy believed that the focus should be on the three learning domains: cognitive, psychomotor, and affective:

Some people tend to only look at the cognitive that is just one. And with these types of children you have to connect with your children, you have to get them to do psychomotor things. Some of them have movement disabilities so you have to get them involved as well and also affective domain some of them have social challenges so you have to put all the aspects. So as I am saying to you really and truly you have to really sit and plan and think to yourself about the different barriers and that's how you have to think about it.

Table 6

*Models Used to Design Teaching Strategies*

Model	Corey	Dahlia	Ivy	Lilac
Bloom's taxonomy	x	x	x	
Integrated approach	x	x	x	x
Student learning style	x	x	x	x

Ivy further added that the affective is important and should be integrated into the activities that are done in the classroom:

So in order for a lesson to be interesting you have to add the psychomotor. You have to make them do a little affective where they debate, talk to each other, learn how to relate, learn how to function as a human being more than remember that a dog is that or two plus two is four. That is one aspect of their being. In order to make it interesting you have to make the lesson relatable.

The levels of objectives assisted in establishing objectives, and Ivy ensured that the

lesson plan is aligned to the objectives:

Do I want them to remember something, do I want them to be able to demonstrate something? So you look at how the lesson plan is set up, introduction, demonstration, independent work, culminating, and any extension or additional work or even the same process to ensure they would have grasped what was taught. You have to match up. Everything has to align or it doesn't make sense.

Dahlia believed that consideration of Bloom's taxonomy is critical: "Definitely have to look at Bloom's taxonomy to take students through the different levels of learning and balancing the Maslow with the Bloom." Corey placed emphasis on the levels of learning. "I normally categorize the lesson in three parts: Knowledge and comprehension; analysis and application; and evaluation; and then set activities to achieve them."

### *Student Learning Style*

All participants used the term "learn the student" in reference to the model used to design strategies. They believed the student's learning style and prior knowledge is of utmost importance in designing lessons. Ivy suggested, "You have to think like these students, to be honest you have to go and think." Furthermore, she added:

In planning really and truly, you have to attack all learning styles... You don't have a blanket, you won't catch the students properly if you don't do that, as really and truly you won't be effective. Yes, so in planning you are given what is called accommodations. So for students you get an accommodation with a list of things that you have to take into consideration about these specific students.

Dahlia lamented that concern must be given to the way the child learns:

We have for too long had a one-size-fits-all approach so that's why so many of students have been left aside for too long. The thing is who decides which child is

normal. Each child just learns differently. We have to ask, how this child learns rather than how do I teach this child. Our training in education is not equipping us to deal with those students.

I think it is imperative that you get to know your students first. You cannot plan for persons you do not know 'cause you plan a very good lesson but it reaches none of them because you cannot move them from where they are based on just who they are and how they learn. So I think it is good practice to get to know your students and then design lessons that for the most part incorporate every type of learner as you go about it.

She further acknowledged:

Plans have to be student-centered. It doesn't make any sense that you have a protocol, because that's the way the school does it, and then it is not applicable for your students. You will just be carrying out the pen and paper policy, but the impact on student outcomes, you won't be reaching it if you just stick to just what is on an outline. We have to realize that we process things differently in terms of the whole and how long it will take for us to understand something, so I have to be mindful of that.

Corey reflected on his planning process stating that he uses an individualized education program so that he is able to cater to the various needs of the child:

In my planning I do what we call the individual learning plan. Once I get an understanding of how they learn it is better for me to formulate the lessons. You know we cater not just their various learning styles but the child as a whole. Long before I hear this term about student centered classroom, student centered this, you know, I've always said that I am teaching students. I am not teaching



administration.

Corey shared his method of how he learns about his students:

I usually take a week or even though I know in terms of their ability, their levels, I usually take a week to learn much about them. I believe that we should meet students where they are. You know. We can ask them, how do you learn? How do you want to learn? How do you think you will learn this? And for the first two weeks of returning to school after the new school term we do not teach. We take time to learn the students. That's what I call it. I think about the students, I think about their background, their culture, where they're from. Their various dispositions, how they are coming to me. Look where they are, see how they learn.

Lilac elaborated on the benefits of learning about the students:

Once I understand how the students learn, it will make it easier for me to select the best strategy to bring across the lesson. It might require for me to do multiple ways to bring cross the same lesson, but at least I would understand how and learning would actually take place. You have to learn how kids learn. Some students might be verbal learners as well as they grasp the information through discussion in class. Or they might be visual learners. So based on how they learn it forces me to, well, not forces me, allow me to prepare the lesson in different ways.

### ***Integrated Approach***

A mixture of approaches seemed to be the pervasive approach. Though the teachers stated that they use Bloom's taxonomy, they went on to specify that a mix of approaches are used. Ivy explained that she mixes the theories with her experiences:

I mix what I call the theories with experience. We all know the science of pedagogy, we all know about the different theories but as a teacher you must be flexible enough to step outside of I'm a teacher. We have to be flexible.

Corey also practices an integrated approach:

I'm expected to be patient, and adaptable, and flexible so that learning can take place. So we integrate the different domains of learning, and focus on what the child gravitates to, and use every opportunity even meal time as a learning opportunity.

Lilac noted, "I start off by as I said, prior knowledge, asking them what they already know. Let you know like the KWL chart, right." Dahlia added other factors that comprised her integrated approach:

So what can we dissect that will improve student outcomes and the professional teaching from those examples that we lauded so often. The five E's by the ministry works and the forces of collaboration and creativity, critical thinking. All of that is good.

## **Document Analysis in Relation to Research Question 2**

### ***Curricula***

One curriculum analyzed identified that each content strand "has a related standard outlining what students should know and be able to do in order to meet the requirements of the Curriculum" (NSC: Grade 3, p. 303). The structure of the objectives showed credence to the domains and indicated that students should "apply; use; distinguish between; reflect and comment; read words and apply rules; develop awareness; and recognise and value" (NSC: Grade 3, p. 2). The philosophical statement of the NSC Grade 3 curriculum embraced a learner-centered approach to teaching:

The NSC for the Grades 1-3 level (early primary) is designed on child centered principles. The multi-disciplinary approach characterized by themes and related focus questions, serve as contexts for children to explore their environment and solve problems so that they learn about others, themselves and their environment on a whole (NSC Grade 3, p. 2)

The curriculum also took an integrated approach to learning that encouraged making lessons meaningful to the learner:

An integrated curriculum is an approach that starts with the holistic experience of the child and purposefully draws together knowledge, skills, attitudes, and values from within or across subject areas to develop a more powerful understanding of key ideas. It provides an interconnected and interwoven approach in which learning experiences are inextricably linked and become more meaningful for the young learner.

### ***Lesson Plans***

Lesson plans showed evidence of Bloom's taxonomy covering the cognitive, psychomotor, and affective domains. Evidence of the five E's could also be seen. The extract from a lesson plan showed how the integration has been done for the different approaches (see Appendix D). The lesson plan showed how the teacher used the five E's as guide to the learning activities within the class. Other lesson plans while making use of the five E's format also showed evidence of Bloom's taxonomy in the phrasing of the objectives. Examples included the following:

1. Describe ways in which the Jamaican / global environment is being protected.
2. To develop a global awareness of the implications for not protecting the environment.

3. To demonstrate an understanding that they have a responsibility of caring for the environment.

4. Evaluate how individual actions can lead to harming the environment.

5. Use information from the video clip and textbook to complete a K-W-L chart; Write a short speech; Design cartoons.

6. Make and distribute fliers and posters to inform the school community about the problems identified and suggest the need for corrective measures to be taken.

### **Triangulation of Information for Research Question 2**

Analysis of the methods used to design plans show that various theories and beliefs guided the development of the lesson plans. Participants made use of Bloom's taxonomy but also integrated various theoretical approaches. Curricula and lesson plans also showed the use of an integrated approach to designing plans. Distinctively, participants emphasized that designing plans starts with knowing the students. In selecting strategies for delivery, students' learning style took pre-eminence. Most of the participants related that planning began after meeting the students as you have to know the students.

### **Accommodations to Meet Student Needs**

Research Question 3 asked the following: How are accommodations made to the teaching strategies that lead to the success of ID students who are taught in self-contained classrooms? Numerous accommodations are made by the participants to address the needs of students. Table 7 shows that participants identified one-on-one sessions, scaffolding, and differentiated instruction. All participants use one-on-one strategies and differentiation, while three participants use scaffolding.

### *One-to-One Sessions*

Participants perceived that working with students on an individual basis helped students in overcoming their challenges. These teachers used their class time or personal time to meet with students to help overcome weaknesses. Ivy had an assigned space in the class for individual help:

I put a student in a particular space and I go to them and I have to have that again even in the learning sessions. I have to have that one-on-one to see, to make sure that child is actually learning and grasping what is being taught.

Table 7

#### *Accommodations to Meet Student Needs*

Accommodation	Corey	Dahlia	Ivy	Lilac
One to one	x	x	x	x
Scaffolding		x	x	x
Differentiation	x	x	x	x

Corey endorsed this technique and exclaimed that it works:

I pull students aside, and work one-on-one for maybe a month. I watch them and as soon as they have made improvement and not necessarily significant, but improvement and significant improvement I will stop because you don't want them to feel different in a bad way. And I can tell you this, it works.

Dahlia gave an example of how she used this technique: "For example, if, let's say I give instructions to the class, but they still don't understand. I would always be available to maybe go to their seats and explain in simpler terms to them." Lilac also has a similar method:

I work with my students who are slow one on one at a small table. We talk, we discuss. I give them passages at their level that make them understand and then we stayed there for 20 minutes and then when the bell goes, like there's a timer, then we rotate.

She added that sometimes she uses small groups and does rotations:

I have to make sure that I do rotations. I don't know if you know what rotation is. Is like a small group loads. I divide my class until like 4 different groups faster, medium, slower and so that now we have four different corners. You have one with the teacher, one with the technology, one for reading. So for each corner you spend at least 15 to 20 minutes there and then they rotate so they come to me.

### ***Scaffolding***

Participants believed that scaffolding is a critical component in accommodating students. Ivy offered an example of how she used this method:

So scaffolding is really you are a cushion for their learning. You are facilitating.

Simple thing as a word. You know even establishing your vocabulary.

Establishing the word of the day. So you have to basically breakdown everything

to give a clear vivid direction. So you can go back so you may say I need to do

developmental lesson. So you do your lesson based on almost like a ladder.

Lilac outlined that time for feedback when using this method is important.

Try to take it a step at a time, not to rush all the information to them at once. So

you take it a step at a time, allow them to give feedback on each step, as to how

they understand and if they understand it as a matter of fact. Allow them to talk

and give feedback.

