

**THE IMPACT OF DIFFERENTIATED INSTRUCTION ON LEARNER  
MOTIVATION, BEHAVIOUR, AND ACHIEVEMENT IN MIDDLE  
SCHOOL READING CLASSES**



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SCHOOL READING CLASSES**

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**İsmail ARAS**

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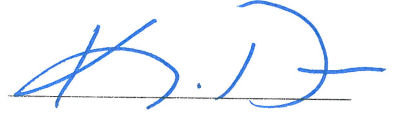
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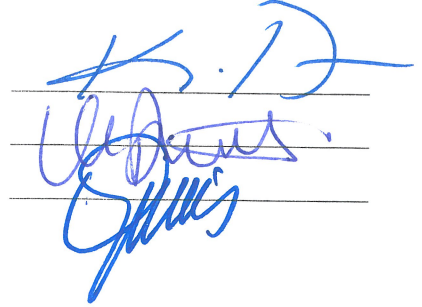
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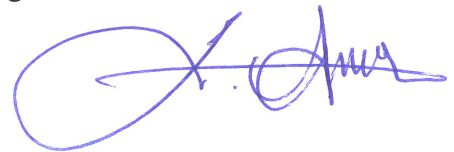
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## ABSTRACT

### THE IMPACT OF DIFFERENTIATED INSTRUCTION ON LEARNER MOTIVATION, BEHAVIOUR, AND ACHIEVEMENT IN MIDDLE SCHOOL READING CLASSES

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Master's Thesis, Master's Program in English Language Education

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Teaching mixed-level classes has always been found not only in EFL/ESL classrooms but also in every class. While some teachers may derive benefit and satisfaction from teaching different levels of students all at once, it has been an enormous obstacle for many language teachers that find it difficult to reach students' levels, interests, and needs. The aim of this paper is to discover the impact of differentiated instruction (DI) on the intrinsic motivation, behaviours, and reading achievement of middle school Grade 5 students in reading classes in a meticulously prepared 10-week lesson plan that was carefully based on the review of literature. Quantitative data form of the current study was gathered through Reading Motivation Questionnaire (RMQ), Behaviour Checklists (BC), and pre- and post- Reading Achievement Test (RAT).

Keywords: Differentiated Instruction, Mixed Ability Classes, Reading Skills, Intrinsic Motivation, Learner Behaviours



## ÖZ

# FARKLILAŞTIRILMIŞ ÖĞRETİMİN ORTA OKUL OKUMA DERSLERİNDE ÖĞRENCİLERİN MOTİVASYON, DAVRANIŞ, VE OKUMA BAŞARILARINA ETKİSİ

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Karma seviye sınıfları yalnızca İkinci Dil Olarak İngilizce ve Yabancı Dil Olarak İngilizce sınıflarında değil diğer tüm sınıflarda görülen ortak bir durumdur. Bazı öğretmenler karma seviye guruplarından faydalanma yoluna giderken bu durum birçok dil öğretmeni için öğrencilerin seviyelerine, ilgilerine, ve ihtiyaçlarına ulaşma konusunda sorun teşkil etmektedir. Bu çalışmanın amacı orta okul 5. sınıfta farklılaştırılmış öğretimin öğrenci içsel motivasyonunu, davranışlarını ve akademik başarılarını ne derecede etkilediğini görmektir. Literatür taramasına dayanarak farklılaştırılmış eğitim temelli 10 haftalık bir ders programı hazırlanmıştır. Çalışmanın nicel verileri öğrenci motivasyon anketleri, davranış kontrol listeleri ve okuma başarısını ölçen ön-test son-testler ile yapılmıştır.

Anahtar Kelimeler: Farklılaştırılmış Eğitim, Farklı Seviye Gurupları, Okuma Becerileri, İçsel Motivasyon, Öğrenci Davranışları



To my lovely parents Aynur ARAS and Sabahattin ARAS



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## LIST OF ABBREVIATIONS

DI	Differentiated Instruction
MAC	Mixed Ability Classes
ELT	English Language Teaching
ESL	English as a Second Language
EFL	English as a Foreign Language
L2	Second Language
KWL	Know Want Learn
KUD	Know Understand Do
UbD	Understanding by Design
PEM	Personalized Educational Modal
CLIM	Content and Language Integrated Method
CERF	Common European Framework
RMQ	Reading Motivation Questionnaire
BC	Behaviour Checklist
RAT	Reading Achievement Test
SPSS	Statistical Package for the Social Science

# Chapter 1

## Introduction

This chapter consists of an introduction to the study. First of all, the statement of the problem for the current study is defined in the first section. The second section sets forth the purpose of the study. The third section explains the research questions. The fourth section provides information about the significance of the problem. Finally, the fifth section explains and defines the terms that are used throughout this study.

