

AMERICAN UNIVERSITY OF BEIRUT

TEACHERS' CONCEPTIONS AND PRACTICES OF
DIFFERENTIATED INSTRUCTION FOR ENGLISH LANGUAGE
ARTS AT THE ELEMENTARY LEVEL:
A CASE STUDY

by
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This study aims to describe the state of the art practices and models of Differentiated Instruction (DI) for English language arts at the elementary level in Lebanon. It examines the teachers' conceptions and practices of DI and the contextual factors that both promote and impede the implementation of DI for English language arts at the elementary level.

Data from this study was collected and analyzed from classroom observations, interviews and site document review, for a period of two months at a private Lebanese elementary school. Two participants were closely observed; one was a third grade English language arts teacher and the other was a both a grade four and five English language arts teacher.

Data in this research revealed the challenges that teachers generally face when implementing DI, such as lack of training and understanding of DI, as well as insufficient collaboration among teachers and inconsistent classroom management skills, coping with difficult students as well as lack of time and resources. Based on the findings in the study, several themes emerged from the triangulated data analysis: Support for the decision to implement DI was widespread and observation highlighted clear teacher commitment; Collaboration for strategic lesson planning was critical as was addressing instructional needs in the classroom; Lack in classroom resources was evident; Lack of professional development training; Classroom management challenges.

Findings from this study highlight the teachers' misconceptions of DI and the challenge of adequate time for implementing DI. The results of this study also showed how the disruptive behavior of some students diminished the effective application of DI and how disruptive students' learning profiles were not adequately addressed during DI. However, based on the findings the study presents some recommendations to overcome some of the challenges and presents a basis for further study of DI at a broader level for better understanding.

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CHAPTER I

INTRODUCTION

Background of the Study

Research related to Gardner's theory of multiple intelligences and Fleming's learning styles shows that students have different cognitive processes and thus learn in different ways and at different rates; "Some students learn best by first focusing on abstract ideas; other students need to begin with concrete learning experiences" (Tomlinson, 1995, p. 12).

As a former elementary school teacher at a Lebanese private school located in Beirut, I had the opportunity to witness the practices of Differentiated Instruction (DI) for English language arts at the elementary level, specifically grade three. At that time, I had very little knowledge of the theory behind DI and even lesser awareness of how the practice of that theory was applied. Nonetheless, through the performance of my students undergoing the DI program, I saw no improvement in both the student's self-image and academic achievement; thus, my confidence in the effectiveness of the program itself diminished, if not evaporated.

When researching this topic further, I paused at the following study finding, even when a teacher is provided with all the resources, but if he or she does not manage his or her classroom adequately, DI will not be effective (Roberts-Mahon, 2016). This finding led me to reconsider the learning impact of DI as a program or theory and shifted my attention to the teachers and their management of resources that would enable them to implement DI successfully inside their classrooms.

The issue of whether DI is being properly implemented in schools today is still ambiguous. It is recognized "Some teachers have implemented it, but there is a need for empirical evidence of its

practice” (Roberts- Mahon, 2016, p.8). Even though there are many existing studies examining the teacher’s role with DI and many of the proposed various assessment tools to measure its impact, few of these tools are being integrated into the school environment to allow solid scientific conclusions.

Statement of the problem

The purpose of this study is to describe the practices of DI for English language arts teachers in a Lebanese private elementary school. The study examines both the teachers’ conceptions of differentiation and the contextual factors that promote or hinder the implementation of DI at the elementary level.

Research Questions

This study poses three research questions:

- What are the current state of the art practices and models of differentiated instruction for English language arts?
- What are the teachers’ conceptions and practices regarding the impact of differentiated instruction for English language arts on elementary student learning?
- What are the teachers’ conceptions of the impact of contextual school factors in promoting or hindering their implementation of differentiated instruction for English language arts at the elementary level?

Rationale of the Study

Much research has been carried out concerning the effectiveness of DI on elementary student’s reading achievement (i.e., Reis et al., 2011, Roberts-Mahon, 2016, Thompson, 2009).

However, very few researchers describe the results and outcomes of DI practice within the elementary classroom in terms of teacher performance and student achievement. This is because DI is regarded as a philosophy of practice, which is basically theoretical, and where researchers did not investigate the actual classroom DI practices (Roberts-Mahon, 2016).

The literature includes some broad studies that have addressed the perspectives and experiences of the classroom teachers who are the most important frontline agents of DI for English language arts implementation. The dearth of research into teachers' perceptions and experiences with DI for English language arts is evident in "a gap in the literature about the perception of elementary school teachers related to using differentiated instruction and how these experiences influence instructional practices" (Thompson, 2009, p.3). This is compounded by the lack of validated data to examine the practice of DI for English language arts within elementary classrooms in the Lebanese educational context.

Roberts-Mahon (2016) described how DI is practiced in an elementary school classroom in a public school setting in the United States. Data collection included classroom observations, interviews of the teachers and site document reviews. The findings revealed that some of the challenges that teachers may face when implementing DI in the classroom include pre-existing ability grouping, spontaneous ability grouping, and the handling of students with behavioral problems.

Thompson (2009) utilized the qualitative paradigm of phenomenology to explore the perceptions that teachers hold of DI and the influence of that perception on instructional practices in the United States. Data analysis revealed the following themes: (a) small group instruction is the most effective method for differentiating instruction based on ability level, (b) learning centers are the best approach for differentiating instruction based on learning style and learning preference, and (c) implementing differentiation is challenging and time consuming.

This study aims to extend the existing literature by investigating teachers' conceptions and perspectives on DI for English language arts in a Lebanese private elementary school context in which English is a foreign language. This is important given that the culture and education system in Lebanon is very different from the contexts in which previous DI research was conducted and discussed.

Significance of the Study

This study attempts to bridge the gap between the theory and application of DI for English language arts in the literature and in understanding the teachers' conceptions of this differentiation, more specifically in the Lebanese educational context. It also seeks to address the limits of existing research on the subject through complementing previous research by increasing the geographic and demographic diversity of schools studied with focus on DI conceptions and practices (Reis et al., 2011). This study will serve as data source for those interested in the practices of DI for English language arts. It will also recommend steps for teachers to be more aware of their students' differing needs inside their classrooms, especially when it comes to the English sessions. This study will also assist elementary schools in understanding DI for English language arts and improving its implementation in terms of teacher training and performance and student learning especially in terms of recognizing the value of coordination and collaboration among teachers in the implementation of DI and the preparation of classroom programs for students.

CHAPTER II

REVIEW OF LITERATURE

This review of literature explores the various state of the art instructional practices of differentiation for English language arts in elementary classrooms. It begins by defining DI and providing a description of the key elements and essential components for the successful implementation of DI for English language arts at the elementary level. Following this, an overview of the theories that deliver the framework for DI is given. Finally, the role and responsibility of teachers in implementing DI, diversity of students' needs, professional development as well as assessment in DI are outlined and explained from different perspectives.

Defining Differentiated Instruction

- Differentiated instruction comes as a result of **Neuropsychology** where three principles from brain research, emotional safety, appropriate challenges, and self-constructed meaning, suggest that a one-size-fits-all approach to classroom instruction is ineffective for most students and harmful to some.
- Tomlinson (1995) defined DI as an instructional approach that individualizes learning based on the need of each student. Tomlinson describes differentiated instruction as factoring students' individual learning styles and levels of readiness first *before* designing a lesson. This method benefits a wide range of students, from those with learning disabilities to those who are considered high ability. Hence, differentiating instruction means teaching the same material to all students using a variety of instructional strategies, or it may require the teacher to deliver lessons at varying levels of difficulty based on the ability of each student. Teachers who practice differentiation in the classroom may:

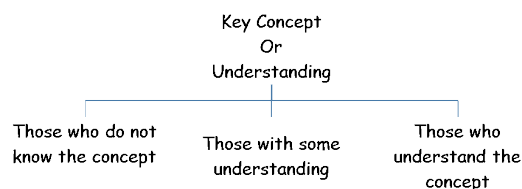
- Design lessons based on students' learning styles.
- Group students by shared interest, topic, or ability for assignments.
- Assess students' learning using formative assessment.
- Manage the classroom to create a safe and supportive environment.
- Continually assess and adjust lesson content to meet students' needs.

This differentiation, as Tomlinson (1995) writes, was influenced by Shulman's (1987) individualization theory which suggested as DI that before teachers can differentiate, they must first comprehend "...that different learners will require different sizes of garments...based on their readiness to learn" (Tomlinson, 1995, p.80). This assumes that a teacher should be proactive in planning lessons and activities and assess continually student readiness in order to help students reach their individual goals and growth (Tomlinson, 2018).

According to Tomlinson, DI includes four main interrelated elements: content, process, product, affect/learning environment.

Differentiation of Content

Differentiation of content is based on pre assessment where tiering the content is changing the level of complexity of a task or unit of study in order to meet the developmental needs of the students involved.



- ✓ Content should cover the set standards of learning. However, some students may be completely unfamiliar with the concepts in a lesson, some students may have partial mastery, and some students may already be familiar with the content before the lesson begins.
- ✓ Differentiate the content by designing activities for groups of students that cover various levels of Bloom's Taxonomy (a classification of levels of intellectual behavior going from lower-order thinking skills to higher-order thinking skills). The six levels are: remembering, understanding, applying, analyzing, evaluating, and creating.
- ✓ Students who are unfamiliar with a lesson could be required to complete tasks on the lower levels: remembering and understanding. Students with some mastery could be asked to apply and analyze the content, and students who have high levels of mastery could be asked to complete tasks in the areas of evaluating and creating.

A general misconception is that differentiating content means altering the content of a lesson; however, it is rather the presentation of the content itself, which is modified by the teacher in response to students' academic abilities and talents (Cooper, 2007).

Modifying the learning experiences leads to better access to learning and motivation (Tomlinson, 1999). Tomlinson and Imbeau (2010) also write that content can be delivered using different methods and resources such as various supportive elements and materials, tasks aligned with learning goals and objectives, and instruction that is concept focused and principle driven. In an English class for instance, a teacher may differentiate content by tiering a spelling or vocabulary list based on students' readiness level or through use of different materials such as videos or text (Tomlinson, 1999).

Tiering is defined by Tomlinson and McTighe (2006) as “a readiness based instructional approach in which all students work in the same essential knowledge, understanding, and skill, but in different levels of difficulty based on their current proficiency with the ideas and skills” (p.107).

Differentiation of Process

Differentiation of process means the teacher uses a diverse list of activities and materials to help students understand key points, thus encouraging them in developing their cognitive skills (Tomlinson, 1999). Process is primarily based on pretesting of students' knowledge on the content being taught through a tiered curriculum (Blaz,2016). Differentiation of process may also include hands-on support provided by the teacher to struggling students. Furthermore, it may include developing a list of tasks by the teacher and giving them to the students to complete during a certain period of time or at the students' own pace (Tomlinson, 1999). This process is vital as it offers each student to be appropriately challenged (Blaz,2016).