Dahlia believed the scaffolding process should begin with the entire curriculum, breaking

it down and rearranging it in such a way that the students keep building on previously learnt concept:

You go through a system of scaffolding where you build the concept, or concepts if you are dealing with more than one, and you build on that for the content so that they can see themselves moving vividly from section A to B to C and understanding. When you do that, you reduce the possibility of a learning gap. I will go through the syllabus and I will pull the syllabus apart and rearrange the topics in a way that will help students realize that they are moving up a ladder.

### ***Differentiation***

There were a variety of ways in which instruction was differentiated by the participants. Lilac differentiates through reading materials:

If you give them at grade level, they don't understand. They just flip the page, that's not gonna help you write or understand. Flipping the page or the words you won't know what the story is about. So you know I have to try to differentiate where I know that you know things are on their level. Try to differentiate as much as possible in their levelled readers and reading books and worksheets. So you start from easy to more difficult.

Ivy adopts differentiation in delivery of instruction:

I use a differentiated approach very frequently because you may have a gifted student in a class and it's gifted on a higher spectrum and I don't call them any other thing than gifted in a different way student. So the experience is you have to plan your lesson highly on differentiated approach thinking about the different learning styles -audio, visual, you have to try to use technology a lot.

You have to keep their interest you have to be basically mindful and aware

of all the students in the class. It is like one class with a variety of students. But being mindful and keeping documentation on each student makes things easier. It's a lot of work because they have different weaknesses but you try to reach all of them in some way by differentiating the lessons. So differentiation is a normal thing in these classes is not even something that you can choose to do.

Ivy added that differentiation should be practiced in all classes and shared how she engaged in goal setting with students:

So differentiation is a normal thing in these classes is not even something that you can choose to do. Differentiation should be a normal thing in all classes. So the peer teaching, the tiered instruction, the study sheets, and everybody gets something to use their strength but build on the weakness. What is good to me is when you set a goal with the student, the two of us then work toward that goal, so you balance it. Somethings they are weak at and somethings they are strong at and so when they see that they accomplish something it helps.

Differentiation in terms of teaching and assessment was pointed out by Corey:

So we have to look at differentiation in a different light in terms of the curriculum that we get from the Ministry of Education, not just for students to sit for hour, and a half to do an exam but differentiation in terms of teaching, and differentiation in terms of assessment.

### **Document Analysis in Relation to Research Question 3**

#### ***Curricula***

The curriculum encouraged differentiation of instruction based on the various methods that were suggested in lesson delivery. There are instances where there are multiple suggestions on how to deliver a particular topic:



Work in groups to identify a problem in their school, community or parish relating to weather conditions being experienced or experienced in the past. Discuss how data will be gathered, organized, and presented. Share ideas with class for feedback.

OR

Select topic from teacher prepared sentence strips (elements of weather - rain, temperature, wind, sunshine). Collaborate with teacher to collect and collate the information from the various groups, then present in class or community forum. (NSC Grade 4, 2016)

The Curriculum Analysis (MoEYI, 2020a) called for differentiation in the unit planning process. Information in the Curriculum Analysis identified, “In preparing the Unit and the related daily Lesson Plans, the guidelines provided for Curriculum Focus, Modification and Adaptation should be observed” (p. 2). The document identified that plans must cater to the diverse nature of learners. Information provided in the Curriculum Analysis reported, “This plan for one group of students at the same grade level, is likely to differ due to the diverse profiles of the learners in each group” (p. 3). The document identified that users should consider different characteristics of the learner. The document also information to include “Remember: The Unit Plan has to be designed to suit a particular group of students based on their background, interests, ability, learning challenges, to name a few of their characteristics” (p. 3). In conducting the unit planning process in respect to differentiation, it has the following steps:

- Classify students’ attributes: Identify commendable characteristics and challenges/concerns using the profiles
- Align identified students’ attributes with Learning Pathways - Ready, Near

### Ready, Not Ready

- Unpack/Unwrap the Essential Objectives
- Align the objectives with the Learning Pathways that indicate students' level of readiness for formal engagement in learning to meet grade level expectations.
- Select differentiation methods and align with learning activities and assessment criteria. Complete the Customized Unit Plan Template. (MoEYI, 2020a, p. 4)

The Curriculum Analysis (MoEYI, 2020a) further went on to provide teachers with a template for the purpose of the differentiation process (see Appendix E). The Grades 4 to 6 teachers were advised to make accommodations. The plan for one group of students at the same grade level, is likely to differ due to the diverse profiles of the learners in each group. The Analysis further added the following “Remember: The Unit Plan has been designed to suit a particular group of students based on their background, interests, ability, learning challenges, to name a few of their characteristics” (p. 3). The structure of the curriculum encouraged scaffolding by having students build upon previous knowledge or learning the basics before moving onto increasingly difficult concepts.

### *Lesson Plans*

Lesson plans showed differentiation in teaching strategies and showed evidence of scaffolding based on the flow of the lesson. For example, students were taught definition of terms before being asked to use in sentences showing evidence of scaffolding. One-on-one methods of accommodating students were not clearly outlined except for instances where the teacher stated they would meet with students having difficulties. This could be because the one-on-one sessions approach is a teacher-determined method and not a school policy.

### **Triangulation of Information for Research Question 3**

The study identified three methods used to accommodate students. These methods are one-on-one, scaffolding, and differentiation. A comparison of the responses of participants with documents collected showed that there is some agreement with the methods used. The one-on-one method is used by the teachers to ensure that students are not left behind. A look at the curriculum shows no reference to using this accommodation. The use of scaffolding and differentiation is evident in the lesson plans and curriculum. Scaffolding in the plan and curriculum is evidenced by the breakdown of topics into subtopics and, as explained by participants, the use of building onto the prior knowledge of students. Differentiation can be seen in the curriculum and lesson plans based on the variety of methods proposed to deliver lessons.

### **Other Emerging Themes**

Data-collection methods used for the study showed the emergence of four themes that the researcher believes cannot be ignored due to their prevalence. These themes are use of technology, good relationship with students, meeting the needs of students, and reward system.

#### ***Use of Technology***

Throughout the interview sessions, participants referenced technology and its value in enhancing the delivery of lessons. Ivy believes that technology is stimulating and used it for lesson delivery in the form of videos, quizzes, or a medium through which students can do self-expression:

You can do quizzes online and in a game form. The students can even compete.

They are so gadget driven because they can touch a screen and touch an answer it makes it more interactive. It stimulates something in the brain I am not a scientist

so I can't tell you but it causes them to respond better to even tests. You want to use it different ways, so other than gadgets you use different aids in your lesson....They can look at that it can be technology. It can be in a technological document. You have to try to use technology a lot you have to keep their interest you have to be basically mindful and aware of all the students in the class...You put it in a digital form so they can always go back, videos and links.

Lilac embraces technology, outlining, "I use technology a lot. I have a smart board and you have to use it up." Lilac used the technology for delivery and also in accommodating students:

A resource that I typically use in lessons is mostly computer. Alright, so I use the videos. The videos, they like watching the videos on like going on the computer." She added in using it as a tool for accommodations "You have one with the teacher, one with the technology, one with the like for reading... when they go to the computer they'll have the work. She further shared "But like at my table at the technology table and at the reading area the works are differentiated at their level"

She expounded on its use in engaging students:

I put them on two different platforms, Prodigy and Freckles. I don't know if you know about those, those are games but at the same time we are learning right so they will always wanna go on the laptop to do stuff like that. Yeah, when they have the free time. So the laptops are good engagements for them. They find it fun, especially the computer. The videos, they like watching the videos and like going on the computer.

Corey outlined the technology used in his teaching: "We have the computer, the laptop, there, we have multimedia projector. We do have the minio board. So the teachers plugin

and watch YouTube. Students can take their own tablets to school to enhance their own learning.” Dahlia saw the technology as an added voice to the lesson that is taught and exclaimed its benefits in research:

I find that if you have access to technology, bring that in. Maybe before the summative too so that they can get another voice, get another look at someone telling them the same thing and then you give them the summative. The next class for me, you have to spend a few minutes on what the first class was about and probably you need to show them that video again to really bring them to where you want them to go for session two. I also encourage preparation. I think students have to get into the art of exploration. They have it at their fingertips. They are technology inclined, technologically inclined. They can press Google and do some research.

The NSC Grade 3 (MoEYI, 2018) encouraged the incorporation of technology by asking students to “use digital tools to design and produce creative multimedia products to demonstrate their learning and understanding of basic technology operations” (pp. 19-20). For one lesson, it suggested multiple use of technology.

Watch video / examine specimens or pictures of intact teeth temporary (primary, milk, baby) and permanent in the upper and lower jaw...Use appropriate ICT drawing tool or draw and colour/paint, and label the crown, root and enamel of the tooth. Present to class correctly labelled drawings. Make non-electronic or electronic journal entries about their findings during the activity. (NSC Curriculum Grade 3, 2018, p. 21).

Lesson plans also showed evidence of use of technology through video links, presentations, and games.

### ***Good Relationship With Students***

The participants portrayed the value of having a good relationship with their students. Lilac had fun with her students and this had a positive impact on her relationship with her students. She communicated on an interpersonal level with her students and referred to them as her kids:

I'm teaching second grade here and I have a lot of fun with my kids. Teaching the younger ones are more fun for me in terms of respect and appreciation. Stuff like that. So I think I enjoy my smaller kids.

Lilac shared an example of how she builds a good relationship with her students:

I call them by name most of the time. I might run a joke and I might give one a pet name and everybody wants to have a pet name. Even though the pet name might be funny and silly, they still want a pet name. You know, lunchtime I'll sit with them, you know we talk, sometimes they fight about who sits with me for lunch break. They say 'is me next.' Each person that day at lunch, OK I have a long table, interested in sitting beside me, they say 'no it's my day today.' And like they bring me snacks and I don't want to take it but they say 'Miss it's yours' and you have to take it so they don't feel bad. I might not like this, but you know, I take it. Every day I get a different card. I love you miss. We just talk with you know yeah. And I appreciate it. They just wanna be around me 24/7.

Ivy shared a similar experience:

I talk to them, I talk on their level yes. You tell them your experiences. I see all students as my children and I am going to be honest with you. I see all students as my children and I treat all of them like my children. They will call me mommy sometimes, that's how nurturing I am. So you have to see all students, to me as a

teacher, as your child.