### 1.1 Statement of the Problem

Reading is an immensely complicated process in second language acquisition (SLA) and the genuine improvement of reading skills is a process that is influenced by several factors such as text choices and background knowledge (Caparoso, 2016). Although several studies have attempted to demonstrate how to improve students' reading skills in a variety of ways, they do not seem to address the reality of student diversity (Boakye, 2017). Unless students with a variety of academic abilities, learning styles, and degrees of intelligence are provided with materials that meet their needs and interests, their frustration and boredom will increase (Danzi, Reul, & Smith, 2008).

In terms of providing a variety of choices, or of meeting the needs of students; Little, McCoach, and Reis (2014) state that the instruction in reading classes frequently fails to engage the interest of theirs. Therefore, it is highly significant for teachers to provide instruction that fits all types of learners instead of simply aiming at the average student and teaching to the middle as in traditional instruction. In this sense, differentiated instruction, a process based on the needs and strengths of students, takes student diversity into consideration (Tomlinson, 2014). Furthermore, DI is regarded as an evolving and promising strategy in EFL/ESL classrooms (ACRC, 2006).

Recently, researchers have shown increased interest on the effectiveness of DI (Joseph, Thomas, Simonette, & Ramsook, 2013). Evidence from research suggests that DI promotes learner participation, motivation, and also helps learners relate what they have learned in the classroom to their own lives (Turner, Solis, & Kincade,



2017). Although DI has been showed to improve the learning process of all students when carefully selected and applied (Baumgartner, Lipowski, & Rush, 2003), Bender (2012) states that there are still only a limited number of studies about the efficiency of this practice.

Since the impact of DI is a challenge to measure and a relatively new one, a lot has to be developed in terms of its implementation in EFL/ESL classes (Mulder, 2014). By examining student diversity in terms of meeting the needs, interests, and learning preferences, it is highly significant to explore whether DI leads to more learner accomplishment, motivation, and positive behaviours.

## **1.2 Purpose of the Study**

In recent years, as teachers have begun to identify the characteristics of an ideally varied classroom routine, it has become important for educators to use brand-new and more ingenious methods to solve problems, so as to increase the motivation of their students and to improve academic achievement (Gavin & Casa, 2012). Therefore, it has become evident that the significance of the use of DI in meeting the needs and interests of students at all levels, and in increasing their motivation in SLA has increased (Tomlinson, 2014).

The present study explores the impact of DI on the learning process in middle school reading classes. Since differentiation is a complex process, a review of the literature has contributed much information about to how to implement DI in an EFL/ESL setting. A quasi-experimental research design has been adopted in which quantitative data was gathered from pre- and post- Reading Motivation Questionnaire (RMQ), pre- and post- Reading Achievement Tests (RAT), and the Behaviour Checklist (BC) in the experimental and control groups. Firstly, RMQ is conducted to understand how DI has influenced student intrinsic motivation in reading classes. Secondly, RAT is used to assess the impact of DI on student reading achievement. Finally, BC is used to observe and record student behaviours during the intervention process in which DI has been adopted.

Overall, the purpose of the study is to gain an understanding of the impact of DI on learner achievement, intrinsic motivation, and the behaviours of middle school students in reading classes.

### 1.3 Research Questions

This paper aims to investigate how DI affects student intrinsic motivation, academic success, and behaviours in reading classes, as shown by the responses to the questions below:

Research questions:

- 1- To what extent has DI influenced student intrinsic motivation in L2 reading lessons?
- 2- To what extent has DI influenced student behaviours in reading lessons?
- 3- To what extent has DI influenced L2 reading achievement?

### 1.4 Significance of the Study

Tomlinson (2009) made it clear that it is unwise to consider two students who learn with the same method and on the same schedule as the same age. The educational system is generally comprised of classes that include students of the same age and has made the assumption that students have the implements to understand and acquire the existing knowledge in the same way their associates do (Robinson, Maldonado, & Whaley, 2014).

There have been a number of studies about the impact of DI on the motivation and academic achievement of students, based on data instruments such as pre- and post- tests, classroom observations, and questionnaires. However, most teachers do not have the essential skills or resources needed to teach targeted reading skills (Tomlinson 2009). Therefore, this study is significant in its provision of sample DI lesson plans and ideas for reading classes as well as its provision of quantitative data for filling the empirical gap in the implementation of DI.