Tomlinson and Imbeau (2010) noted that though process is often misunderstood as an activity, the two are markedly different. The act of making sense of an educational activity by the teacher and realizing its relevance in the world we live in is the point of understanding process. Tomlinson and Imbeau (2010) also stated that the consistent use of flexible grouping as well as classroom management help teachers better implement DI practices in the classroom and assists students in processing information faster. Differentiating process can be done in different ways such as placing students into groups to work on tasks (Hall, 2002), curriculum compacting: eliminating contents that students already know and replacing it with more challenging materials based on students' interests (Reis & Renzulli, 1992), tiered instruction and assignments: providing different learning opportunities for students at different achievement levels (Tomlinson,1995) and reading strategies (Boerger, 2005);

Differentiation of Product

Differentiation of product means that students are able to demonstrate what they have learned in different ways so that the student possesses specific understandings and key ideas as well as knowledge transfer and application of skills (Tomlinson & Imbeau, 2010). It is essential because it represents the students' understanding and concrete explanation of the concepts and skills being taught. Differentiation of product could be a paper and pencil test, a letter, a questionnaire, a journal entry, an art project, a technology presentation and much more but at varying degrees of complexity. It includes tiering the assignment to fit the students' ability levels and interests (Tomlinson, 1999).

Tomlinson's model suggested that a teacher can address students' needs by providing them with engaging tasks: work that is equally appealing, equally engaging, and equally important (Blaz, 2016); flexible grouping: placing students into groups to work on tasks (Affholder, 2003; Arens, 2007; Boerger, 2005; Hall, 2002; Levy, 2008); and on-going assessment and adjustment.

A teacher can, therefore, differentiate content, process, and product based on students' readiness, interests, and learning profiles through a range of instructional and management strategies such as small group instruction, independent study, learning contracts, compacting, and interest groups (Blaz, 2016). Although the instructional strategies presented in the model can address students' needs, they do not compensate for a teacher "who lacks proficiency in his content area, is unclear about learning goals, plans an unfocused activity, or does not possess the leadership and management skills to orchestrate effective classroom functioning" (Tomlinson, 1999, p. 11).

Affect/ Learning Environment

Affect/learning environment is the effect of students' emotions and feelings on their learning. Differentiating student affect means modifying the learning environment to meet students' emotional needs. Addressing students' affective needs is important in planning DI to ensure effective learning,

since as Tomlinson (2013) explains; some children do not work well in groups and can accomplish more alone due to emotional challenges. As quoted by Cox (2008) “Says Tomlinson, Using Bloom’s Taxonomy of Cognitive Educational Outcomes allows teachers to design projects around the content, process and product that meets the needs of all levels of students in the class” (p.53).

According to Tomlinson (2003), there are three main considerations for the teacher when differentiating according to student affect: First, there is readiness, which is the student’s level in learning based on initial assessment. Second, is identifying the personal interest of the student. There are many ways to determine a student’s interest such as having students write an interest list in which they relate their interests (Sciglano and Hipsky, 2010). Third, there is the learning profile that takes into account the student’s style of learning (Tomlinson & Eidson, 2003) and simply how a student best learns as stated by Tomlinson (2003). Various factors can determine a student’s learning profile such as a student’s learning style and culture. Once a student’s learning profile has been drawn, teachers may start individualizing their students’ learning activities and tasks accordingly (Sciglano & Hipsky, 2010) and allow teachers to pinpoint students’ strengths and weaknesses in different learning activities.

Learning environment

The conditions for optimal learning include both physical and psychological elements. A flexible classroom layout is key, incorporating various types of furniture and arrangements to support both individual and group work. Psychologically speaking, teachers should use classroom management techniques that support a safe and supportive learning environment.

- Examples of differentiating the environment:
- Break some students into reading groups to discuss the assignment.
- Allow students to read individually if preferred.

- Create quiet spaces where there are no distractions.
- Create quiet spaces where there are no distractions.

Consequently while designing a differentiated curriculum for their students, teachers should make sure to keep the above-mentioned elements in mind. This will result in students gaining a greater sense of self-worth, empowerment, better understanding and academic achievement.

Theoretical Literature on DI

For the purpose of the study, a review of the theoretical literature about DI drew on the work of several authors: (Roberts Mahon, 2016; Baxter, 2013; Thompson, 2009).

In 2016, Robert-Mahon conducted a qualitative case study on DI in inclusive elementary classrooms. The purpose of the study was to examine, understand and describe the implementation of DI in an elementary school classroom in a public school setting.

The study focused on four teachers, of which one was thoroughly observed while the others were briefly observed. The instruments used to conduct the study included classroom observations, interviews of the teachers and site document reviews (Roberts- Mahon, 2016). The teachers were interviewed to determine how they actually differentiated instruction, and to what extent differentiation occurred. It also aimed to investigate the factors that were in place to support DI. The results of the study revealed that teachers differentiated more for "...readiness rather than interests or learning profiles" (Roberts- Mahon, 2016, p.113). The participants readily admitted the difficulties encountered when differentiating instruction as it was very time consuming and hard to plan for (Roberts- Mahon, 2016).

Baxter (2013) conducted a study using the mixed methodology approach to investigate the effect that professional development (PD) had on the implementation of DI in elementary

classrooms. The purpose of the study was to explore whether the teachers' attitudes towards DI had been affected by the extent of received professional development on the implementation of DI. Participants in the study involved 10 elementary teachers. The instruments used in this study were surveys and interviews. The study revealed that teachers in the district had a positive attitude toward DI, and its implementation, and were comfortable implementing differentiation in their classrooms. The professional development program implemented in the study also convinced the teachers of the importance of DI for student achievement seeing how teachers were resistant to implementing DI at first. In her study, Baxter managed to prove that teachers themselves had a positive attitude towards DI but that other factors such as lack of teacher's self-esteem, training and perseverance (Baxter, 2013), led to the early resistance to its implementation.

Thompson (2009) conducted a qualitative study, which explored the teachers' conceptions towards DI and the effect of that perception on instructional practices. Participants of the study included 15 teachers practicing at different grade levels. The only used research tool was interviews, which took place in the form of conversational dialogue from which data were generated. The purpose of the study was to describe teacher perceptions of implementing differentiated instruction. The results showed that implementing differentiation is challenging and time consuming.

Consequently, DI is riddled with competing definitions in the literature on the topic (Mounla, Bahous & Nabhani, 2011/ Roberts-Mahon, 2016/ Reis et al, 2017/ Thompson, 2009). Some researchers such as Baxter (2013), Richards (2013) and Gilbert (2012), are not yet convinced with the influence of DI claiming that the concept remains too theoretical with little research conducted of the experiences and practices of it in schools today thus calling for the "...need for empirical evidence of its practice" (p.8). DI then becomes a deep theoretical philosophy, which not many researchers have looked into how it is being practiced in the classroom (Roberts-Mahon, 2016). This apparent lapse

potentially undermines agreement on a comprehensive definition of DI.

Nevertheless, despite such criticisms, the literature on DI provides substantial benefits and relevant knowledge to the wider education field assisting both the teacher and student in enhancing the learning environment which they are part of, more precisely in helping teachers meet each child's needs once they enter class and enhance the learning process for each learner (Levy, 2008). In order for this strategy to successfully take place however, a set of approaches that go beyond the curriculum must be integrated so that differentiated instruction for English language arts assists teachers in amending the curriculum and creating effective teaching approaches which meet all students' needs, abilities and interests (Mounla, Bahous & Nabhani, 2011). This approach will maximize students' academic achievement through a clear method of approaching teaching during the course of learning and make the instructional practices of a classroom more successful (Guskey, 2007, Rock, Gregg, Ellis & Gable, 2008; Tomlinson & Allan, 2000).

A core aim of DI is to eliminate the gaps in English language learning in a classroom where English is a first language and with diverse learning abilities, enabling students to build on previously gained knowledge and to expand on it as well. In order for this to occur, students have to be motivated by the teacher since as Baxter (2013) writes: knowing the student's interest gives the teacher the advantage of getting the student engaged and "...motivated in what he or she is learning" (p.30). This places a heavier burden on teachers to teach through means that best unlock the potential of each student, since in a classroom that is differentiated, not all students are taught the same way.

Most researchers view DI as a program that is optional when it comes to implementation, pointing out that instruction is not always differentiated or frequently implemented (Thompson,

2009). Others though contend that DI is a naturally ongoing way of teaching, suggesting that all teachers have applied DI one way or another in their classrooms (Levy, 2008).

Whether DI is a fixed or evolving process and whether it is a planned process or a natural consequence of classroom teaching, it will undoubtedly be debated for many years to come. Therefore and as a starting step, while accepting that in specific cases differentiation might work, the mere fact that teachers encounter students with learning difficulties on daily basis pushes them to integrate a type of differentiation in some way in the topic which they are introducing placing “...differentiated instruction as an ambitious community-based practice” (Puzio et al., 2017, p.138).

DI may appear at times as a set of easy to apply theories but it poses many challenges which teachers typically and regularly face, such as lack of time required for more effective implementation due to the individualistic approach, difficulty in planning lessons that are tailored based on different student needs (Roberts-Mahon, 2016) as well as lack of teacher self-esteem, training and perseverance (Baxter, 2013). It is accepted that teachers are almost always aware of the differences among the students in their classes, but it is still the case that most remain unsure to this day of how to address these differences (Tomlinson, 2003).

Aspects of DI include offering students choices in content, modifying the pace of learning, and on-going assessment (Winter, 2007). Unfortunately, while many private schools in Lebanon have embraced the concept of DI, its implementation inside the classroom has not been thoroughly documented over the years. Tomlinson, Brimjoin, and Navarez (2008) like many other researchers state that it is very unlikely for students with learning differences to succeed in classrooms that do not acknowledge learning styles. Therefore, as teachers, it has become a necessity to consciously deal with the existing differences, which students bring to us in order to improve our learning outcomes.

In summary, there is little research done on DI in terms of classroom practice. This is because a differentiated classroom can have different forms. However, results from studies such as Baxter (2013), Thompson (2009) and Roberts- Mahon (2016) yielded positive results when it came to students' learning and understanding. Furthermore, as Blaz (2016) writes, there is still some solid research that does authenticate the basic practices for differentiation "Studies such as Vygotsky (1986), Csikszentmihalyi (1997), Sternberg, Torff, & Grigorenko (1998), Danielson & Axtell (2009) show the effectiveness of methods like instruction based on readiness, interests individualization, zone of proximal development, learning profiles, attention to students' varied learning needs and especially, effective instruction" (Blaz, 2017, p.6).

Dealing with a Diverse Community

The diversity of students is key in forming the school culture, which cannot be separated from successful differentiation and the creation of learning communities that contribute to improving student learning as a whole. Students are also diverse in their ability levels, prior knowledge, exposure to subject matter, and learning styles (Heubner, 2010). Furthermore, even though the students' diversity results from individual differences in terms of ability and motivation, environmental and developmental factors also affect the ability to learn (Gagn, Wager, Golas, & Keller, 2005). Creating proper learning environments that address students' readiness, interests, and learning profiles will complement the diversity of students further within the classroom.