Corey also believed that nurturing is important and that he is a father-figure to his students: “One of the last things that I never get to do, you must never give up on anyone. As teachers we have to adopt and mentor.” He added:

But then there is that hidden part of the curriculum that they have learned from me that that father figure. Our morning greeting how we greet students in the morning. You know, put it nicely. Pikney [children] have life rough. Yes, God knows and coming to school expecting to have a rough life at school and so our morning greeting. I learned this in my Master’s program, every single morning, I will usually have classes on weekends. Every single morning our lecturers would greet us with a smile, a sweet, a handshake. But there was always a smile and there was always a welcome. It sets the pace for the day and it says to me, my teacher is interested in me. And so if even my teacher gets a little bit rough on me, what happened before, the morning greeting, would have kind of wiped everything that would have happened during the day that my teachers are interested in me. So the first thing is our personality or warmth.

Corey further reiterated:

And you know it's too. It has to do with sitting and eating with the children, allowing them to know that whatever you eat, I eat, not necessarily eating from them. And the dismissal. The dismissal, what I call it, atmosphere, goodbye, see you tomorrow. I tell you this 97% of my students don't want to stay home. This Covid thing has had a negative impact on them. They want to come to school you know because of the sort of environment that is created there for them.

Corey explained:

I usually greet them as they come in in the mornings, Hello morning, how are you? Welcome back. How was the weekend? You know we have our morning devotions and we use that time to just speak life into them. Celebrations like birthdays and other special events. When I go to the classrooms, you call them by their names. When someone is Sonja and you say Sonia or Sandra, Tonya, no.

How are you Sonja? Oh my God? He knows me. You know, he knows my name.

Corey gave a warning: “Things are cyclical effect, or you treat them will determine their attitude come later on and how they will in turn will treat you so you really have to have that individual approach with them.” Dahlia provides an atmosphere of trust that allowed students to confide in her:

Students must know that there's a level of confidentiality with you. You must be a safe space. They must know and realize that if they say something to you they're not going to hear it being discussed in the staff room or someone is going to come to class and use it against them.

### ***Meeting Needs of Students***

Teachers are expected to meet the educational needs of students. These participants moved beyond that to meeting the psychological, physical, and emotional needs of their students. Lilac sought to meet the psychological needs of the students sharing that she does her best not to frustrate them:

I don't wanna frustrate them, but at the same time they have to get somewhere.

You know it's unfair, at the end of the year, you have national exam. They might not be able to master the test but they step up a little bit and sometimes they can manage, so they're not frustrated all the time, right? So that's the only concern I have...so I think that once my kids learn the basic. Anything else comes after, so I



try to work with them on the smallest of stuff that I think they should know, and once they know that then you know everything falls into place.

Ivy met the needs of students on several levels aiming for holistic development. She shared that consideration must be given to the mental state of the students:

Some of these children are aware of what their challenges are and if you try to out them they may feel a sense of embarrassment so you have to be careful of how u treat. They might have anxieties in the class setting where they don't function well in groups. Even now in the Zoom classes because we are teaching online, some students are not comfortable. Even showing their face in zoom so you have to be to me mindful of persons that are in your space.

Ivy promoted the attribute of being nurturing and shared an example of meeting the physical needs of one of her students:

So there was a child who did not have a correct bag, and so when you build a relationship, I gave the child a bag saying I realize that you are struggling and the child wanted to carry books which is unusual and I strategically gave that child a bag, which is like a gesture. So nurturing again, is very important where again you are going to look after all their needs-learning needs, social needs, development needs. So you talk about careers, you go outside of just subject content. What do you want to be? How can you get there? You encourage them, Stay in school because, you have to be again, you have to be open. You have to speak to them, again, the key thing like a mother or a father, as a teacher to a child that needs to make proper decision. So nutrition needs, so some of them, they have home problem too you know, so that will come out. You can nurture, you call meetings, do referrals. Call the parents to meetings.

Corey shared that all students are capable of learning and that developing self-esteem builds the students:

I'm always moved by the mantra of the Ministry of Education: "Every child can learn. Every child must learn." My point has always been this. A child can move from A to B. C to D. And rule out the comparison that we often make you know with children.

Corey also gave an example of meeting the physical needs of students:

I also have uniforms because some of them come to school and you know, their uniform is dirty. So we give them a clean uniform for the day and they walk around, their self-esteem is higher. They do better in class when the self-esteem is high.

Dahlia also sought to meet the social and physical needs of her students:

I make sure that I reach the class before my students. So when the break bell is going or the lunch bell is going, I must be walking to class using the opportunity to talk to them as they come in. So I will say Kristen what did you have for lunch? Did you eat? If her answer is no, we have a little window to say why and we chit chat a bit and get things sorted.

### ***Reward Systems***

Throughout the interview, the participants stressed the importance of rewarding students for their efforts. Teachers used a variety of rewards to encourage their students.

Lilac shared:

I give rewards incentives. I have student of the month and student of the week and I give out certificates. Stuff like that. At the end of each where you calling up what are semester and they do a general testing here for everybody, and then from

that I'll take data or the kids know their growth. So for instance, they see their number here we have four different colors, red, yellow, green and blue. So for this quarter that might be at the yellow next quarter, they move up to the green, so they see that they are progressing. If they see their color drop they know they have to work a little bit harder for the next part. So we have a chart showing beginning of the year, middle of the year, end of the year. I also have a theme for the class and we use that as motivation. So this year the theme is 'Reach for the Star' so that's what I use to motivate them. I give out stuff like this. Yeah, so it motivate them incentives like pencil, sharpeners, yeah, so it motivates them, incentives.

Ivy stated:

These students love reward system. So whether or not you want to call it stroke their ego you have to have a proper and definite reward system. I have a pizza party, when we were in normal setting, I have a pizza party and awards ceremony where I give them physical certificates. I give them for participating, the student that participate the most and I allow them to basically have critique and encourage each other, find something positive, it has to be something positive about the work, so you have to have a reward system in place whether it be physical reward or you just affirming them. They are doing something they are making the effort, you know, you show them. You have to look for even the littlest or minute improvement shown. You have to do that as a teacher and that is you can't go around it. I had a 'Work of the Week' board in my class where I featured and I made sure it comes from all types of students. You may have a display area where you display all, not just the good ones, all the work in the class. So basically you

know affirming them, reassuring them, rewarding them. I give physical awards, sometimes, I give gift cards, sometimes I give art products. Trust me, I do try my best to let them especially if they are participating, going the extra mile, feel good about themselves.

Dahlia further explained that the reward system is important in creating positivity in the classroom and is a way of reassuring them that they are on the right path:

Key one, reward system. So even now we doing digital learning, I have a student of the month where I feature the student on my page, I have viewer's choice award where I create a slide and allow them to vote. So each child picks their favorite work for the month and I share it with them on the slide and everybody vote. And then the child that has the most vote get the viewer's choice award. You have to reassure them as you are teaching so as they do something whether it is at the level or not, showing improvement, just the effort.

Corey contributed:

I've always said to school leaders. What about those who we do not sometimes look on who have made significant improvement in terms of say? From a 10% or 30%, is there any way that we can recognize them? And so for me it's always looking at what the child has grasped over a week, a term a year.

Corey explained his reward system:

There are usually four pencils on my desk. When students have done well, they get a pencil or they get an eraser or little booklet. There is always some token for them. Crayons or so on. We big them up in devotion and everyone, we highlight the child. We speak positive to them. So yes, we identify them with little tokens, positive commendations, you are doing well, you will continue to do well at big

school.

Dahlia believed in “balancing the Maslow with the Bloom.” She linked her reward system with the educational needs of her students by allowing students to earn gift cards which can later be redeemed at the book shop for school supplies. She stated:

A system where I have rewards for students, like a book shop that based on their behavior they earn tickets to go get supplies, supplies that they could probably not get by themselves. But some people may say, but you could just buy the books and stuff and take to them. But if they earn it and they can go shop for what they want in this school shop, it means something different.

### **Conclusion**

This chapter outlined the findings of the qualitative case study on teaching strategies leading to the success of ID students taught in self-contained classrooms. A summary of the background of the participants was first presented. The findings that surfaced from the analysis of transcripts, curricula, and lesson plans were then presented. The researcher discussed the 20 specific themes that emerged from the data analysis. The themes emerging from the core research question that focused on teaching strategies leading to success were as follows: (a) peer groups, (b) field trips, (c) homework, (d) self-expression, (e) questioning, (f) modeling, and (g) teacher-designed strategies. The factors that are considered when selecting teaching strategies were as follows: (a) student characteristics, (b) curriculum, (c) objectives, and (d) teacher learning style. Models used to design strategies were varied. The themes that illuminated were (a) Bloom’s taxonomy, (b) student learning style, and (c) integrated approach. The last research question concentrated on accommodations made by participants. The themes were (a) one-on-one sessions, (b) scaffolding, and (c) differentiation. Analysis of the data

illuminated additional themes that could not go ignored: (a) use of technology, (b) good relationship with students, (c) meeting student needs, and (d) reward system.

## Chapter 5: Discussion

The central problem that prompted this study was the lack of information on teaching strategies leading to the success of ID students who are taught in self-contained classrooms. The researcher applied a qualitative case study approach with a descriptive design. This methodology led to the emergence of 20 dominant themes. These themes represent descriptions of teaching strategies, factors involved in the selection of the strategies, factors influencing the design of plans, and methods used to accommodate students taught in self-contained classrooms. This chapter looks at the following elements: (a) Current Theoretical Perspective, (b) Presentation of Findings, (c) Interpretation of Findings, (d) Implications of the Research, (e) Recommendations for Future Research, and (f) Conclusion.

### Current Theoretical Perspective

Bronfenbrenner's ecological systems theory and Bandura's social cognitive theory provided the conceptual framework for this study. Ecological systems theory posits that an individual's characteristics are intertwined into interactions with others, and this creates certain outcomes whether positive or negative. The context also plays a key role in interaction and when this concept is projected on schools it highlights the impact of parental, and teacher attitude and actions on student outcome (Bronfenbrenner & Evans, 2000). Bandura's social cognitive theory suggested that teachers' self-esteem and level of motivation impact their level of success in the classroom. The higher the level of self-efficacy, the more success a teacher is likely to experience. Self-efficacy is improved by the years of experience, level of flexibility, level of support, and level of training. As a change agent, the teacher has to be intentional, have foresight, be reactive, and reflect (Bandura, 2001). By doing so, the teacher creates an atmosphere of positivity in the class

that fosters student engagement and learning (Darling-Hammond et al., 2019; Wecker, 2015).

It was imperative to examine the strategies used by successful teachers of ID students taught in self-contained classrooms because it can contribute to the adoption of critical strategies that can improve success in schools with self-contained units. While inclusion is the ultimate aim, teachers have to exist within the current paradigm and seek ways to be effective. Data collected by the MoEYI showed that, while some schools have discovered a path to success, others are dangerously lagging behind (NEI, 2017). By conducting this study and sharing the findings, it is hoped that more efficacious strategies as suggested by this research will be implemented for the overall improvement of the SPED system in Jamaica.