### 1.5 Definitions

**Differentiated Instruction:** “Shaking up” what goes on in the classroom so that students have multiple options for taking in information, making sense of ideas, and expressing what they learn (Tomlinson, 2001).

**Mixed Ability Classes:** A mixed ability class or teaching system is one in which pupils of different abilities are taught in the same class (Collins English Dictionary)

## Chapter 2

### Review of Literature

#### 2.1 Learner Differences

In the field of language teaching methodology, much emphasis has been given to language learners rather than to the variety of teaching methodologies (Richard & Rodger, 2001). The determining dynamic of accomplishment or failure is no longer considered a teaching method yet it is really the very means by which teachers know what individual differences are; because the learner has immense significance in educational context (Ikwumelu, Oyibe, Oketa, 2015).

Learner differences, a concept which dates back to the era of Hippocrates, is also used currently as a notion to increase learner autonomy in terms of suitable metacognitive and learning strategies (Ehrman, Leaver, & Oxford, 2003). To better understand the term, Liao (1996) lists the key aspects of learner differences as follows: (a) intelligence, (b) aptitude, (c) language learning strategies. For Skehan (2002), learner differences are of four kinds: (a) language aptitude, (b) learning style, (c) motivation, (d) learning strategies. In her comprehensive research on successful language learners, Bond (2002) presents some dynamics that affect the language learning process: (a) age, (b) exposure to a foreign language in infancy, (c) immersion, (d) intelligence, (e) personality, (f) attitude and motivation, (g) relationship between the first and the target language, (h) sensory style, (i) learning strategies, and (j) other factors (mimicry skills, musical ability). Dörnyei (2005) suggests four broad categories of learner differences, which are: (a) language aptitude, (b) motivation and self-motivation, (c) learning styles and (d) cognitive styles, all of which give teachers a deeper understanding of the characteristics of mixed ability classes.

Simanova (2010) states that language learning abilities are influenced by many factors such as differing student strengths, weaknesses, and approaches towards language learning, in which they react differently to individual teaching methods and a variety of classroom circumstances. Therefore, the examination of learner differences provides teachers with the opportunity to adapt suitable instruction for each student and to design detailed program elements for effective learning (Hall,

2011). In the same vein, McCarty (1999) claims that getting to know students is one of the most crucial of all obligations for teachers in terms of understanding learner differences. Teachers are able to make accurate choices in the process of language learning by defining their students' different learning styles and choices, their previous involvement in learning a language, their philological approaches, their characters, and their point of view. According to Meenakshi and Zafar (2012), a knowledge of individual differences is seldom adequate in quantity yet it should be the mission of teachers to make use of any of these differences by transforming them into benefits for their language learning students. Therefore, their expectation that information about individual differences and the educational consequences of these variations would contribute a great deal to the attainment level of students in SLA. Putintseva (2006) expresses the importance of assuming that there will be individual differences by stating that people are different from each other in terms of their preferences. Furthermore, she suggests that EFL/ESL teachers should keep in mind the fact that these individual differences are measurable.

**2.1.1 Learning styles.** The term “style” as a psychological aspect was first put forward as the categorization of characteristic individual styles or forms of behaviour by Allport in 1937 (cited in Li, 2011). Additional emotional, intellectual and physical aspects of behaviour have been incorporated into this classification over the years because of the further growth and increased sophistication of some social disciplines like psychology, linguistics, and SLA. As a result, researchers like Brown (1994) have mentioned that learning style is a constant and relatively permanent inclination or preference for each individual student with respect to these universal features of academic effectiveness.

In the field of language acquisition, various definitions and models of the term ‘learning style’ can be found. Dörnyei (2005) use the term ‘learning styles’ to refer to “an individual’s preferred and habitual modes of perceiving, remembering, organizing, processing, and representing information” (cited in Kim & Lee, 2014, p.119). In his comprehensive study, Caulfield (2004) discovered that there have been 72 models of learning styles, all of which maintain that learning style is a means by which a child chooses to acquire new information. Honey and Mumford (1986) proposed that there are four major kinds of learners, each with distinct learning styles: activists, reflectors, theorists, and pragmatists Furthermore, they recommend