DI was initially introduced to satisfy the diverse needs of students in schools in terms of a student's existing knowledge and skills, which put together would set a teaching process that leads to students' learning success (Thompson, 2009). Despite the fact that many researchers state that DI is not a new phenomenon, and that it could be effective for all students (Roberts-Mahon, 2016), teachers still face numerous issues when it comes to implementing this differentiation in their

classrooms. This is due to the spectrum of learning abilities found in every classroom. This variability places challenging expectations on a teacher to effectively differentiate for all the learning abilities among students in the classroom (Levy, 2008).

This difficult question opens up the route for further discussions on how to categorize diversity in learning abilities and whether this categorization should be done periodically. This becomes further complicated when attempting to analyze and quantify the barriers that teachers face while practicing differentiating instruction.

Robert-Mahon (2016) tackles this issue in her work by specifying the hindering factors of implementing DI both in terms of the class size and lack of training, two factors that may be truly problematic if not dealt with properly. In addition, student behavioral issues and challenges is an aspect that needs to be factored in DI.

Consequently, when implementing the best practices of DI, teachers should always be aware of their students' differences and plan their lessons and design their activities to accommodate the diverse needs of a student body found in one classroom.

Teacher: A Critical DI Agent

Effective implementation of DI for English language arts in schools leads to questions that relate to the teachers' role in this differentiation and what type of relationship these teachers should have with their students. In this context, Tomlinson (2013) draws heavily on the thought that teachers should not only be aware of their students' strengths and weaknesses but also be fully conscious of their interests.

It is presumed that the main responsibility for providing students with strong English language skills falls onto the teachers' shoulders. This results in focusing on two important aspects,

one of which is the mindset of the teacher himself/ herself and the other is the extent to which the teacher is willing to develop his/her own learning skills and update current knowledge and perspective of DI as this process ensures the application and the successful implementation of differentiated instruction (Coubergs et al., 2017).

In addition, the confidence of the teacher in differentiating instruction plays an important role for the effectiveness of DI; this confidence comes from a strong understanding of differentiation (Baxter, 2016) and consolidates in the teacher through sustained strong professional development (Baxter, 2016).

In the article titled "Measuring teachers' perceptions about differentiated instruction: The DI-Quest instrument and model", Coubergs et al (2017) outline two teacher mindsets, the fixed and the growth mindset; the latter focusing on the potential of students despite their differences and the former on the students' qualities which are seen as fixed qualities that define their success (Coubergs et al., 2017).

These two mindsets represent perfect examples of teachers' perceptions of DI, since the teachers holding a fixed mindset would never be able to differentiate between their students, whilst the teachers holding a growth mindset are more than willing to look into the qualities, which individualize every student (Baxter, 2013).

Consequently, to implement differentiation teachers must learn to distance themselves from traditional teaching and design a classroom that fosters true understanding (Lewis & Batts, 2005) since teaching all students the same way using the same methods can never lead to successful implementation of DI (Tomlinson, 2005). As Tomlinson (2005) stated, each teacher faces different challenges, which lead to the hindering of DI application. While some teachers lack the classroom management skills to lead a differentiated classroom; others might lack the understanding of their

students' strengths and weaknesses; or even the overall understanding of DI. To overcome these barriers, more training and learning on the part of teachers should take place.

While co-teaching which is defined as, "two or more professionals delivering substantive instruction to a diverse, or blended, group of students in a single physical space" (Cook & Friend, 2005) is a convenient way to meet the needs of the different students in the same classroom, it is still considered to be a very challenging and time consuming for both teachers and co-teachers. Nichols, Dowdy, and Nichols (2010) noted as well that many issues should be resolved prior to deciding to co-teach such as sharing responsibilities, classroom management and parallel teaching so that both teachers are equal in sharing the responsibilities inside the classroom (Murawski & Dieker 2008). However, if properly applied, co-teaching would alleviate both stress and anxiety from teachers while simultaneously meeting the individual needs of their diverse students.

There remains insufficient literature that focuses on the teacher's performance in implementing DI inside the classroom regardless of the teacher type. The fact remains that once a teacher enters the classroom, the interaction with students remains behind closed doors and is largely unknown. This statement reinforces once more the importance of teachers' familiarity with their students on an individual level for the purpose of a successful learning collaboration.

Professional Development in DI Classrooms

There are many barriers that teachers come across when implementing DI. Teachers sometimes do not understand what instructional strategies are appropriate in DI or do not possess the required classroom management skills to effectively incorporate DI in their classes. There is also an ambiguous understanding of what students should gain as learning outcomes from the different presented activities (Tomlinson, 2005).

Teachers are all too easily expected to use DI in their classrooms with little provision DI training throughout the academic year (Davis, 2009), a factor which makes it difficult for teachers to successfully implement differentiation in their classrooms. The best way to address these is to provide a more in depth and ongoing teacher training on differentiation (Davis, 2009) rather than settle for quick accessible approaches (Dana & Hoppey, 2008). If conducted well, Professional Development (PD) is a way for teachers to gain knowledge and understanding of DI and how to properly implement it in their classrooms.

Assessment in DI Classrooms

Assessment is ongoing and diagnostic to understand how to make instruction more responsive to learner need (Tomlinson, 1999). As quoted by Burkett (1994), classroom assessments fit into three categories: pre-assessment (test taken before a unit to know student's level), formative (multiple tests throughout the school year) and summative assessment (test taken at the end of an instructional unit). An effective employment of these three groups would contribute in increasing teaching time, streamlining instruction and facilitating learning for all students (Brimijon, Marquissee & Tomlinson, 2003). Students should have access to a diverse set of assessments that they can use to demonstrate their learning and understanding rather than a one size fits all assessment (Anderson, 2007). They can also be offered options and allowed to decide which type of assessment they would like to work on for instance. Self-assessment is another way to include differentiated assessment into the classroom. It allows students to be a part of their own assessment and to control their own progress with time. Checklists of skills can be used to guide students' self-assessment process. Teachers and students can work together to come up with a set of guidelines, which can be referred to in demonstrating the students' growth and progress (Tomlinson, 2003).

DI and Classroom Management

Classroom management is critical for DI to be effective (Winter, 1997). For a class to be successfully managed, teachers should be trained to manage student behaviors, create a respectful learning environment for all students and establish a culture for learning (Smeeton, 2016). Tomlinson and Imbeau (2010) indicate that classroom management is not only done for the student's benefit but it also helps the teachers implement DI practices in the classroom." (p.42). Research such as Roberts-Mahon (2016) suggests that "...effective teaching and learning cannot occur in a poorly managed classroom" (p.22).

Content management: managing space, materials, equipment, movement of students, and instruction; conduct management: skills employed to address discipline problems; and covenant management: managing interpersonal relationships (Froyen & Iverson, 1999) are essential components that the teacher must plan in advance to effectively manage students who display disruptive behaviors during DI.

DI and Best Practices

Summary

Several researchers have offered various discussion points concerning the use of DI as a feasible school reform effort claiming that DI challenges traditional instruction and offers a rich variety of instructional practices that can be used in the classroom to address students' different needs. The existing theoretical and empirical research on the implementation of DI has stated the various benefits of DI. All three studies of Roberts- Mahon (2016), Thompson (2009) and Baxter (2016) suggest that teachers had a positive attitude towards DI but were overcome with challenges such as the practicality of DI and the lack of time in implementing it. Another challenge in addition

to the lack of training is class size such as in Thompson's (2009) research. Nonetheless, the teachers' attitudes showed openness to DI and a need to research it further stating that they needed guidance and professional development training in DI in order to perfect the program.

In all the empirical studies found in the literature, the teachers who embraced DI and practiced it stated that they actually experienced major benefits such as an increase in student achievement, an improvement in their own teaching skills and a much more positive learning environment present in the classroom (Baxter, 2013; Thompson, 2005).

CHAPTER III

METHODOLOGY

Research Design

This study employs a qualitative research design based on a constructivist view of reality that allows the data collection based on the experiences of others and patterns to interpret the data (Creswell, 1998). The employment of such a design aims to look holistically at the practice of DI for English language arts in grade three at a private school in Greater Beirut area. The researcher chose grade three primarily because the students' level of maturity is conducive to observing and documenting more clearly the DI occurring in the English language arts classroom as corroborated in Burkett's (2013) post data with third grade showing the greatest increase in phonemic awareness. In addition, grade 3 is the last grade level in cycle 1, so it should be of interest to learn about DI at this level. Furthermore, grade three students are of more professional interest to the researcher. The qualitative design allowed the researcher to experience the teachers' practices and their conceptions of DI for English language arts within one Lebanese elementary classroom. It also assisted in exploring how this differentiation is occurring (how the teacher actually differentiates English instruction inside his/her classrooms) and under which conditions. With this design, a better understanding was reached on how schools support teachers in DI for English language arts and what types of resources are being used in the classrooms.

The study addressed the three research questions:

Research questions	Data Collection Tools	Data Collected
1. What are the current state of the art practices and models of differentiated instruction for English language arts?	Review of the Literature	Provided documentation from the review of literature on different teachers' instructional practices of differentiated instruction for English language arts in an elementary classroom.
2. What are the teachers' conceptions and practices regarding the impact of differentiated instruction for English language arts on elementary student learning?	Interviews and Observation	Provided documentation of teachers' conceptions of differentiated instruction for English language arts.
3. What are the teachers' conceptions of the impact of Lebanese contextual school factors in promoting or hindering their implementation of differentiated instruction for English language arts at the elementary level?	Interviews and Site Document Review	Determined through teachers' conceptions and school's context the factors that either promote or hinder differentiated instruction for English language arts at the elementary level.

Table 1: Research tool(s) used to collect data for each research question.

Case Study Description and Selection

This study is a single site case study in which one classroom was observed in order to gain deeper insight into understanding the practice of DI for English language arts at the school. The unit of analysis was a single classroom. Nonetheless the conceptual framework of the study required gaining multiple perspectives of the classroom under investigation. The researcher observed two other classrooms (grade four and grade five) at the same school to better understand the teachers' conceptions and practices of DI for English language arts at the elementary level. This case study explored DI for English language arts using multiple approaches to collect data, which are observation, interviews and site document review as supported by Creswell, 1998.

Roberts- Mahon's (2016) study forms a strong basis for the framework of this study as both relied on classroom observation and responses from interviews with the teachers. The case study approach allowed the researcher to explore in depth each occurrence of the implementation of DI for English language arts and the complex interplay of the contextual factors within the school. Also, the case study enabled the researcher to get the teachers' perspectives of DI for English language arts.

Participant Selection

The participants in the study were both English language arts teachers. The study took place in one selected Lebanese private elementary classroom located in Beirut where DI for English language arts was adopted at all elementary classes at the school. The school selection was purposeful, as most schools in Beirut do not adopt DI in their curriculum. The chosen school states clearly in its mission that it follows methods that render the learning process accessible to students. This was further supported by the school principal's statements and asserted that DI is implemented in the school whilst admitting the need for further development and training for its teacher practitioners. As an effort to attain this, professional development for DI was briefly offered to the teachers at the school on an annual basis.