Bronfenbrenner's ecological systems theory provided a conceptual framework that allowed the researcher to organize and rationalize the diverse activities and practices of these successful teachers of ID students (Bronfenbrenner & Evans, 2000). The ecological systems theory model looked at the diverse factors that influence human development and that should be factored into the learning experiences of students (Bronfenbrenner, 1979; Ettekal & Mahoney, 2017). The process of learning is a complex one. The study revealed that consideration of students' needs, prior experiences, and learning styles can create an environment for positive learning. The study revealed that teacher's recognition of these crucial factors have significantly impacted the way in which they are able to address and meet the needs of students with ID.

The findings revealed that the practices of the teachers involved an interplay among the microsystem, mesosystem, and exosystem relevant to Bronfenbrenner's ecological systems theory (Bronfenbrenner, 1979; Ettekal & Mahoney, 2017). It is



perceived that the participants' awareness of the environmental factors that may impede learning has led them to create an atmosphere in the classroom that nurtures students and motivates learning. Students are willing to take risks because they know that responses will be loving and they will be guided in the right direction. Bronfenbrenner's theory outlines that interactions with parents, teachers, and peers can help how a child learns (Bronfenbrenner, 1979; Ettekal & Mahoney, 2017). Walls (2017) commended the ecological systems theory model for its student-centered approach that considers the whole student. This ideology of students as individuals forms the core for actions and activities conducted in the classroom as revealed by the participants in this research. Teaching strategies and accommodations are all based on an understanding of the student. Teachers focus on shaping the individual holistically. Consideration is given for the affective, and behavioural development of the student, and not solely cognitive. The students benefit from what is seemingly a personalized learning experience with relevance given to key personal variables (Taylor & Gebre, 2016).

The collection and analysis of data indicated that there is a high level of interaction within the classroom. Students are able to learn from each other and influence each other. Methods used by participants promote discovery. The use of skill building activities can improve self-esteem and unearth hidden talents. Opening up opportunities for students to be leaders and to influence their peers lead to positive self-efficacy. The social dynamics created in the classroom, and the integrated approach to learning combine to positively impact learning outcomes, and student development (Reif et al., 2016; Schimmer, 2014).

There is high quality student-teacher interaction. The student-teacher relationship is characterized by respect and trust. The practices of the teachers highlight the

interconnectedness of the considerations and actions of teachers to bring across best practices to promote excellence. Linkage is made with the home environment that forms the mesosystem as strategies used leverage school-home interaction to improve the nature and quality of the teaching-learning process. Brody et al. (2014) opined that the effective parenting strategies can positively impact the learning process. In this study the analysis of data collected indicated the opposite occurrence, as the discipline inherent in the school is being transferred to the home. Utility is gained from linking the family with the school in attending to the shared vision for students (Walls, 2017).

The four participants demonstrated an awareness of the impact of home and community dynamics that impact students, and these factors form part of the consideration in selecting strategies. The exosystem plays an integral role in the life of students both positively and negatively. The community serves as a learning resource and as a support system for schools (Benjamin, 2015). Challenges in financing, sibling rivalry, community warfare, and other socioeconomic conditions may impact student functioning (Mulisa, 2019). Consideration of the student leads to an awareness of how activities in the home and the neighborhood impact student learning. The experiences and reactions of students to certain topics help to shape the strategies used by the teachers. Teachers have even been able to incorporate activities in the classroom to address issues students may face in their community.

The role of Bandura's social cognitive theory focuses on the way the teacher addresses the teaching-learning process in order to improve student success (Bandura, 2001). From this study, it can be seen that the four participants behaved similarly in planning lessons for active student engagement. Clavel et al. (2016) supported the use of active teaching practices, outlining that the efficacy of teaching practices that emphasize

analytical and critical thinking skills greatly improved student performance on tests. Teachers with a high level of self-efficacy are more likely to embrace this strategy. Each participant considered themselves a good teacher. It could also be seen that each participant in this study had their self-designed teaching strategy that had been developed over the years from their individual experiences. Self-efficacy improves with experience and increased knowledge.

Teacher efficacy impacts the energy they emit in the classroom. Their beliefs and attitude about students can impact success, as suggested by Coe et al. (2014). By holding the students at a high level of expectation, teachers can engage the student in self-regulated learning causing them to activate and sustain behavioural and mental processes for improved learning (Schunk & DiBenedetto, 2016). The study revealed that participants supported the teaching-learning process with reward systems and inculcating good relationships. These support factors have been proven to improve student outcome (Coe et al., 2014).

## **Summary of Findings**

### ***Teaching Strategies for Success***

The findings from the data collected and then analyzed in this study revealed that numerous strategies were used in order to engender success among students with ID students taught in self-contained classrooms. The teaching strategies discussed by the participants were (a) peer group, (b) questioning, (c) self-expression, (d) modeling, (e) field trip, (f) homework, and (g) teacher-designed strategy. With the exception of modeling that was identified by three teachers, all other strategies were discussed by each participant. The strategies of peer teaching, questioning, self-expression, modeling, and field trips have been found in literature to be efficacious for students with ID (Hughes et

al., 2018). This suggests that the participants are cognizant of the most recent research that advocate the use of explicit instruction.

Very little literature points to homework being a teaching strategy (Lombardi, 2018), though it is considered an important element of successful teaching strategies. It could be seen that the participants view homework as a requirement for success, considering it an extension of the interaction time in the classroom. The participants' intention of homework was the deepening of knowledge of the students. It could be perceived that homework served as a form of ongoing assessment that helped to determine the educational progress being made by students. The value of the homework was also evidenced in parents' queries when no homework was given. Homework was not only a development process for the students but for parents as well who were actively involved in some of the assignments that were given.

An interesting finding in relation to the strategies used by the four participants in this study was that all of the teachers indicated a strategy of teaching they developed. The participants had their own delivery technique evolving from years of experience, training, and personality. None of the participants were asked if they had a personal style, but, as they discussed their teaching strategies, the participants stated that they had developed through the years a style they believed has proven efficacious based on the needs of the learners in their classrooms. Analysis of the data revealed that integral to the style was the personality of the teacher. Analysis of the strategies shows a hybrid approach that blends the best of the teacher while emphasizing a student-centric learning.

These practices may suggest that the 21st-century teacher of ID students must also consider a strategy that is right for them but will also meet the learner's needs. It can be perceived that, though each teacher-designed strategy might fit into a previously

mentioned strategy, it is the way in which it is intertwined with the personality of the teacher that gives it the range to meet the diverse needs of students. Many times, teachers emphasize the unique personality of the students in the class but these strategies point to the uniqueness of the teacher and how they are able to use these eccentricities to effectively deliver in an unconventional space.

The participants expressed no hesitation regarding the efficacy of the strategies proposed in meeting the needs of the students with ID. They also did not express any inadequacies in their ability and competence in using these strategies in an effective manner to meet the needs of their students. All teachers considered themselves a good teacher. The factors expressed for the favorable rating included being flexible, reflecting, positive reports from students, good results from students, and years of experience. These factors expressed are referred to in literature as factors that lead to high self-efficacy among teachers. Literature also expounded on the positive effect of teachers with high-self efficacy in meeting the educational needs of students (Kistner et al., 2015).

### ***Factors Influencing the Teaching Strategies Used***

The participants discussed four factors that are considered when determining what teaching strategy to use: (a) student characteristics, (b) the curriculum, (c) objectives, and (d) teacher learning style. An interesting finding was the individualistic approach that teachers took to the selection of teaching strategies. Teachers considered various characteristics of students such as age, gender, learning style, prior learning, personality, and preferences. Teachers were aware that students learn in different ways and that the strategies selected must match the learning style of the students. Teachers perceived a learner may be able to assimilate through visual, verbal, auditory, or social means.

Teachers were cognizant that what works with one group may not work with another, so

it was imperative for them to take time to get to know and understand the students and identify their learning styles.

Literature purports that teachers who study their students are able to incorporate topics of interest that bring life to the lessons and an element of fun into the classroom (Bahr & Mellor, 2016). The interest levels of students become aroused, leading to increased levels of feedback. The analysis of data revealed that teachers tried to develop a pathway to connect what the students know and what they needed to know. The four participants believed that, by identifying the students' learning styles, knowledge would be more easily acquired, learning time would be reduced, and there would be improved results in assessments.

Analysis of the data collected in this study revealed that objectives were not framed in a didactic format requiring students to acquire knowledge and be passive in the learning process. The objectives defined the path to be taken by the students and directly matched the modes of learning. The participants in this study focused on what students would learn, not simply the activity they would perform. Objectives stated what students should know and the tasks they would perform to signify acquisition and understanding of the knowledge. Objectives were also broken down into a format that showed a process of scaffolding. Broad objectives from the curriculum were unpacked to develop objectives that were more specific and procedural without limiting the learning process. In alignment with literature, the objectives were connected to the teaching strategies and were learner-focused outlining what the students would achieve from the educational experience. They were also presented as observable behaviors that could be measured (Burden & Byrd, 2019).

Comparison of the curriculum with the lesson plans and participants' responses

revealed that the curriculum provided guidance to the teachers on strategies that can be used in imparting the content. This means teachers were not left stranded having to devise strategies to match the content. However, while teachers incorporated some of the strategies in the curriculum they took full freedom in making modifications to suggestions or diverting from suggestions altogether. The curriculum was considered important in making teachers aware of different methods that could be employed based on the required objectives. It can, therefore, be said that the curriculum cannot be separated from the objectives as they are intertwined. The curriculum itself emphasized a child-centered approach and a high level of interaction between students and teachers. The curriculum identified ongoing coaching and feedback as techniques to be used by teachers and provided the release for teachers to be flexible in the adoption of suggested teaching strategies. Evidence of teacher flexibility in using the curriculum was evident from lesson plans analyzed. Literature revealed that the curriculum is a pillar to quality education but many focus on general education needs (Mitchell et al., 2014; Sulaimani & Gut, 2019). Consequently, it is the task of the teacher to employ strategies that support SPED students and enhance equity. Evidence of this could be seen in the practices of the participants through their flexibility in adopting suggested teaching strategies (Burden & Byrd, 2019).

Teachers referenced their own experiences as students, imprinting their personal learning styles on the selection process. This could mean they were predisposed to adopting a certain style based on how they learn. This may mean there is a possible association between teacher and student learning style and how they use that information to improve practice with their learners. Corey, for example, liked when his teachers moved around and spoke, and he has incorporated storytelling as his teacher-designed

strategy; therefore, we see the teachers' learning styles resonating with their practices in the classroom. The study revealed the teachers' awareness of their own experiences as students has caused them to recognize the difficulties faced in the classroom in respect to learning styles. Their own educational practices are now informed by their learning preferences and the success or failure of past teachers. The implications of the hidden curriculum cannot be ignored in relation to this practice. Literature notes that teachers exist within the microsystem of the child, and their experiences conveyed intentionally, or unintentionally form part of the lives of their students (Alsubaie, 2015).

### ***Models Used to Design Plans***

The participants discussed three considerations in planning their lessons: Bloom's taxonomy, integrated approach, and the student's learning style. The participants placed great emphasis on the affective domain. This implies that teachers believe that a change in attitude and outlook can lead to success and that when students are able to apply what they have learned, it leads to better retention. Literature confirms the value of the affective domain in building relationships and developing values, awareness, and civic engagement among other areas (Markle & O'Banion, 2014). The teachers also employed the levels of cognitive development. Teachers were able to move from lower order to higher order skills allowing students to obtain mastery. Evidence can be seen with the questioning techniques used by teachers as questions were posed to gauge the level of understanding and got increasingly difficult like a pyramid of learning. Using the taxonomy, teachers organized objectives and were able to match content with instruction for effective delivery. Bloom's allowed the teacher to cover three key aspects of the learning process: the desired outcome, the strategy to achieve the outcome, and the success criteria.



Another finding was the participants' belief there is no one-size-fits-all model that will meet the requirements of students in the classroom and that use of the same model will not fit all situations within the class. This allows for diversity in teaching techniques opening the gateway for investigation and practice. The more approaches teachers have at their disposal they are able to optimize their efforts for the success of their students. Teachers did not elaborate on the mixing and matching that was done. However it could be perceived that the aim was to put together the best aspects of different models in order to bring out the best in students. Literature confirmed that a key aspect of teaching is creating an environment that increases students' capabilities to learn more effectively and increases student motivation. Teachers' are encouraged to use of their professional judgement to adapt their practices to the learning context (Cuevas, 2015).

It could be perceived that a personalist approach that gave credence to the unique qualities that students bring into the classroom was taken to developing lesson plans. Teachers expected students to use prior knowledge in order to make connections with what was being taught in the classroom. Literature emphasized that such expectations comes from a developmental, and reflective paradigm as teachers consider what experiences students have, how they have behaved in the past, and then use this knowledge as a viable means of teaching (Kizel, 2016; Ricci & Pritscher, 2015). This does not mean the children get to do as they please. It simply means that the learning process is centered on the interest and preferences of students in the class and is paced in such a way that students are able to learn. The intent is to create an engaging atmosphere and give students the opportunity to manage their own learning.

#### ***Accommodations to Meet the Needs of Students***

Numerous strategies were used to accommodate students. Three strategies that

were discussed by the participants were one-on-one interactions, scaffolding, and differentiated instruction. It could be perceived that the accommodations used indicated an understanding of different learning modalities and variations in learning styles. This finding was arrived at as the strategies were not simply modifications to the duration of class or additional time allotment for assessments. The participants seemed to have a fairly good understanding of what it means to accommodate learning differences. An interesting finding was that the participants referred to accommodation strategies even without being asked. Accommodations seemed to be a natural aspect of the teaching process within the classes. Two of the participants also mentioned use of the IEP. Participants all noted that their desire was to support the students and not to alienate them or cause them to experience discomfort. All the accommodation strategies used by the teachers were confirmed by literature to be highly effective (Lombardi, 2018).

### ***Other Themes***

Technology was perceived to be an instructional aid that contributed to the strength of accommodations and the overall effectiveness of strategies used. Participants related using the technology for visual learners, using gaming platforms for evaluating learning, and search engines for research. The incorporation of the technology was perceived to facilitate easier delivery as the students were technologically inclined and served to engage the students while the teacher focused on those who needed individual attention. Studies also point to the use of technology as a way of differentiating instruction (Liu et al., 2018).

The use of rewards, as well as the strong interpersonal relationship between teachers and students, can be perceived to be a contributor to student success. Coe et al. (2014) attributed a positive classroom climate to student success. It is perceived that the

teachers engaged students in informal settings, developing a rapport with students based on mutual respect and trust. This relationship is perceived to be strengthened by teachers recognizing the students as individuals and treating them in a way that built their self-esteem. Teachers exhibited pastoral care for students through concern for their wellbeing.

## **Interpretation of Findings**

### ***Teaching Strategies for Success***

The strategies used show that teachers have adopted a learner-centered approach. The students are not considered passive recipients of knowledge and the teacher considered the reservoir from which knowledge flows. Additionally, teachers were not just using oral language and engaging in the “talk and chalk” method. Teachers were modeling actions for the students and incorporating the environment as a strategy. Strategies used by the teachers illustrate a combination of cognitivist and constructivist view. The learner actively participates in problem solving, conceptualizing, and processing of information (Algahtani, 2017; Durwin & Reese-Weber, 2018; Sidney 2015). The reference to the teacher not being the “sage on the stage” is quite applicable. The shared view was that students using their learning experience helped the learner to transfer what they already know and stimulates their interest causing them to absorb new information. Students engaged in knowledge integration, questioning, and simulation. These forms of active engagement can lead to cognitive, practical, and affective development. The constructivist model embraces the ideas of John Dewey, Jean Piaget, and Lev Vygotsky by allowing students to fully engage in their learning, develop relationships with the people around them, and associations with their environment (Echazarra et al., 2016).

Homework as a teaching strategy shows the impact of the microsystem on the

success of the child. Through interaction with teachers and parents, a nested system is formed positively impacting the learning process (Bronfenbrenner, 1979; Ettekal & Mahoney, 2017). This pulls on the teacher's role as an agent of intentionality, preparing the assignments with a desired outcome in mind. By having the opportunity to do the assigned tasks at home, students benefit from the flexibility and support existing in the home (Darling-Hammond et al., 2019; Wecker, 2015). Teachers were also able to see what areas of content needed to be revised before they delved deeper into a topic or moved on to a new topic (Murungi & Wanyora, 2019; Peko et al., 2014).

The school system places emphasis on summative assessments. However, the participants seemed not to consider summative assessments as the symbol of success but focused more on students gradually moving up from one level to the next. They were more focused on celebrating small achievements with the belief that with minimal progression students will become more confident leading to overall improvements on summative assessments (Peko et al., 2014). The value of the continuous assessment including classroom and homework assessments become evident as teachers were able to see the impact of their teaching strategies, and make modifications as they go along or respond to specific student needs through accommodations (Poza-Lujan et al., 2016).

Literature endorses peer teaching as an effective strategy among students with IDs. Peer teaching has been proven to improve the self-esteem of students and develop feelings of belonging among peers. By realizing their specific strengths and weaknesses, students may also have a greater acceptance of each other (Ali, Anwer, et al., 2015; Ullah et al., 2018). Students not only learn academics but also about the interests and personalities of their peers. Students are able to interact and learn from each other based on these differences. Affective learning is also enhanced as students are able to increase

their social skills, and this can lead to improvement in their ability to follow instructions, and initiate contact with others (Dewey, 2017; Halves & Mitya, 2014). Teachers must fulfil key dimensions of identifying the right peers, ensuring willingness of peers to fully engage, and giving them the time, and the means to engage (Andrews & Manning, 2016). Recognition of individual strengths and weaknesses of students makes peer teaching an asset to teachers. Every child has something unique to share, and, in that learning community, students develop a high level of comfort. This can lead to the classroom becoming a safe place for students (Frykedal & Chiriatic, 2017).

Experiential activities create authentic and diverse opportunities and exposure outside of the classroom. Field trips provide unique opportunities for students to learn in realistic and relevant contexts (Nawi & Fuziana, 2016). Students have been known to develop conceptual and factual knowledge from participating in field trips. The field trip planning process can be an intense one, and teachers did not reveal the steps they used in planning for these trips. Lesson plans also did not reveal what actions were taken following the field trips to solidify or determine if objectives were achieved. The key to successful field trips is planning the trip so that it supports the curriculum, assigning roles that ensure participants are focused on educational goals while on the trip, and conducting debriefing and culminating activities after the trip (Nawi & Fuziana, 2016). The lack of evidence on planning procedures and evaluation of outcomes made it difficult to ascertain the processes involved in conducting this teaching strategy.

Questioning seemed to be effectively used by the participants. Considerations when using questioning as a teaching tool are stimulating deep thinking, showing concern for the development stage of the learner, using Bloom's taxonomy (i.e., using an approach of increasingly complex questions), and taking actions to minimize discomfort.

To further promote active learning, it is also advised that students be given the opportunity to generate and pose their own questions (Long et al., 2015). All these practices were evident in the use of questioning by the participants.

The importance of self-expression was stressed as a way of allowing students to share their authenticity and uniqueness. By nurturing creativity, teachers are able to build the confidence of students. Activities such as art, role play, journaling, and dancing combine cognitive and emotional elements that can help students who may have deficits in social and communicative skills. Students develop their personal voice as they unearth new talents resulting from exposure to the talents of others. Research on self-expression and creativity as a teaching strategy is limited to their use as a support system (Seechaliao, 2017; Smith et al., 2014). The link is, however, made to teacher self-efficacy and tolerance for ambiguity, embracing the view that the use of such strategies shows the teachers ability to thrive in dynamic situations rather than avoid it (Smith et al., 2014). Through activities in the classroom, various forms of self-expression are evident from verbal, emotional, creative, and individual perspectives. Jagdag and Dembereldorj (2017) believed students are able to mature, regulate feelings toward others and events, evaluate self-will, and foster characteristics crucial at both individual and society levels. When used for students with special needs, self-expression helps students to connect thoughts and ideas that may have seemed unrelated, explore a variety of possible solutions, and have them open to new ways of thinking (Price-Mitchell, 2015).

Literature stated that modeling is fundamental to conceptual development, especially for students with special needs, but little attention is paid to it. Learning from observation is an effective teaching strategy and one of the best ways to learn a new skill (Kim, 2017). It could be possible that teachers considered this method a normal part of

the teaching process or perceived that it does not contribute to success. Unknown to many teachers is that, in the process of modeling, they are displaying both thought and action that can impact effectiveness. Many view it as a teacher-directed strategy, rendering it ineffective. However, when such a vital teacher-directed strategy is left out, it reduces the potency of other strategies that may be used in the classroom (Salisu & Ransom, 2014). Salisu and Ransom (2014) cited that students frequently may be asked questions, and, while they possess the ability to answer, the lack of a model of how to respond deters participation. The authors advised that teachers need to model the processes of teaching, writing, and responding to questions.