Teacher Selection

The teacher selection criteria for this study was the following:

1. S/he must be a third grade language arts teacher who integrates DI for English language arts in her elementary classroom. One other teacher (grade four and grade five English language arts teacher) was targeted, who was presumed to be a knowledgeable practitioner of DI for English language arts.
2. S/he is responsible for a grade level; in other words was the teacher on record for the

particular classroom.

3. S/he implemented DI for English language arts.
4. S/he should have at least eight years of experience in DI for English language arts at the elementary level.
5. S/he should agree to participate in the study.
6. S/he fulfilled both all criteria stated above.

Research Site

In this study, three classrooms were observed. All classrooms were set up in the same fashion, however grade three was a significantly more of a print rich environment than both grade four and grade five. Students' work was displayed on the walls in abundance. Class rules were posted right above the board and on the walls in all classrooms and were decorated with posters, teaching aids along with addition, subtraction and multiplication cardboards.

Each classroom had a desk for teachers. The teachers sat at their desk mainly during roll call, test taking, when students were working individually, or during lesson planning. They mostly went around the student worktables to check on their work and understanding. The teachers' desks had most classroom material on it. The rest of the resources such as supplies, students' books, workbooks and copybooks were stored in small cupboards at the end of the classroom. There was no chair or desk placed for the assistant teacher. Not enough space was available for students to move between tables as well. A smart board and a marker board were present in the classroom for the teacher to use. One laptop was found in every class that was only used by the teacher.

Grade Three. Grade three's classroom had six groups of five students sitting together. Each student had a label stuck on the corner of his/her table describing his or her duty in class. The tables

were all the same with the only difference between them being the color of each label. The students' seating encouraged them to work in groups on most activities.

Grade Four. Grade four had twenty tables placed in a "U" shape, with an additional ten tables placed in the center as one group with all ten students sitting facing each other. There was no space between the tables, a factor that prevented both the homeroom teacher and assistant teacher to walk in front of the tables and behind them to check on students' work.

Grade Five. Grade five had six tables, two of which had individual students seated at them. This was due of the disruptive behavior of both of these students. The rest had four students seated on every table. Both slow and advanced learners were seated together. There was no division based on levels of student abilities.

Data Collection Techniques

Classrooms Observations

For the purpose of this study, the researcher adopted the role of a participant observer. Through this role the researcher intended to explore how teachers planned for DI in their English language arts classrooms, which in turn enabled the researcher to observe more closely the contextual factors affecting the practices of DI. The researcher's aim was as Burns (1999) puts it to become a part of the context and engage in its culture and activities.

The researcher based the classroom observation on an observation checklist, which was divided into three parts: Differentiating Content, Process and Product. The researcher acquired the list of components from the literature and used it a reference when observing the teachers in their classrooms. This method was used to complement the field notes, which was the primary data collection technique to refer to when recording the information. While there is no ideal timespan for a

researcher to observe, “Mainly, it is clear that the more time spent observing, the better and reliable information can be obtained” (Zohrabi, 2013, p.257). The minimum sufficient time would be upon identification of a clear pattern of teaching and interaction within the classroom context.

The duration of data collection was two months, with the attendance and observation of all English sessions in grade three and upper elementary classrooms (grade four and grade five) for a total of 6 hours and 15 minutes a week, four of which were dedicated to grade three while the remaining two hours and fifteen minutes were used to observe grade four and five. The recording of the observations was in the form of field notes during and after the observation sessions. Appendix B is the form, which helped guide the observation. The form is titled “Differentiating content, process, product, learning environment” and was retrieved from the State of New South Wales, Department of Education and Communities. The review of literature in this study provides the context of the current state of the art practices and models of DI for English language arts in an elementary classroom.

During the observations, the researcher focused on Content: what was taught (Tomlinson, 2000); Process: the activities that were used to help students grasp the ideas and skills being taught (Levy, 2008; Tomlinson, 2000), Products: the ways students demonstrate what they had learned (Levy, 2008; Tomlinson, 2000). The researcher’s observation focused these DI elements, which the teachers were implementing in class to better understand whether the teacher was tiering the content, process, product and creating a DI environment, or merely making small adjustments to each lesson.

Interviews

One interview was conducted with each of the two teachers. The interviews were conducted in a one-on-one format. One interview was audiotaped while the other one was taken down as notes following the participant’s request. While the interview technique has some limitations, it is still

considered to be "...good for measuring attitudes, providing in-depth information, and allowing good interpretative validity" (Zohrabi, 2013, p.255). The type of interview was a semi-structured interview guide approach. This form of interview is neither too rigid nor too open. It is a moderate form in which, a great amount of data can be elicited from the interviewee (Zohrabi, 2013, p.256). The interview form can be found in Appendix C. The list of questions is based on Baxter's (2013) instrument tools in "How teacher training affects the implementation of differentiated instruction at the elementary level". This tool was intended to study the conception of teachers and hindering factors when it comes to the implementation of DI for English language arts in elementary classrooms. This addressed the question of what the teachers' conceptions and practices are regarding the impact of DI for English language arts on elementary student learning. The data collected from the interviews once transcribed produced commonalities and coding that directly related to the thesis questions and helped produce emergent themes. This was grouped in chapter five into categories along with the observational data to determine alignments and contradictions between the two.

Site Document Review

Site document review obtained data from four sources:

1. The school curricula were reviewed to determine what concepts and skills students were expected to acquire in the different subject areas.
2. The researcher went through the lesson plans that were prepared by the teachers prior to conducting the class. Through this action the researcher acquired an understanding of what concepts and skills the teacher was planning to teach and how she planned to teach those concepts and skills. This also enabled the researcher to compare what the teacher actually did versus what he/she planned to do.

3. Materials in the classroom such as textbooks were reviewed as well, with the aim of observing how the teacher refers to them in addressing students with different learning needs.
4. The researcher also reviewed students' work to look for evidence of DI.

This tool addressed the questions of what the teachers' conceptions were regarding the impact of the contextual school factors in promoting or hindering their implementation of DI for English language arts at the elementary level.

Data Analysis Procedures

The data were analyzed through various means including dividing information into categories so that relevant answers may emerge concerning what common patterns arise around specific items in the data and whether there were any deviations from these patterns. Lessons were analyzed through observation of interaction to see how the teacher was implementing differentiated instruction in an English language arts classroom.

Triangulation

Triangulation was employed to ensure trustworthiness of data. Two forms of triangulation were employed in this study: Triangulation with a focus on consistency of findings using different data-collection tools (Stringer, 2009) such as classrooms observations, interviews and site document review since "Gathering data through one technique can be questionable, biased and weak" (Zohrabi, 2013, p.258). The data collection tools once taken together provided a stronger evidence for the finding (Shank, 2002). To triangulate the data, the researcher looked at the observation data, interview data, site document data and connected it to the research questions. To remain anonymous, the researcher referred to pseudonyms to identify the teachers, the school and the principal.

Data source triangulation was also used where data from this research proved to be consistent with data gained from different sources with the use of the same data collection tool (Stringer, 2009).

The Researcher's Biases Related to the Topic

Yin (2009) noted that researchers have to be especially careful about biases when conducting case study research because they generally have a preconceived idea about the topic of study. Despite having developed a predetermined notion about differentiated instruction for English language arts within the Lebanese context, the researcher intended to go into the chosen sites focusing merely and solely on the teachers' perspectives, wholly excluding the biases and assumptions from the research. These biases and assumptions were reflected upon at a later stage of research.

Ethical Considerations

As Creswell (2008) noted, ethical research should be at the forethought of the researcher's design rather than an afterthought (p. 13). Careful considerations were taken to ensure ethical treatment in this study. Participants were given a consent form to sign prior to the research. This consent form informed the participant that participation in the study was voluntary and that all participants' identities and responses would be kept anonymous.

CHAPTER IV

RESULTS

This study aims to describe and understand the teachers' conceptions and practices of DI for English language arts at the elementary level in a Lebanese private school system, and to examine the contextual factors that contribute to the enhancement and impediment of the DI implementation.

The study involved two participants: a grade three English teacher who in this research and for reasons of confidentiality will be called Ms. Mia, and a grade four and five English teacher (same teacher) who will be called Ms. Lynn. The participants were observed and interviewed over a period of two months, three days a week, with a total of six hours and fifteen minutes a week. Grade three was the main focus of observation and research, while grades four and five were observed for the purpose of comparison and to gain a deeper understanding of how DI was practiced at the school. Based on the purpose of the study, three sources of data were utilized: classroom observations, interviews, and site document review.

The following section will present the findings of the study and an analysis of the results.

Research Question 1: What are the current state of the art practices and models of differentiated instruction for English language arts in an elementary classroom?

This has been previously addressed in the review of the literature section of this study. DI depends on many essential state of the art practices for its successful implementation such as differentiation of content, process, product and affect/learning environment, diversity of the student body, teacher approach and mindset, professional development and assessment.

The literature states that when implementing DI, the diverse needs of a student body should always be considered; instruction must be individualized and modified according to the student's

readiness, interest and learning style. In this study, DI seemed to be targeting more students with learning difficulties rather than all students present in the classroom. The observations showed as well that teachers focused mostly on students with learning difficulties than other present students in the classroom.

The four DI key elements that Tomlinson outlines which are differentiation of content, process, product and affect/learning environment are also critical in tailoring lessons based on each student's needs. Even though both participant teachers (check Appendix F) stated that they did apply DI key aspects, these components were not properly applied as supported by the observations.

As stated in the literature, in differentiating content, the teachers will need to offer different techniques that students can use to access key content (Tomlinson & Imbeau, 2010). The teacher in this case "...would provide a variety of texts, from simple to advanced, from print to electronic, from leisure reading to commercial to educational" (Blaz, 2016, p.10). This was not witnessed with both participants in this study since the same version of any text was always given to all students.

Differentiating process on the other hand, is all about practice based on the content. By differentiating process, the teacher will have to guide students to think about different topics, have them ask about various things constantly and encourage them to try figuring things out on their own rather than solely depend on the teacher (Tomlinson & Imbeau, 2010). In this study, both teachers referred to simplifying texts rather than looking into students' learning styles when differentiating process.

In differentiating product, the participant teachers provided the same tests to all students but again focused on simplifying questions rather than emphasizing on the "...critical and creative thinking" (Blaz, 2016, p.12) that students should apply once they have learned a lesson or acquired some knowledge about a certain topic.

The learning environment on the other hand, is the environment's impact on students' learning. Teachers can differentiate by readiness, interest and learning profile to help students engage with new information, understanding, and skills by making connections with things they already find appealing and worthwhile. To do this, teachers can ask students questions and pay close attention to what they say or do as well as understand their "...preference for taking in, exploring, or expressing content" (Tomlinson & Imbeau, 2010, p. 17). Students' interests were not taken into consideration as well when planning lessons and activities. Despite the fact that students were part of a comfort zone, there was no clear structure present in the classroom and as Blaz (2016) wrote "... Without clear expectations for classroom management, communicated well to students, differentiation will be very difficult to implement" (p.4).