Modeling goes beyond the realm of explaining what to do and can be in the form of written descriptions, diagramming, simulation, or visualization (Kim, 2017). Modeling is characterized as an explicit strategy, with the teacher providing step-by-step instructions and correcting student errors as the students develop mastery at each stage of learning. Teachers are expected to explicitly teach content, assisting the ID student to learn and apply what has been taught. The emphasis that should be placed on this teaching strategy has been minimized as teachers have not made the connection on how this strategy contributes to the effectiveness of other strategies used.

The personalities of teachers were interjected in self-designed strategies. Jurczak and Jurczak (2015) denoted the difficulty in identifying the specific personalities that are needed for teaching but emphasized that no other profession is as dependent on personality for efficacy as teaching. Literature also looked at the contribution of personality in the development of positive social climate that can lead to the growth and holistic development of the child (Taylor & Gebre, 2016). It can be deduced that, over time, the teachers have propagated strategies that are uniquely theirs and that, even if

taught, may have a different outcome since everyone's personality is unique. These strategies developed by the participants are rooted in different models of learning. The Beatitudes are seemingly rooted into a behavioral model that breaks down operationally the rules for learning and having students practice using those rules as guides. Ivy's Approach is relational in that it is aimed at identifying the level of understanding of the student and then altering the lesson to close any gaps in learning. Students get immediate feedback and are possibly able to self-correct. Storytelling and use of fun are rooted in social learning through the engagement of students in social interaction (Johnson, 2014). Storytelling, as stated by the participants, is also rooted in the Jamaican culture and the art of oral communication characterized by gestures, rhymes, chants, and movement. Through storytelling, students accumulate vast knowledge that they willingly share, thereby solidifying concepts learned. Sugiyama (2017) opined that storytelling transmits generalizability knowledge and should be considered as pedagogy.

### ***Factors Influencing Strategies Used***

Durwin and Reese-Weber (2018) considered that there must be a match with the learning style and the strategies used. May (2018) agreed that different aspects of the learner must be considered. It is not possible to reach all students all the time with the same strategy and so it is important to use a variety of strategies. Considering the potential deficits of students with ID, strategies must be geared at improving the learning process. The high correlation between teaching strategy and student success makes determining the learning style a valuable asset (İlçin et al., 2018). Teachers did not share the method by which they are able to determine the students' learning style. What is known is that a level of flexibility is required to cater to these different learning styles.

Various models of teaching, such as the ADDIE model and Bloom's taxonomy,



declare the value of objectives in the teaching-learning process (May, 2018). Objectives provide direction and are based on the premise that, once individuals know where they are going, then they can determine the best way to get there. When the components of objectives and strategy are misaligned, students may become confused (Chatterjee & Corral, 2017). The results of the data collected in this study showed that there was alignment with the objectives and the teaching strategies. Objectives must be learner focused, outlining what the students will achieve from the educational experience. They should be presented as observable behaviors that can be measured. The SMART learning objective is also required (Chatterjee & Corral, 2017). Stating the objectives and ensuring that students understand the desired outcome can create a win-win situation. Sharing of objectives can empower students, allowing them to take charge and direct their own learning. Student participation in establishing objectives helps the students to monitor outcome (Poza-Lujan et al., 2016). What is unknown is if these objectives were shared with the students and if students were allowed to participate in their establishment.

While the curriculum is aimed at students, the teachers are its drivers, as it is their job to interpret it and pass on this interpretation to the students. The didactic suggestions in curricula assist teachers in making decisions on learning units, teaching styles, and evaluation strategies. Teachers are encouraged to be innovative based on the learning needs of their students (Elena, 2015). From the study, it can be seen that the curriculum is a key reference point for the participants, linking standards with assessment outcomes. The curriculum was also objectives driven, specifying behavior and contexts under which learning should take place. Evidence of teacher flexibility in using the curriculum was evident, and, though they passed on the official knowledge, they passed on ideological information as well. This emphasizes the importance of the hidden curriculum where

structural and cultural practices are embedded into the teaching-learning process (Mitchell et al., 2014; Sulaimani & Gut, 2019).

The curriculum is an interaction of the following components: objectives, learning experiences, content, teaching strategies and assessment measures. The teaching strategy and objectives must be based on content and aligned to student learning style. Literature confirms that the learning styles of teachers influence how they teach, and they may adopt practices from teachers they considered good (Bantwini, 2015). Teachers have been noted to use a strategy that they found easy and helped them to understand a concept.

### ***Models Used to Design Plans***

Bloom's taxonomy paves the way for deeper learning and is commonly used by educators. By systematically classifying the thinking and learning processes, the model moves teachers from just pointing out factual information through a hierarchical structure that challenges the mind. Bloom's taxonomy is linked to the cognitive development of students, and teachers are encouraged to develop skills at higher levels of the taxonomy (Adams, 2015). Analysis of the use of the taxonomy shows that it is being used effectively, allowing students to develop critical thinking skills that can be transferred to various tasks and contexts.

Teachers are encouraged to integrate a variety of methods to improve efficacy. Teachers do not need to buy into a specific philosophical orientation but can choose aspects of various models that align to their teaching beliefs. One model may not be appropriate for all scenarios, and increasing diversity optimizes teaching delivery (Williams, 2017). Participants supported an integrated approach to learning by incorporating several theories and models in the instructional design process. Teachers

not only considered learning styles but incorporated different models. Cuevas (2015) stated that, even if students have a learning style, it does not mean that they will learn all content effectively using that style. As good teachers, the participants have combined a variety of approaches for the benefit of their students. This hybrid approach is considered inclusive but is believed to dilute the learning process because it does not have a single focus (Lathan, 2020). However, students are diverse with a wide range of learning needs. No one method is able to suit all needs across the wide range of content that needs to be delivered.

A personalized approach calls for provisions that support student needs, such as assistive technology. Teachers have to know the profile of students and form an intellectual framework of their learners. Deficits in learning can be overcome by targeting any misleading abstractions or filling any gaps. Students do not need to be dependent on teachers, but preparations should be made to have them guide their own learning. This makes the students agents in their own learning process and the teacher the facilitator in developing self-awareness, self-reflection, and the cognitive capacities of students (Ricci & Pritscher, 2015). Kizel (2016) referred to this as the self-determined approach to learning. Students are given some freedom to learn based on their inner motivations and in a way that is suitable to their needs. Students acquire competence and capability, leading to learner confidence, and they are able to take actions that enrich their own learning.

#### ***Accommodations to Meet Student Needs***

The use of a one-on-one strategy is a way of affording students the personal feedback needed for improvement. When teachers engage in that one-on-one time with students, they are able to offer more guidance. Without the distraction from the whole

class, the student also receives more praise, which acts as a motivator. This time for scheduled, targeted feedback provides more powerful feedback that improves student output (Burden & Byrd, 2019; Lombardi, 2018). This form of personal tutoring seems to have the most profound impact, enabling the development of a better understanding of the learner's needs and personality and providing effective support at different stages of their learning.

Scaffolding is to break content into manageable parts, and students are able to use their prior knowledge to learn new concepts. Teachers use different tips such as cues and prompts. Scaffolding must be intentional with clear goals in mind. The teacher must communicate to the students so that their intentions are geared toward developing new skills (Lombardi, 2018). If the level of difficulty of a task increases too quickly, students may be unable to progress. Gonulal and Loewen (2018) confirmed that scaffolding is a promising technique in teaching and highlighted that it should be a fluid support that is gradually withdrawn over time. The use of scaffolding contributes to reducing the frustration of students, and this was a particular concern with the participants. The seamless integration of the use of a scaffolding strategy can help learners connect new information to prior knowledge, activating and building on students' cognitive competencies.

The premise for differentiation are as follows: (a) students are different in their experiences, (b) students learn when the content can be connected to their life experiences, (c) students need to be challenged but not to the point of frustration, and (d) support from the teacher motivates students, and learning within the context of a community promotes the abilities of students. Differentiation strategies can, therefore, be based on learning styles, the interest of the student, and the teacher's assessment of what

method is best to bridge identified gaps in learning. Teachers utilize varied questions, tiered assignments, and group activities. This shows a relationship between the strategies and the accommodations that are made for the students (Echazarra et al., 2016).

Lombardi (2018) stated that differentiation is usually used in heterogeneous classes, and the teacher varies instruction according to learning needs. Teachers maintain a flexible design to their lessons. Teachers differentiate according to practice, process, product, assessment, grouping, or content. The key to differentiation is that it supports each student's learning style, prior knowledge, and interests (Lombardi, 2018). Relevant to this statement is the participants' emphasis on "learning the students."

### ***Other Themes***

Technology was a pervasive topic throughout the study and could be perceived as an initial component of the delivery process employed by teachers. Technological use is determined by pedagogical beliefs. Liu et al. (2018) opined that since pedagogical beliefs are classified as traditional or constructivist, similarly, use of technology should be classified in the same manner based on how it is used in the classroom. The participants used the technology in a constructivist manner as students employed them as mediums to explore, create, and present findings. Lin et al. (2016) believed that the teacher's perception of student readiness to use technology is essential to the adoption process. Participants in this study viewed students as technology oriented with the ability to effectively use technological tools that were available to them. The view by teachers that students were technologically oriented promoted the views of the teachers on using technology in the classroom. Studies also point to the use of technology as a way of differentiating instruction (Liu et al., 2018). In adherence with this view, the teachers employed technology to differentiate through the use of videos, learning activities, and

presentation formats.

Technology can bridge the achievement gap when the context of learning matches the characteristics of the learner (Darling Hammond et al., 2014). The technology is not intended to take over from the teacher but incorporated into the learning process to improve student performance. Technology can be a supplement to instruction, helping students in mastering new complex materials. The use of technology may also allow students to see concepts from differing perspectives, allowing content to come alive so students can understand potentially difficult topics.

Student engagement and motivation are premised on a solid relationship. Relationships should be mutually reinforcing. Interactions that are courteous and kind can build strong relationships. The relationship should not distract from the learning process but add to it. Efforts toward constructive feedback are met with receptive attitudes. Through positive relationships, teachers are also able to encourage students to take on more challenging tasks (Ashton, 2014). Furrer et al. (2014) believed the basis for good relationship in the classroom is based on the teacher being a dependable source upon whom the student can lay emotional and psychological burdens. Teachers' display of confidence in the student can override limitations they may have placed on themselves. Teachers value the opinion of students and become a listening ear. It is important not to operate in ways that are rejecting or dismissive to students and their efforts because students seek to gain acceptance and learn from the approval or rejection of their teachers (Zhou & Brown, 2015). Disinterest and dislike can be communicated by not having time for students or being irritated, sarcastic, not affirming input, and being critical. Attempts to control or coerce students can also have negative effects and undermine feelings of value. Research shows that students are more receptive to openness and availability

(Filsecker & Hickey, 2014; Koludrović & Ercegovac, 2015).

A look through the lens of Maslow's hierarchy of motivation shows that there are levels to the needs of students. Maslow believed that humans are born with five essential needs that are ranked as a hierarchy, with some categorized as lower order needs and others as higher order needs. Lower order needs include physiological, security, and belonging needs. Higher order needs include esteem and self-actualization needs (Zhou & Brown, 2015). Participants have been able to apply the principles of motivation in order to support student learning. As it relates to the theory of motivation, lower order needs must be fulfilled first before attempting to meet higher order needs (Zhou & Brown, 2015). Through the approach to learning used, participants were able to fill higher order needs supporting students' desire for autonomy, connection, and competence. Through teaching strategies such as peer teaching and questioning, students gained the opportunity to develop leadership skills, make decisions, gain confidence, and increase interaction with peers (Shaughnessy et al., 2018). When students' needs are met, they are more likely to be engaged in the classroom. The classroom is more welcoming and becomes a buffer for external pressures the student may face (Furrer et al., 2014). Filling lower order needs of security and physical needs also facilitated the learning process. In one example, the participant gave the student a school bag, while, in another, students were provided with clean uniforms fulfilled the physical needs of students. By accepting students' learning deficiencies and facilitating their needs, students would have developed a level of trust in their teachers that would make them feel more secure in their classroom space. This allowed the students to be better prepared for the learning process (Darling-Hammond et al., 2019; Zhou & Brown, 2015).

The psychological and mental beliefs of teachers play a role in teaching behavior

influencing the direction of their teaching practices. Their beliefs about teaching approach and how students learn contribute to variates in pedagogical beliefs (Ciascai & Iuliana, 2016; Jerome & Samuel, 2017). Some research suggested that there are inconsistencies in the beliefs and practices of teachers (Cross Francis, 2015) and that teachers' beliefs may be shaped by the context they are in (Schoenfeld, 2015). In this study, agreement can be seen between the practices of teachers and their beliefs about education and how students learn. Overall, teachers believed all students are capable of learning, and it is the task of the teacher to create the conditions for the learning process to take place. The teachers consider the context or situation that exists, with a focus on the students and their needs.

### **Implications of the Research**

The findings of this study can prove useful as a source of information for strategies that can be used in self-contained classrooms to improve student outcomes. The information may also prove relevant to developers of curriculum and teaching plans on learning philosophies of teachers considered successful, allowing for improved and strengthened instructional guidelines. The findings may also be used to engage teachers in professional development activities that may enable them to prove more effective in attaining higher levels of success for their students. All this is possible in the way that the findings provide information on (a) teaching strategies leading to success, (b) factors to consider when selecting teaching strategies, (c) how plans are designed, and (d) accommodations used.

One may argue that this study is a process-product view of the use of teaching strategies that focused too much on discrete behavior. It is true that the diversity of teaching environment and the differences in objectives can make a strategy effective for



one set of students and ineffective for another. What this study presents are general ideas of what works for the four participants in this study. It is important to maintain flexibility and be aware of the student characteristics in the application of any strategy. Researchers argue that the main determinants of success of students are based on ability, level of motivation, peer interaction, social class, and previous achievements, downplaying the importance of the teacher (Ayua, 2017). The data collected and analyzed in this study indicate that an effective teacher can impact and heighten many of these factors through the teaching strategies and support systems presented.

What has also emerged from the study is the contribution of nonpedagogical attributes toward student success. Studies have focused on teaching practices, knowledge of teachers, and instructional time (Bolton, 2018). The results of this study reveal that, in addition to the use of effective teaching strategies, there are underlying factors that create success in the classroom. The relational factors existing within the classroom were very prominent in the research and seemed just as important as the use of the strategies. The responses from the participants could lead one to believe that, without these relational factors, implementation of the strategies could prove ineffective. Teachers must ensure they have a positive relationship with students and show concern regarding the physical and security needs of students before venturing to meet educational needs.

Bandura (1997) believed that the self-efficacy beliefs of individuals impact their actions, thought patterns, and coping abilities. Teacher self-efficacy was impacted by a number of factors, one being years of experience. This implies that new teachers may have efficacy issues upon entering the classroom due to lack of adequate experience and practice. An understanding of factors leading to high self-efficacy can help in preparing new teachers to erode limiting barriers and develop confidence regardless of the lack of

experience. In addition, teacher attributes are central to effective teaching and cannot be ignored (Bahr & Mellor, 2016).

Central to the responses of the participants was the various characteristics that make students the individuals they are. For teaching to be effective, consideration of the unique characteristics of the students must be foremost. The activities within the classroom must have the students at the center. Qualities such as independent thinking, cooperation, acceptance, commitment, and an expectation of high performance should be the outcome of implementing effective teaching strategies. Proper planning that incorporates the strengths of students and improves on weaknesses should be the practice of teachers who desire to be successful (Ayua, 2017). Teachers are encouraged to take a student-centered approach to improve the learning outcomes of ID students in self-contained classrooms.

## **Recommendations for Future Research**

### ***Methodologies***

A qualitative case study using descriptive design was used for this study. This allowed the researcher to collect information regarding the views of the teachers, and to use records such as lesson plans, and the curriculum. The researcher recommends further exploration into the topic using a mixed methodology. The use of both qualitative and quantitative methods may lead to increased understanding of the strategies used and show statistical links between strategies and outcomes. The inclusion of direct observation as part of the case study strategy may also prove beneficial to future researchers. This may yield better data on the strategies that are used and how they are used that could help in preparing teachers in training programs. Wiorkowski (2015) conducted a phenomenological study based on the experiences of students with autism spectrum

disorder as they progressed through different levels of academia. A similar longitudinal study could be performed to follow selected students from the study site as they move to high school and even university.

### ***Demographical Variations***

The study focused on teachers employed by an elementary school. Future studies could include different levels of education, such as the secondary level. A limitation of the study was also the small sample size. A larger sample size could increase the level of confidence in the research.

### **Conclusion**

Ayua (2017) stated, “The teacher’s real effectiveness involves knowledge of what to teach, how to teach it, when it should be taught, whom is to be taught, why it is taught and even where to teach” (p. 1). As the systematic demands for improved student performance increase, teachers face a pedagogic crisis made more complex when students experience intellectual challenges. Flexibility through the use of various teaching strategies and a variety of accommodations is required for success of ID students. A more constructivist approach to teaching is required that uses the tools of inquiry learning. Lessons need to be student centered, allowing for cooperative learning, self-expression, experiential learning, and use of prior knowledge. Peer support develops the confidence of students with ID as they are able to improve on strengths and overcome weaknesses.

A requirement of the education system in relation to SPED students is that they are not only exposed to the general education curriculum but that they are able to progress and do the same exit exams as typically developing students. By using a variety of strategies and catering to the challenges faced by students, teachers are able to develop

the confidence of students to do increasingly difficult work. In a reality where inclusion is not the standard, careful planning and delivery of instruction improve the chance of student success.

Teachers may find themselves ineffective if they take a homogeneous approach to teaching ID students in the self-contained setting. Materials and lessons need to be prepared to meet a range of cognitive abilities as students operate at different levels. The topic may be the same for all students but activities and assessments are matched to the students' individual needs. Students should encounter real-life issues and actively engage in making sense of the world. Students should engage in multiple modalities that can lead to improvement in critical thinking skills (Claiborne et al., 2020; Fedesco et al., 2020). This student-centric method of learning engages the senses, causing the course material to become more vivid and enhancing communication of concepts. A move from normative teaching concepts of knowledge transfer with the teacher as the source to a one aligned to the needs of learners will guarantee more meaningful experiences.

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Appendix A  
Interview Protocol

## Interview Protocol

### **Research Topic: Teaching Strategies Leading to Success in Self-contained Classrooms**

The interview protocol was based on the research questions proposed in this study. The core research question was: What are the teaching strategies used by SPED teachers in self- contained classrooms? The following sub-questions guided the research:

1. As a teacher who works with ID student in a self-contained classroom, what decisions do you make to determine the strategies you use to help your ID students be successful?
2. What models have you used to design the teaching strategy(s) that lead to the success of ID students who are taught in self-contained classrooms?
3. How are accommodations made to the teaching strategies that lead to the success of ID students who are taught in self-contained classrooms?

### **Research Topic: Teaching Strategies Leading to Success in Self-contained Classrooms**

Each research question led to the interview protocol being divided into four sections:

Section 1: Demographic Information

Section 2: Teaching Strategies and the Factors that Influence Choice

Section 3: Models used to Design Teaching Strategies

Section 4: Accommodations to meet Student Needs

#### **Section 1: Demographic Information**

1. What is your education background?

Prompt: What is your highest level of education?

- What certification do you have in teaching?
- What certification do you have in teaching of special education?

2. How long have you been teaching at this institution?
3. Do you think you are a good teacher? Why

### **Section 2: Teaching Strategies and the Factors that Influence Choice**

1. Describe your experience teaching in a self-contained classroom.
2. Describe your personal expectations of your students based on the nature of their intellectual disability.
3. Describe your personal expectations of yourself as a teacher of students with intellectual disabilities.
4. What policies or procedures do you use to guide your teaching planning process?
5. Who/what is your focus when developing your lessons?
6. Discuss the teaching strategies that you use when developing lessons.
7. What are the specific considerations when deciding on the strategy?
8. Describe your thoughts and feelings as you develop your plans and select the strategies.
9. How do you create positive learning experiences for your students?
10. How do you convey the message that you care about each individual student?
11. How do you provide a nurturing and supportive environment for your students?
12. How do you ensure learning is both interesting and challenging for students?
13. How do you make learning meaningful to the students' lives?

### **Section 3: Models Used to Design Teaching Strategies**

1. What are your beliefs about how students learn?
2. How do your beliefs about how your students learn impact the choice of teaching strategies?
3. What are the resources that are typically used in your lessons?

4. Discuss how these resources help in delivery of the lesson
5. How do these resources serve to engage the students?
6. Describe actions taken to scaffold the learning process
7. What is your approach to eliciting feedback from students?
8. Discuss the motivational strategies used to encourage learning
9. What are the ways in which you manage the behaviour of students while teaching?

#### **Section 4: Accommodations to Meet Student Needs**

1. What are the range of intellectual disabilities of students in your classroom?
2. Describe the factors that would lead you to make accommodations for the students
3. How are you able to accommodate the different needs of the students?
4. What supplementary aids are used to assist the accommodation process?
5. How does teaching in the self-contained classroom impact the accommodation process?
6. How do you differentiate instruction where applicable?