The teacher plays a critical role in implementing DI but success is dependent on a positive attitude, teacher confidence, teacher willingness and teacher mindset. Furthermore, collaboration with other teachers leads to building a stronger teaching unit and a more structured process when designing and planning lessons for DI. Teamwork also helps in making better use of time while teaching a DI class. Teachers should always be undergoing professional development while applying DI to better understand its practices and update their knowledge continually about the theory. In this study, both teachers seemed to hold a positive mindset towards DI but lack of professional development and training pushed the participants to research DI more on an individual level rather than as a team. Ms. Lynn struggled with this more than Ms. Mia.

"You learn something from everything but I do my own research and believe that this helps me the most in overcoming DI classroom difficulties" (Lynn).

"I try my best. I don't think I apply the program perfectly. But I do try and I do my own research" (Lynn).

Consequently, lack of collaboration, communication and connection were prevalent in the teachers' understanding of DI and students' learning. This approach did not trigger a variety of learning styles in both instruction and assessment.

Research Question 2: What are the teachers' conceptions and practices regarding the impact of differentiated instruction for English language arts on elementary student learning?

Using Pre-Assessment Data to Identify Instructional Needs

When asked on how students were identified for DI and how the accommodation of those students were determined, the participant teachers stated that the school provided a diagnostic test, which students had to undergo at their school entry. According to the participants, this pre-assessment allowed the school to assess the strengths and weaknesses of each student so that teachers would be better able to plan lessons fitted to each student's needs. The test results helped teachers identify students for DI and prepare for them a list of activities prior to each session in the aim of addressing suggested deficiencies for every pupil in question. Typically, teachers were not involved in the testing itself. The teachers simply took on the students and began the implementation of DI.

"The questions of the test are broken down into sub skills such as phonics, comprehension, vocabulary, reading long passages, fiction and non-fiction stories, and paragraph writing" (Mia).

"The diagnostic test helps us identify students for DI. It allows us to precisely designate the skills or processes, which we need to teach" (Lynn).

Both teachers relied on diagnostic testing and their years of experience in the academic field to structure and form DI groups inside their classroom.

"We usually set up our students in groups of four with one high achiever table, one low achiever and two average level students in each group" (Lynn).

“Students who show lack of comprehension are seated with strong learners and given additional tasks to work on, until showing mastery of the skill. I feel it is very essential to re-emphasize on certain skills that some students might not have mastered” (Mia).

Observation revealed however that the participant teachers followed the flexible grouping approach; a tool used to match students' readiness for learning with the instruction provided. Hence, students were regularly switched from group to group, eliminating any division of levels or systemization of who sat where as the year progressed. There was however no post-testing to allow comparison of student progress since entry.

DI Key Elements

Participants stated that they addressed instructional needs in the classroom by differentiating content, process, and product. This was witnessed in the researcher's observations. Differentiation based on content, process, and product is discussed below.

Differentiating Instruction Based on Content. In differentiating content, both Ms. Mia and Ms. Lynn did not refer to pre assessment to determine their students' needs and interests. “Hands on” activities were also not part of any activity observed in the classroom. Although Ms. Mia presented information clearly, she mainly referred to part-to-whole than whole-to-part. There were no additional arrangements to support and challenge students when working with different texts. Below is a description of how I observed Ms. Mia differentiate content during her English period:

After reading a story from the English textbook during one session, Ms. Mia gave a written task for all students to complete to test their understanding of the story; the objective of the question was the same for all students, “List all differences and similarities between the two characters in the story”. Pair work was assigned for this task. There was no division of roles, which is as it should be in a differentiated classroom. The only differing factor in this activity was that students with learning

difficulties had to only list three differences and three similarities while other students had to find five in each for the same subjects. It is evident from this example that the misconception of content differentiation was reaffirmed by focusing on making the task simpler rather than a different presentation of the same content.

Although the six levels of Bloom's Taxonomy are: remembering, understanding, applying, analyzing, evaluating, and creating, at this stage and through the researchers' classroom observations, students with learning difficulties were merely completing tasks on the lower levels: remembering and understanding.

Differentiating Instruction Based on Process. In differentiating process, both participants did not use challenging, complex or tiered activities to encourage motivation. There was also no attention paid to the interest of the student. Grouping of students in class was actually based on ability rather than interests. Both teachers had an agenda of the session's content and schedule. This was reinstated on the school's website. However, additional time was given by both teachers to students in order to provide additional support for a struggling learner or to encourage an advanced learner to pursue a topic in greater depth. There wasn't much access to a variety of materials that targeted different learning preferences and readiness, especially computer games or computer skills. There were two auditory learners, one in Ms. Mia's classroom and another one in Ms. Lynn's. Both teachers focused on this point and made the rightful adjustments to certain activities. In addition, the participant teachers rarely provided established inquiry-based, independent activities such as story writing or research.

In one instance of differentiating process, Ms. Mia asked her students to write a story. Students with learning difficulties got prompts and their paper separated into different elements to make the writing an easier process for them. They were assisted and prompted by both the homeroom

teacher and co- teachers throughout the whole process. Other students worked independently on achieving this task. Struggling students wrote three pages instead of five. Once students got the required assistance, Ms. Mia sat at her desk correcting papers. Another observed scenario was in Ms. Lynn's class, where students were working on a worksheet following a grammar lesson. Ms. Lynn wrote five sentences on the board and asked the students to tell her what the noun, verb, adjective or adverb in each sentence was. Ms. Lynn then wrote on the board the eight common parts of speech, said "adverb", and asked students what adverb meant. Two students raised their hands and were selected. Students who did not raise their hands were overlooked. When the researcher later asked one of the students who did not raise his hand what "adverb" meant, he did not seem to know the answer.

Differentiating Instruction Based on Product. Ms. Mia and Ms. Lynn referred mainly to formative and summative assessment in their classrooms. The formative assessment usually consisted of vocabulary oral citation, oral questioning, writing, projects and performances while the summative assessment included paper and pencil tests. Students' interests were not taken into account as only his/her readiness was tested at the beginning of the school year and lessons were planned accordingly.

"I try as much as possible to focus on the student's personal interest but this remains very challenging and time consuming as I have thirty students in my classroom, I generally and honestly don't find the time to look into each one of my student's interest" (Lynn).

"Student's interest are always considered and I try as much as possible to determine what they are and change various activities accordingly" (Mia).

Both teachers provided product assignments at varying degrees of difficulty to match student readiness as well as a wide variety of assessments. The test was not drastically changed and

surprisingly some students with learning difficulties embraced this as a challenge. Some questions were removed in the exam for students with learning difficulties but the aim remained the same for all other students. Both teachers made sure that all students attained the same goal by the end of a lesson. The researcher did not witness the provision of any rubrics by the teachers that matched and extended students' varied skill levels.

The teachers used the traditional paper and pencil sit down test at the end of the lessons or units to formally assess their students understanding of what was taught. Most of the tests were timed. However, the teachers revealed that they assessed their students in different unconventional ways such as story reading followed by questions to the students.

"I informally assess my students before and after each lesson; we use discussion, participation grades, and projects. My students are always assessed differently; I mostly refer to oral questioning, which helps me test their comprehension and engagement in the classroom. 'Games and projects are the best way to assess my students' understanding as well'" (Mia).

"I listen to them read, so I assess them based on their verbal ability, their accuracy, their fluency" (Lynn).

Both Ms. Mia and Ms. Lynn mostly used the oral questioning technique to assess their students. They also acknowledged that they mostly referred to projects instead of computer-based programs to differentiate products due to the lack of resources and time.

"We create posters and projects so that the students grasp various concepts more" (Mia).

Collaboration and DI

Collaboration did not always occur between the teachers to plan strategic lessons for DI, an important element to making the program work since as quoted by Baxter (2013) "For co-teaching to truly be taking place, both individuals in the classroom are equally responsible for delivering

instruction to all students.” (p.40). The participants’ answers varied when it came to DI where Ms. Mia held a positive attitude towards collaboration, stating that she was “...definitely for co-teaching”, and that she continually planned ahead with her assistant teachers “on how the tasks should be essentially divided between all students and what students she should most importantly focus on while being in class” (Mia).

Ms. Mia also mentioned that she constantly discussed ideas and activities to have with her co-teachers. “I cooperate frequently with my co-teachers...this helps me address my students’ diverse needs better. I find collaboration essential in implementing DI and managing a classroom, I constantly approach my teacher assistants whenever planning a lesson and it always helps in making my classroom easier to handle and teach” (Mia).

In contrast, Ms. Lynn found it challenging to have proper collaboration and implement parallel teaching due to weak teacher and co-teacher collaboration.

“At times, it is hard because we have to keep everything in parallel, you have to know what is happening on the other side and provide them with information or at least activities or something new and to keep an eye on your own group so it is kind of hard for me” (Lynn).

Despite the fact that co-teachers would assist the classroom teachers in implementing different DI activities throughout every session and even take over the lesson in case the homeroom teacher wasn’t present, observation data revealed that the collaboration between the main classroom teachers and the assistant teachers proved to be weak, as there was very little communication between them.

“I struggle in communicating with my co-teachers (which are presently two in grade four and one in grade five) as a consequence, parallel teaching fails in most of my classes, this pushes me more as a teacher to work alone, as I feel I am more productive on an individual level” (Lynn).

Research Question 3: What are teachers' conceptions of the impact of contextual school factors in promoting or hindering their implementation of differentiation English language arts instruction at the elementary level?

Lack of Resources

Both participants stated that they lacked resources. In terms of technology-based projects, there were none. Both teachers used Microsoft PowerPoint and Internet derived videos in the classroom to explain various lessons. The student's only interaction in this process was to watch and listen. Students did not have the chance to use a computer themselves in the school environment to work on a project with their peers. Resources such as computer are often essential for projects and similar type activities that allow successful DI.

"Projects are great for drilling students on emerging skills, I can make many interactive projects for the kids to use. A lot of the projects are differentiated so I tell the students exactly what they need to do; with that I address their level depending on the set of skills they are using" (Mia).

School Support and DI

When asked whether the school administration supported the staff in implementing DI, both teachers expressed that they were fully supported by both the principal and Head of Division (HOD). "HOD is a full believer in DI and is always supportive of any resources we ask of the school" (Mia and Lynn).

The principal offered instructional support, access to the school's available resources, and occasional professional development, while the HOD tried as hard as possible to plan weekly meetings with the teachers to work cooperatively during which she provided all teachers with constructive yet brief advice concerning DI. Teachers confirmed the importance of professional development in DI and the desire to have more training in this particular program since it was only

offered twice a year and lasts about two hours each session. Therefore shortage in professional development was an obvious factor.

“I feel that training in DI helps me progress my skills and knowledge of DI” (Mia).

“Professional Development is very important to me since I never specialized or learned about DI. Training in DI makes me understand it more and teaches me how to apply it better inside my classrooms” (Lynn).

Behavioral Problems in DI Classrooms

As witnessed in the all three classrooms, student disruptive behavior was a common pattern when implementing DI. The teachers were asked on how they typically addressed disruptive behaviors and how they planned to re-enforce positive behaviors in DI classrooms.