## Appendix B

### Themes of the Study

## Themes of the Study

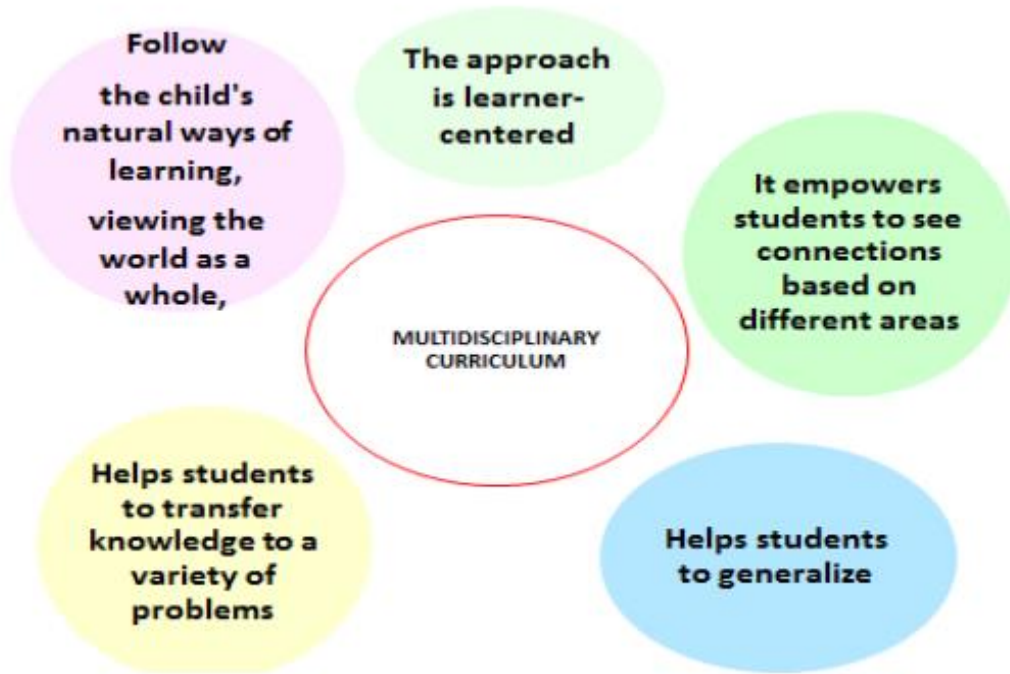
*Themes from Data*

<b>Research Question</b>	<b>Themes</b>	<b>Number of Participant responses</b>	<b>Overarching Statement</b>
1	Peer Groups	22	A key one I always use is peer teaching (Ivy). I use question and answer (Lilac). You must model, this is what I want (Ivy).  They have their field trips (Corey) You have to get them to be expressing (Ivy)  They do get Homework (Corey) So I mix laughs what I call the theories with experience (Ivy)
	Questioning	27	
	Modelling	6	
	Field Trips	11	
	Self-expression	43	
	Home work	21	
	Personal Strategy	4	
3	Bloom's Taxonomy	22	Definitely have to look at Bloom's taxonomy to take students through the different levels of learning (Dahlia) I mix what I call the theories with experience (Ivy) Plans have to be student centered (Dahlia).
	Integrated Approach	26	
	Student's Prior Knowledge	15	
4	One-on-One	13	I pull students aside, and work one-on-one (Corey) Differentiation should be a normal thing in all classes (Ivy) Try to take it a step at a time, not to rush all the information to them at once (Lilac)
	Differentiation	25	
	Scaffolding	35	

Other	Use of Technology	44	They are technology inclined (Dahlia).
	Good relationship	14	So the first thing is our personality or warmth (Corey)
	Reward system	12	So I give rewards incentives (Lilac).
	Meeting student needs	12	So I will say Kristen what did you have for lunch? Did you eat? (Dahlia)

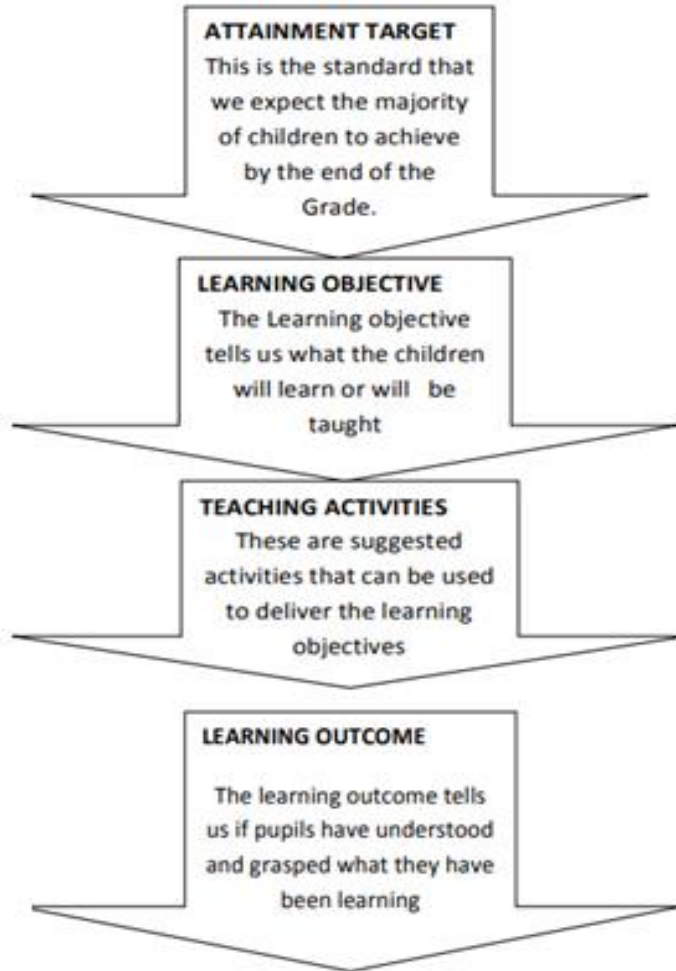
Appendix C  
Curriculum Information

## Curriculum Information

**Item 1: Multidisciplinary Curriculum**

*Note.* Adapted from NSC Grade 2, p. XV111

## Item 2: Curriculum Standards



*Note.* Adapted NSC-Grade 2, pp. XXV1-XXV11

Appendix D  
Sample Lesson Plan

## Sample Lesson Plan

**Subject:** Language Arts

**Duration:** 1hr x 2

**Theme:** Our Common Heritage

**Sub-theme:** Culture and Heritage

**Focus Question:** How do I effectively share ideas about cultural practices which have helped to shape our national and regional identity?

**Attainment Targets:**

- Listen to, recall, understand and respond to speakers' messages, whether implicit or explicit
- Communicate with confidence and competence for different purposes and audiences, using SJE and JC appropriately and creatively
- Use deduction and inferences to interpret information and ideas to predict outcomes
- ICT Tools
- Use a range of word recognition clues to identify new words
- Automatically recognise words (including basic sight word lists) through repeated exposure and mnemonic devices
- Use a range of approaches to learn and spell irregular words
- Build vocabulary through various strategies

### Day 1: Language Structure (Grammar and Convention)

**Specific Objectives:**

The students will:

- Apply correct capitalization and punctuation.
- Identify and construct compound sentence.

**Content Summary:**

**Punctuation marks** are symbols that are used to aid the clarity and comprehension of written language. Some common punctuation marks are the period, comma, question mark, exclamation point, apostrophe, quotation mark and hyphen.

A **compound sentence** has at least two **independent clauses** that have related ideas. The independent clauses can be joined by a **coordinating conjunction** (for, and, nor, but, or, yet, so) or by a semicolon, as you can see in the compound sentence examples below.

In either case, each half of the sentence must be able to stand on its own as a complete sentence. That means each half needs a subject and a verb. For example:

- *I want* the sporty red car, but *I will lease* the practical blue one.

In the sentence above, the subjects are italicized and the verbs are in bold. The first half is a complete sentence because it contains the subject "I" and the verb "want." The second half that comes after the comma and coordinating conjunction is also a complete sentence, with the subject "I" and the verb "will lease."

**Key Skills:**

- Identify the use of capital letters.
- Use capital letters and punctuation marks.
- Revise rules.
- Critique presentation.



**Materials/Resources:**

- Dictionary, Language Tree Jamaica workbook 4, Children's own
- <https://www.enchantedlearning.com/grammar/punctuation/>
- <https://examples.yourdictionary.com/compound-sentence-examples.html>

**Teaching/Learning Activities****Students will:****Engage/explore:**

- Teacher will probe students for a definition for punctuation marks.
- Teacher will note students' responses on the board.
- Teacher will ask have a short discussion about when punctuation marks are used.
- Teacher will ask students what they think compound sentences are.
- Teacher will note students' responses on the board.
- Teacher will have students watch a short video to clarify their responses on compound sentences.
- <https://www.youtube.com/watch?v=7c1Gbo-BvKo>
- Teacher will work one-on-one with students who show signs of difficulty.

**Explain/elaborate:**

- Student will read a paragraph from levelled readers, paying attention to the punctuations marks as well as compound sentences.
- Students will note when punctuation marks are used and discuss the use of each in the paragraph.
- Students will revise the rules which governs the use of capital letters and end punctuation marks.
- E.g. capital letters are used at the beginning or sentences.
- End punctuation marks- a full stop is used at the end of a statement.

**Extend:**

- Students will complete activity on page 18 of Language Tree.

**Evaluation**

Areas of Evaluation	Excellent	Good	Fair	Poor	Needs Improvement
Effective use of teaching aids					
Time Management					
Students' Participation					
Teacher's use of content					
Use of reinforcement					
Meeting Objectives					
Students grasping concept					

Appendix E

Differentiated Unit Plan Template

## Differentiated Unit Plan Template

## The Differentiated Unit Plan Template

<b>Grade/Class:</b>			
<b>Subject</b>			
<b>Date &amp; Duration</b>			
<b>COMPONENTS OF PLAN</b>	<b>PROFICIENCY LEARNING PATHWAYS FOR A DIFFERENTIATED PLAN</b>		
	<b>READY</b>	<b>NEAR READY</b>	<b>NOT READY</b>
<b>Pertinent Learner Characteristics being Considered</b> (commendable attributes & challenges)			
<b>Learning Objectives</b> relative to Characteristics to be addressed (skills, attitudes etc.)			
<b>Content Focus &amp; Organization</b> (concepts, key skills, attitudes etc. method/s of integration within/across disciplines)			
<b>Differentiation Method/s:</b>  1. Task Complexity 2. Learning Material & Modality 3. Learner Participation/Expected Learner Response to Tasks/s (Products) 4. Nature and Level of Support	1.		
	2.		
	3.		
	4.		
<b>Assessment Considerations</b> (nature of differentiation, methods, criteria etc.)			

The following information on the curriculum analysis for the subject areas included, should be used to engage in the Unit Planning Process, including the completion of the template provided.