“Overall I do not have serious behavior problems since I started DI. The school sends home the expectations of student behavior at the beginning of the year. I do not do anything differently in the classroom. It is a school-wide initiative, and I don't really do anything different than the rest of the school” (Mia). This statement actually implies that the teacher is a passive actor when it comes to dealing with students with behavioral problems.

Ms. Lynn was more explicit about the issue and revealed that as a further complication to her efforts to implement DI she had some behavioral issues with most of her students. During this research, one of her students was actually removed from her classroom and sent to the HOD repeatedly due to disruptive behavior. The researcher was also able to witness the disruptive behavior of several other students. Clearly, from the observation, the version of DI that Ms. Mia, Ms. Lynn and the school established did not eliminate nor solve behavior problems such as those exhibited by the problematic students. These behaviors by the students proved that they were not accommodated or positively affected by DI as it was implemented in the classroom. DI arguably implies a classroom

with minimal behavior problems because of its emphasis that all students should be accommodated, regardless of their ability or disability, and no student should be left out. This was not the case in all three classrooms.

Behavioral problems by students are particularly significant because the teachers already faced a major challenge in balancing their efforts and the restricted time to do so.

“DI is very time consuming especially when it comes to planning and researching how to teach. I try as much as possible to manage my classrooms but there is not really any particular classroom management initiative that is being followed” (Lynn).

Affect/Learning Environment

As has been observed, the teachers expressed several concerns when it came to learning environment. The lack of resources impacted the delivery of projects and other activities necessary for the success of DI. Due to various challenges such as class size, behavioral problems and inadequate agreement among the teachers on the level of collaboration, it was observed that there was a direct impact on the learning environment that hindered the proper implementation of DI and failed to address students' emotional needs.

Summary

The purpose of the study was to examine, understand and form a description of how DI was practiced in an elementary school classroom in a private school system. The study also examined contextual factors within the school that enhanced or impeded the application of DI. In addition, the study looked at the teachers' conceptions on student learning and DI and the nature of classroom management within a DI classroom. The results of the study showed that students underwent a diagnostic test at their school entry with no posttest offered at any later stage of the school year. The test results helped identify students for DI, which in turn helped teachers plan lessons, tasks and tests.

Teachers were not involved in the initial decision to differentiate instruction but held a positive attitude towards it and believed in its importance and effect on student learning. The study revealed that the teachers differentiated content, process, and product. However, they differentiated more for readiness than interest and learning profiles so the student's affect was not taken into consideration while implementing DI.

The teachers collaborated rarely for strategic lesson planning. They sat together once a week with the Head Of Division (HOD) to discuss general issues taking place in their classrooms. Teachers stated that they were well supported by the principal and HOD, but that they needed to be provided with adequate resources that will fit the needs of the students in their classrooms, especially computers, which can be used as a form of informal assessment for student understanding. Creativity in teaching was clearly a missing factor in this research and an essential one to overlook as one of Robinson, Maldonado & Whaley's (2014) participants once stated: "If we're all three doing the exact same format and same learning styles, then we're not meeting their needs that way"(p.15).

The following chapter will provide a discussion, conclusion, implications, limitations and recommendations for the study.

CHAPTER V

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

Discussion

Three research questions were investigated in this study. In the discussion, each question will be discussed separately.

- Research Question 1: What are the current state of the art practices and models of differentiated instruction for English language arts in an elementary classroom?
- Research Question 2: What are the teachers' conceptions and practices regarding the impact of differentiated instruction for English language arts on elementary student learning?
- Research Question 3: What are teachers' conceptions of the impact of contextual school factors in promoting or hindering their implementation of differentiation English language arts instruction at the elementary level?

Research Question 1

Research question one described the state of the art practices and models of DI for English language arts at the elementary level. The best practices as explained through the literature state that teachers should always take into consideration the student's readiness, interest and learning profile when implementing DI, they should have training in classrooms management and DI practices which includes student assessment and planning differentiated lessons and units. They should make sure to always include the four essential components of DI which are: differentiation of product, process, product and affect/ learning environment. These key elements assist the teacher and school in planning the curriculum and lessons included. The teachers also should be confident when applying DI, however this confidence should result from a strongly gained knowledge in DI and its practices.

This is why professional development becomes an integral part of the implementation process of DI, and should be offered on an ongoing basis throughout the school year to all present staff in the school. The teachers should be willing to expand their current knowledge and go beyond traditional teaching approaches in order to properly implement DI. DI requires the teacher to be creative in designing the lessons and activities for the purpose of making the lesson more appealing to the each student present in the classroom. Classroom management in DI is also a crucial step for effective DI. Teachers should look for different ways to include order and discipline in their classrooms and prevent students with disruptive behaviors in distracting their colleagues while listening to the teacher explain or working on a task. Collaboration among teachers is essential in ensuring more successful management especially when augmented with regular and open communication with the Head of Division and school administration in general.

Dealing with a diverse community is one of the reasons why DI was highlighted and encouraged, since each student has a different learning style as well as readiness. Schools should always train their teachers on ways to deal with a wide spectrum of diverse needs so that no student need goes unnoticed.

When being interviewed, Ms. Mia stated that she was well aware of DI's best practices. A statement, which contradicted her, observed teaching in the classrooms. This was present in Ms. Lynn's classroom as well. Both classes were teacher centered. DI was mainly targeted to students with behavioral issues and learning problems and not all students as DI states. The same lesson was offered to all students with modifying the instruction up and down only based on difficulty. Both teachers viewed DI as just a set of strategies and activities and teachers assumed that they constantly needed access to new materials to implement DI, a fact that is not needed in DI (Blaz, 2016).

Research Question 2

Co-Teaching and Differentiation. Co-teaching as defined by Cook and Friend, as quoted by Murawski (2005), is when “two or more professionals [are] delivering substantive instruction to a diverse, or blended, group of students in a single physical space” (p. 77). Based on my classroom observation and teacher interview, there was a clear gap in the collaboration between the teachers and their classroom assistants. Even though Ms. Mia claimed to have a productive working relationship with her teacher assistants, there was a clear lack of understanding between them all. For instance, the assistant teacher would usually arrive late into the classroom, by which time Ms. Mia or Ms. Lynn would have already started their lesson. This alone diverted the students' attention. I also noticed that while Ms. Mia would be teaching her classroom, the assistant teacher would be mostly occupied on her phone while neglecting students' needs. The assistant teachers seemed largely distracted and/or demotivated while the main teachers seemed to have very little ability or authority to direct them. Another interesting fact was that the tables laid up in front of the classes were more observed and assisted by the main teacher and her assistants while the students seated behind were always playing, daydreaming and behind in most if not all tasks. The same was witnessed in Ms. Lynn's classes. I also remarked that no desk was placed for the co-teacher within the classroom, which forced her to stand for most of the day, thus lessening her productivity and making her eager to leave work quickly. All three co-teachers except for one present in grade five clearly did not understand the concept of DI and its basic components. Thus they basically ended up doing the students' work or just quickly pushing them to write down any answer and count it as good effort. This stands in contradiction with the underlying goal of DI “...to meet the learning needs of a diverse student population”(Burkett, 1994, p.23). It is inevitable then, that more training in differentiated instruction as well peer coaching is needed at this stage.

DI Application and Time. When it came to time and DI, Ms. Lynn seemed to find particular difficulties due to the realities she faced. She admitted the difficulties of merging lessons and activities and keeping up with each student's needs especially when a particular student did not comprehend concepts and lessons as fast as his or her peers. She considered this as one of DI's disadvantages and stated that research alone helped her understand how to manage her time better. But the fact remains that having thirty students in the classroom is impossible to both manage and teach when you are alone, especially with the absence of a good teacher support system. Successful co-teaching in this case would help alleviate the stress and anxiety for all involved.

Ms. Mia on the other hand stated that time was never an issue for her. Yet while observing her, the researcher noticed how things were rushed and activities were squeezed within a short time frame. The researcher also witnessed the complications students faced in her classroom, when working on a worksheet for instance and running rapidly through the answers, without fully comprehending some basic grammar rules and sentence structuring. This was again witnessed with students seated in the back of the classroom. Therefore, it seemed Ms. Mia focused more on being efficient in terms of time by fitting required tasks to meet deadlines, rather than delve deeper into the quality and distribution of learning among students with different needs, a fact that compromised her students' understanding.

In practice it is not sufficient to compromise learning and DI activities by rushing them within a time frame; the whole aim of DI remains to enrich students' knowledge and make sure that all needs are met continually while taking into consideration the challenges faced by each student throughout the lesson. Ensuring that timeframes are met by rushing the teaching to complete tasks may reduce the anxiety of time management to complete the essential purpose of DI is overlooked.

Research Question 3

Lack of Training and Resources: The third and final research question examined some of the factors within the school that promoted or hindered the implementation of differentiated instruction in the school under investigation. The results of the study revealed that classroom resources such as computers, games, puzzles and varying texts were not presently available, a factor which challenged teachers creatively in designing tasks, this agrees with Cox's statement (2008) which concurs adequate resources must be available to the teachers for any school reform effort to work. Therefore, the teachers mostly relied on available material to create projects to keep students thinking both creatively and critically. The Station Approach created by Denise Jacques Jones (2007), which incorporates many concepts used for differentiated instruction, proves that you can effectively implement DI within a classroom despite having limited resources.

Support from the principal including instructional support, and staff development training in DI were all factors that enhanced the implementation of DI, however the school itself seemed to hold a misconception for DI, presently witnessed in the teachers' practices and knowledge. There was inadequate time or focus on providing professional development and lack of ongoing assessment for teachers who mostly ended up researching DI alone rather than in groups. This further pushed teachers to work individually and diminished the prospect of collaborative teaching. This reasserted further the present misconception of DI and its practices. One of the main challenges faced by the participants was lack of time which still forms a problematic factor to many teachers implementing DI, this is also supported by the literature where Garrett (2017), Robinson, Maldonado & Whaley (2014) and Burkett (2013) actually conclude that implementing DI was too time consuming.

A finding from this study, similar to that of Robinson, Maldonado & Whaley (2014) and Richards (2013) revealed that teachers had a positive attitude towards differentiated instruction.

Nevertheless, teachers held a traditional teaching approach, which was more teacher than student centered. This however cannot only be attributed to the teachers but to the available resources they had at their disposal as well. The resources as the researcher found were limited and as a consequence could not fully allow the teacher to be creative as it was much too difficult and costly to come up with creative projects on their own. Most projects were made on paper or cardboard. While the school encouraged differentiated instruction and advocated the theory with the support of the HOD, the school was unable to provide various extra resources for learning while it was simultaneously working on fundraising for its development and acquiring a bigger number of students per academic year. The latter compounded the situation, as there wasn't enough space to make changes as such which again constrained the ability of the teacher to create a more student-centered environment.

DI and Classroom Management: Tomlinson (2000) stressed the importance of classroom management during differentiated instruction. Tomlinson (2001) also emphasized that having classroom management under control is necessary to successfully implement differentiated instruction. The results of this study revealed that many students were very disruptive during DI, making it difficult for effective student learning. While Ms. Mia and Ms. Lynn used many strategies such as encouragement, goal setting, rewards, isolation and others to put a stop to such behavior, none of the approaches seemed to be working effectively. Some students continued to disrupt the class. Did those students' misbehavior reflect a deficiency in DI theory and its implementation at this particular school? Or was it a personal problem within the students themselves? Latz, Speirs Neumeister, Adams, & Pierce (2009) added that most teachers do not differentiate in their classrooms because they have classroom management and student behavioral problems.

DI theory suggests that the teacher should be able to develop effective management strategies so that DI could be effective (Winter, 2007). But it failed to provide deeper insight as to how to deal with students who display disruptive behaviors during DI. It appears that both teachers did all they could to curb the disruptive students' behavior, but it just did not work. In order for the class to function, most of them needed to be removed from the classroom. Sadly, DI could not accommodate the needs of those students as it was implemented in the classroom.

Conclusion

The results of the study brought several factors to the forefront that promoted or hindered DI. The teachers reported that projects, materials, principal support, staff development training and adequate planning time promoted DI. All of the teachers acknowledged that they were well supported by the principal and HOD. They claimed that they provided them with all of the above. However, one teacher felt that DI was very time consuming especially when it comes to planning and researching how to teach, and this was considered to be an obstacle in the implementation of DI.

The findings in the study also brought out some problems with students with disruptive behaviors in the classroom when differentiating instruction. The school had a school-wide classroom management initiative, which the teachers followed, nonetheless this plan did not seem to work on many students. Based on the results of the study, when the student became disruptive, DI was ineffective for the entire classroom. This was not helped by the lack of coordination among teachers in the classroom. Additionally, the study revealed that the disruptive students' learning profiles were not adequately addressed during DI. Based on the results of the study, both teachers believed that DI improved student learning. They also believed that DI helped them become more creative.

After taking a deeper look at the implementation of DI at the school under investigation, it became clearer that there were some deviations from the theory. First, the literature on DI does not explain in depth how time should be managed during every session and the accommodation of every student's needs during a specific time slot. Second, DI theory gives the impression that there will be order and discipline in DI classrooms (Tomlinson, 1995) but it failed to provide deeper insight as to how to address the social-emotional needs of students who display disruptive behaviors during DI.

When it comes to teachers' conceptions and practices regarding the impact of DI on student learning, answers varied greatly between the two participants. However common themes did emerge from both while coding the data acquired through both observations and interviews:

1. Support for the decision to implement DI was widespread and observation highlighted clear teacher commitment
2. Collaboration for strategic lesson planning was critical as was addressing instructional needs in the classroom
3. Lack in classroom resources was evident
4. Lack of professional development training
5. Classroom management challenges (Inability to deal with disruptive students' behaviors)
6. Difficulty with balancing both time and DI

The issues listed above restricted the delivery of content, process and product, for instance due to time, teachers squeezed a list of activities into a very tight timeframe which lead teachers in turn to focus more into student readiness rather than interest and profile. There was also a gap between pre testing and post data as there was inadequate follow up between the former and the latter.

Interview statements		
Ms. Mia	Ms. Lynn	Observation statements
“Yes, I have enough time to apply DI in my classroom. Time is used well in every session, grammar, lesson explanation through PowerPoint mostly...” (Mia) (p.71)	“... In the classroom, it is very time consuming, we are struggling with time as I am dealing with 30 students in each classroom.” (Lynn) (p.71)	“... Yet while observing Ms. Mia, I noticed how things were rushed and activities were squeezed within a short time frame. I also witnessed the complications students faced in her classroom, when working on a worksheet for instance and running through the answers, without fully comprehending some basic grammar rules and sentence structuring.” (p.42)
“...I constantly approach my teacher assistants whenever planning a lesson and it always helps in making my classroom easier to handle and teach” (Mia). (p.31)	“I struggle in communicating with my co-teachers... as a consequence, parallel teaching fails in most of my classes, this pushes me more as a teacher to work alone, as I feel I am more productive on an individual level” (Lynn). (p.32)	“...the collaboration between the main classroom teacher such as Ms. Mia and Ms. Lynn and the assistant teachers, proved to be weak while being observed as there was very little communication between them..” (p.31)
“Student’s interest are always considered and I try as much as possible to determine what they are and change various activities accordingly (Mia).” (p.32)	“... this remains very challenging and time consuming as I have thirty students in my classroom, I generally and honestly don’t find the time to look into each one of my student’s interest (Lynn)” (p.32)	“Consistent with Robert- Mahon’s (2016) research, the results of this study determined that teachers at the school under investigation differentiated instruction more for readiness rather than for interest and learning profiles.”(p.45) “... There was also no attention paid to the interest of the student.” (p.46)

Table 2: Comparison of interview statements and observations statements of both participants.

Implications

The concept of DI is to address the learning needs of all students in a classroom. As a result, the structure that the school used to implement DI may not be a good idea for improving the academic performance for subgroups of students.

The results of the study raised some concerns with regards to DI theory. For one thing, some teachers may not have the skills to re-teach concepts to certain groups of students while at the same time, keep

the rest of the class engaged. DI theory suggests that if teachers do not know what instructional strategies to use to effectively address the learning needs of students in their classrooms then the implementation of DI will not be effective.

The data in this study suggests the importance of planning time for the teachers. The data suggests that teachers could be provided all of the resources and all of the support that they need, however, if they do not have adequate planning time, it could have negative impact on the implementation of DI.

The results of the study also raised some concerns with regards to differentiating instruction to students with different learning profiles. If the learning profiles of students are not considered or addressed, it could have adverse effects not only on the particular student but also on the entire classroom.

Limitations

A limitation to be considered is that the study was conducted in one private school in Beirut; making the results of this study not necessarily applicable to all other private school districts.

One other limitation of this study is that it focused on the elementary level only and did not consider Pre-kindergarten, or 6th -12 grades and is not applicable to those grade levels.

Recommendations

Based on the findings of the study and because the results of this study are limited to teachers in grades 3-5 in one specific school, future studies should take a closer look at how DI is practiced in different classrooms in other schools at higher level.

It is also recommended to study various classroom management plans and decide which one best fits the classroom in question. DI theory suggests that if teachers do not manage their classrooms

effectively, DI will not be effective. Teachers should be provided with more meaningful ways to reinforce positive behaviors because effective learning cannot occur in a disruptive classroom. An important strategy that is recommended is to train teachers to provide one-on-one instruction for certain students with disruptive behaviors while at the same time, keep the other students engaged.

Another recommendation is to provide teachers with more in-depth professional development in DI. Professional development should focus on how to teach students with a wide variety of needs in the DI classroom. In particular, professional development should focus on strategies to identify and to adjust instruction for students when they are struggling with a concept. Also, professional development should focus on special education. All teachers should receive special education training so that they will be better able to meet the needs of a wide range of students, including those with disabilities including students with undiagnosed disabilities who may need special intervention.

Professional development should also focus on teaching students with different learning profiles. It is conceivable that the teachers in the school under investigation were sensitive to students' readiness and interests, but did not appear to be adjusting instruction based on the learning profiles of students. During professional development, teachers should be provided a variety of instructional strategies that could be used in the classroom to address the needs of students with different learning profiles.

The final recommendation based on the results of the study is to have school management staff observe and document DI application within classrooms and highlight both its flaws and strengths over the period of one year. This will assist the school in assessing whether DI is a program they will want to be part of their curriculum and whether it really does help students learn and perform better. It will help them evaluate teachers' performance and approaches when implementing DI and whether its basic components and requirements are being followed and respected.

APPENDIX A: OBSERVATION CHECKLIST

Note: The Differentiated Classroom Observation Checklist. This tool is aimed to measure the practices of teachers in differentiating instruction.

Teacher _____ Grade Level/Subject Area: _____ Observer: _____ Date: _____

Differentiating Content

- Teacher used pre-assessment to determine where students need to begin, then match students with appropriate activities.
- Teacher used 'hands on' activities for some learners to help them understand a new idea.
- Teacher presented information through both whole-to-part and part-to-whole
- Teacher used a variety of reading-buddy arrangements to support and challenge students when working with different texts
- Teacher re-taught students who need further demonstration.
- Teacher used texts, computer programs, and videos as a way of conveying key concepts to varied learners.
- Teacher used Bloom's Taxonomy to encourage thinking about content at several levels.

Differentiating process

- Teacher used tiered activities through which all learners work on building the same important understandings and skills but proceed with different levels of support, challenge or complexity.
- Teacher provide interest centers that encourage students to explore subsets of class topics that are of particular interest to them
- Teacher developed personal agendas (task lists written by the teacher and containing both 'common' work for the whole class and work that addresses the individual needs of learners) to be completed either during specified 'agenda time' or if students complete core work ahead of time
- Teacher offered 'hands-on' supports for students who need them.
- Teacher varied the length of time a student may take to complete a task in order to provide additional support for a struggling learner or to encourage an advanced learner to pursue a topic in greater depth
- Teacher provided access to a variety of materials that target different learning preferences and readiness
- Teacher developed activities that target auditory, visual and kinaesthetic learners
- Teacher established areas/stations for inquiry-based, independent activities
- Teacher use flexible grouping to group and regroup students, for example according to content, ability, interests.

Differentiating product

- Teacher allowed students to help design products around learning intentions/goals.
- The teacher proactively planned for differing specific student readiness, interest, and/or learning profile needs.
- Teacher encouraged students to express what they have learned in varied ways.
- Teacher allowed for varied working arrangements – alone, with a group.
- Teacher provided or encourage the use of varied types of resources in preparing products.
- Teacher provide product assignments at varying degrees of difficulty to match student readiness.
- Teacher use a wide variety of assessments.
- Teacher worked with students to develop rubrics that match and extend students' varied skill levels.

Source: Differentiating content, process, product, learning environment. (2015). [ebook] State of New South Wales: Department of Education and Communities. Available at:

http://www.ssgt.nsw.edu.au/documents/3_content_pro_etal.pdf

APPENDIX B: INTERVIEW QUESTIONS

Note: This tool is aimed to measure the conception of teachers in differentiated instruction for English language arts and to study the factors that hinder the implementation of this differentiation.

1. How would you define differentiated instruction for English language arts?
2. How do you use differentiated instruction for English language arts in your classroom?
3. What is your opinion of the usefulness of differentiated instruction for English language arts in your classroom?
4. What measures have been taken to provide you with an understanding of differentiated instruction for English language arts and how to implement it in your classroom?
5. How comfortable are you with differentiated instruction for English language arts and your ability to implement it in your classroom?
6. How much professional development have you had in differentiated instruction for English language arts?
7. Do you feel that the professional development you have had has been valuable in helping you understand and have the ability to differentiate reading in your classroom? If so, can you tell me how it was helpful?
8. How was the professional development that you attended structured? Was it lectured base, interactive, small group, etc.?
9. How often do you differentiate in your classroom?
10. How do you feel co-teaching would impact differentiated instruction for English language arts in your classroom?
11. How does time factor in your ability to differentiated instruction for English language arts in the classroom?

APPENDIX C: TEACHER CONSENT FORM



Department of Education
Dr. Ghazi Ghaith and Silvia Ekzarkova

Consent document

We are asking you to participate in a research study. Please read the information below and feel free to ask any questions that you may have.

A. Project Description

1. In this study the researcher will be observing two teachers in total, each one individually over the period of two months. The observation will follow a checklist (Attached) provided by the researcher, this will only belong to the researcher. Classroom field notes will be provided as well to validate the data. The differentiated instruction for English language arts program implemented by the teachers in the classroom will be observed.
2. The interview questions will aim to study the practices and conceptions of teachers of differentiated instruction for English language arts. The interview questions will be tape-recorded and the recordings will be shared with the teacher prior to data writing. In case the teacher refuses to be recorded, field notes will be used instead of tape recording.
3. Two teachers will be chosen for the research. This is a purposeful sampling and criteria based. The recruitment strategy is based on identifying teachers who use differentiated instruction in teaching language arts in grade 3 in consultation with the school principal and coordinators. Two teachers from the identified list will be asked to participate in the study on a voluntary basis.
4. The estimated time to complete this study is approximately two months. The researcher will be attending the school three times a week, 8 hours week in total. Approximately 72 hours in whole.
5. The research will serve as data source for those interested in the practices of differentiated instruction for English language arts therefore it might be used as a referral in some other researches or for presentation in academic conferences.
6. The research will just be shared with Education department in AUB and the committee members.
7. No subject will be compensated whatsoever.

B. Risks and Benefits

Your participation in this study does not involve any physical risk or emotional risk to you beyond the risks of daily life.

You have the right to withdraw your consent or discontinue participation at any time for any reason. Your decision to withdraw will not involve any penalty or loss of benefits to which you are entitled. Discontinuing participation in no way affects your relationship with AUB.

You receive no direct benefits from participating in this research; however your participation does help researchers better in understanding differentiated instruction for English language arts in a Lebanese private elementary school and improving the performance of it in terms of teacher training and student learning.

C. Confidentiality

To secure the confidentiality of your responses, your name and other identifying information will never be attached to your answers. All codes and data are kept in a password protected computer that is kept secure. Data access is limited to the Principal Investigator and researchers working directly on this project. Your privacy will be maintained in all published and written data resulting from this study. Your name or other identifying information will not be used in our reports or published papers.

D. Contact Information

If you have any questions, concerns or complains about your rights as a participant in this research, you can contact the following office at AUB:

Social & Behavioral Sciences Institutional Review Board

American University of Beirut, Bliss Street, Hamra, Beirut, Lebanon, Email: irb@aub.edu.lb;

Telephone Number: +961 01 350 000- Extension: 5445

E. Participant rights

Participation in this study is voluntary. You are free to leave the study at any time without penalty. Your decision not to participate is no way influences your relationship with AUB.

Do you have any questions about the above information? Do you wish to participate in this study?

I have read and understand the above information. I agree to participate in the research study.

Participant: _____ Date: _____

Source: Sample Consent Document Using Outline Form, Institutional Review Board, The American University of Beirut, Available at <https://website.aub.edu.lb/irb/Pages/SocialForms.aspx>

APPENDIX D: IRB APPROVAL

AMERICAN UNIVERSITY OF BEIRUT – INSTITUTIONAL
REVIEW BOARD

Application for Exemption from IRB Review
*Institutional Review Board
American University of Beirut*

**For Projects Involving Human Participants in Research
Assigned for Course Credit and/or AUB graduate theses where
research will be carried out by AUB Undergraduate and/or
Graduate Students**

11 APR 2018
RECEIVED

To expedite the review and approval process of research involving human participants when the research project is intended to meet course requirements or thesis requirements, especially where time to conduct the research may be limited, the IRB suggests that Faculty advisors urge students to develop research protocols that will be eligible for Exempt Status, and therefore exempt from IRB review and oversight. This form, which is a modification of the *Application for Exemption from IRB Review and Oversight Form* should be completed by students who intend to conduct projects or theses in part-fulfillment of program requirements. An AUB faculty member (typically the course instructor making the research project assignment or the thesis advisor) is required to serve as the responsible Principal Investigator for any student-conducted project. The Principal Investigator, must review the Application, ensure that it is complete and signed with an original signature (*stamped signatures are not permitted by the IRB*). When the PI has determined that the Application fulfills the criteria of exempt status, applications **should be submitted** to the IRB office for review. **Completed applications** that fulfill the criteria for exempt status are anticipated to be reviewed and approved by the IRB within 8 calendar days from the submission date. Incomplete applications will be returned to the applicant. The PI has primary responsibility for the ethical conduct of any research study conducted by a student that involves human research subjects.

An application is considered complete if it includes at minimum:

- Completed application form
- Research proposal (*please refer to Appendix I for guidance*)
- Informed consent documentation
- Recruitment material *
- Data Collection form*
- CITI Certification for the PI and each co-investigator/student

The PI and Student Investigator(s) are urged to review:

- Guidance to identify if research projects need IRB Approval (*Appendix II*)
- The "*Tips for Student -Conducted Research Projects*" before submitting this Application or any application for IRB review. (*Appendix III*)

CITI Certification:

AUB requires all researchers involving human participants in research to complete the appropriate CITI training program. Attach copy(ies) of CITI certification to this application. Absence of CITI certification is an Incomplete Application submitted without CITI certification will be returned to the PI without being reviewed. **NB. Students need only to take the CITI module designed specifically for them, which takes less than an hour to complete.** All CITI modules can be accessed at <https://www.citiprogram.org/Default.asp> (log on using your AUB user name and password).

*Institutional Review Board
American University of Beirut*

24 MAY 2018
APPROVED

* If applicable

Form Version # 5, April 22, 2010

APPENDIX E: CERTIFICATION OF ATTENDANCE

June 2018

To whom it may Concern

This is to certify that **Ms. Sylvia Ekzarkova**, attended English sessions [REDACTED] School for a period of two months. The total number of sessions per week was eight and the sessions were distributed over three days. Three sessions on Monday, three on Friday and two sessions on Wednesday. The duration of 6 sessions was 45 minutes and the other two sessions had a duration of 50 minutes. Thus, the total number of minutes sums up to 6 hours and 15 minutes per week.

This certification is given upon her request.

Head of Lower School

APPENDIX F: INTERVIEW ANSWERS

Question 1: How would you define differentiated instruction for English language arts?

“DI depends on the level of students in terms of writing, spelling and reading. It is used to accommodate various student levels, both advanced and early learning styles. I believe that each student is good at something.” (Mia)

“I would define DI as a way to teach each one of my students in a way that suits them best.” (Lynn)

Question 2: How do you use differentiated instruction for English language arts in your classroom?

“I use it in spelling mostly. For instance I would give struggling students five sentences instead of eight. This helps them do better. I also apply the same method in vocabulary. I modify the summative test as well so it best suits their level. This includes the same skills, but the material would be much more, providing students with a paragraph instead of essay writing. Reading activities are also shorter for students with learning difficulties.” (Mia)

“I usually reduce the amount of assignments to some students, excess for others, different ways of teaching, different ways of explanations, using different types of media depending on which each one of them.” (Lynn)

Question 3: What is your opinion of the usefulness of differentiated instruction for English language arts in your classroom?

“I see DI as very useful. Inclusive classrooms are quite beneficial. Students do not feel different whatsoever, since activities remain the same yet formatted to suit their level. They always finish their work on time and they take the same text as the rest of their colleagues. The most prominent issue is considered behavioral.” (Mia)

“It is useful but everything has its advantages and disadvantages. The disadvantage is that it is very time consuming. The advantage is that everyone is learning at their own pace.” (Lynn)

Question 4: What measures have been taken to provide you with an understanding of differentiated instruction for English language arts and how to implement it in your classroom?

“I have taken two workshops in this current school, as well as another workshop in another school I used to work in. I have been observed at least once in my classroom for my DI program implementation. I have tackled the subject but never went into the core of it as it was never a focused on program until today.” (Mia)

“We had a workshop at the beginning of the year and many through the year continually with the support of the ASD Department.” (Lynn)

Question 5: How comfortable are you with differentiated instruction for English language arts and your ability to implement it in your classroom?

“Fully comfortable. If DI is not properly implemented, then students will surely not grasp skills. I deal comfortably with DI due to my strong familiarity with my students and the pre-assessment I apply at the start of the academic year.” (Mia)

“I try my best. I don't think I apply the program perfectly. But I do try and I do my own research.” (Lynn)

Question 6: How much professional development have you had in differentiated instruction for English language arts?

“PD: 2 classroom observations, once by the Head of Division and another time by the ASD Coordinator.” (Mia)

“I took related courses in university but that was a while back, about 5 years so I don't really remember the content so well. I had two courses about differentiation (DI and its implementation in the classroom).” (Lynn)

Question 7: Do you feel that the professional development you have had has been valuable in helping you understand and have the ability to differentiate reading in your classroom? If so, can you tell me how it was helpful?

“The PD offered was very useful as I learned how to do pre-test through it, in other words “differentiation of readiness”. I also always focus on differentiation of content, process and product.” (Mia)

“You learn something from everything but I do my own research and believe that this helps me the most in overcoming DI classroom difficulties.” (Lynn)

Question 8: How was the professional development that you attended structured? Was it lectured base, interactive, small group, etc.?

“Three different unit planning to read and proofread. PowerPoint explanation for each phase of DI, oral assessment, wrapping up and icebreaker activities.” (Mia)

“It was small interactive groups. We tried planning on the spot and teaching each other. It was nice and took place right here in the school.” (Lynn)

Question 9: How often do you differentiate English reading in your classroom?

“I usually differentiate every grammar lesson during every lesson, spelling every week, writing every week, reading on a daily basis.” (Mia)

“Yes, in every classroom, especially when explaining or drilling into a certain activity especially that I have severe student learning cases in my classroom. 6 cases exactly that have learning difficulties with three others that are behavioral in one class. The other class, two students, one of them is labeled as ASD but I don't believe he doesn't have learning difficulties, I think he just needs help listening to the instructions. I also one other student who has behavioral issues in this class.” (Lynn)

Question 10: How do you feel co-teaching would impact differentiated instruction for English language arts in your classroom?

“I am definitely for co-teaching. Two teachers sharing different ideas and discussing them, just to add experience from one teacher to another. Practically a build up.” (Mia)

“At times, it is hard because we have to keep everything in parallel, you have to know what is happening on the other side and provide them with information or at least activities or something new and to keep an eye on your own group so it is kind of hard for me.” (Lynn)

Question 11: How does time factor in your ability to differentiated instruction for English language arts in the classroom?

“Yes, I have enough time to apply DI in my classroom. Time is used well in every session, grammar, lesson explanation through PowerPoint mostly. When you are an experienced teacher, you learn how to use your time wisely and efficiently.” (Mia)

“ It is very time consuming both inside and outside the classroom as I prepare each lesson in different ways but then again it's my job. In the classroom, it is very time consuming, we are struggling with time as I am dealing with 30 students in each classroom.” (Lynn)

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