that teachers should be able to understand and harness these differing kinds of learners effectively, if they are to the successful completion of tasks successfully. Activists, in this sense, are “correlated with agreeableness, conscientiousness, and extraversion” (Busato, Prins, Elshout, & Hamaker, 1998). They prefer to be immersed in an array of activities and they choose to work in groups rather than to work by themselves. Reflectors, on the other hand, like to observe before they make decisions; theorists like to envision a framework as they learn, by adopting reasonable and logical methods; and pragmatists are keen on searching for hands-on suggestions in the learning process (Jerome, 2010). It should be kept in mind that learners may work by making use of more than one characteristic of this model and not just one of these four dimensions (Pritchard, 2009). Through use of figurative thinking, Silver, Strong, and Perini (2002) offer four styles of learning that can help students remember the characteristics of each type of intelligence to better understand their learning styles. After inviting students to brainstorm about the characteristics of words like beach ball, clipboard, microscope, and puppy, teachers can be helped to realize the needs of each style in order to create a variety of practise their learning climate. By making use of the simile of the ‘beach ball’, Silver, Strong, and Perini (2002) aim at spotting learners who need a diversity of materials, a flexible atmosphere, several different schemes, the possibility of selecting an activity, of improvisation, of allowing learners access to activities, of giving the learner some autonomy. Students are linked to the simile of ‘clipboard’ as a reference for making plans, organizing, and requiring clear instructions, steadily practising, and being always provided with graphic guidelines; the metaphor of ‘microscope’ refers to exploratory learning, investigating notions, looking deeper, concentrating on facts, and obtaining possession; and by making use of the simile of ‘puppy’, we are introduced to the learning style of learners who need a relaxed and playful atmosphere, enjoy the addition of new energy to the learning environment, appreciate the creation of helpful group combinations, and the establishment of secure classroom settings, and the assurance of polite classmates, empathic auditors, and thoughtful clientele.

Learning style theory plays an important role in ESL classes by providing a vast number of findings on the correlation between instructional approaches and the learning process (Klitmoller, 2015). Green (1999) highlighted the significance of the

notion by claiming that teachers are able to help their learners to obtain better academic results on condition that they recognize their learners' learning styles. Additionally, teachers can also direct their approaches to learning, so that they may become familiar with the possible drawbacks that they can encounter in their work. In his article, Fine (2003) reported that when the students' favourite learning styles are integrated into the teaching process, there will be a noteworthy improvement in the resulting academic work. This view is supported by Goldfinch and Hughes (2007) who found out that learner styles are one of the most crucial elements in ensuring achievement in the first year of undergraduate studies. Moreover, Caulfield (2004) clearly indicated that information about learners' desired learning styles allows them to obtain efficient feedback about study resources that they are making use of and engaged in. However, in their comprehensive study of the impact of learning styles on general achievement, Massa and Majer (2006) found no strong support for the theory that learning should be facilitated according to the learning styles of students. This finding is supported by Scott's (2010) study, which revealed that combining teaching styles with learning styles may result in certain possible dangers in the application of the selected method. The emphasis on learning styles frequently confuses instructors about how to use a variety of educational methods. Furthermore, such an emphasis may lead to unrealistic categorizations of pupils due to an evaluation of learning styles that is done for apparently self-interested reasons. Likewise, Neel and Grindem (2010) hold the view that unsatisfactory scores and inadequate learning among EFL students may be caused by a gap between instructors' and students' learning styles.

In view of all that has been mentioned so far, a number of definitions and models of the term 'learning style' have been indicated. Numerous studies found that the analysis of learning styles results in higher scores and notable improvement. In contrast, it may also lead to inadequate marks in language learning.

**2.1.2 Multiple intelligences.** Over the past few decades, intelligence has been considered as an important aspect of language learning in terms of being consistent throughout a person's lifetime (Dolati & Tahriri, 2017). This shows a need to be clear about exactly what is meant by the word 'intelligence'. Intelligence refers to "the ability to solve problems or to create or fashion products that are valued within one or more cultural settings" (Gardner, 1983, p.81); and the classical theoretical

vision of intelligence is challenged by this description (Currie, 2003). According to a definition provided by Muijs and Reynolds (2011, p16), intelligence is “people’s ability to learn, to achieve academically and therefore to take on leading roles in society”.

Gardner (1991) suggests that people are wired to perceive the universe by different means, which is called ‘multiple intelligences’ (MI). In 1993, he first recognised seven different types of intelligence in mankind, despite the fact that each aspect of our learning has its own strengths which for the most part have substantial consequences in the learning environment. With regards to an investigation of MI, human beings can identify the universe by means of language, analytic inquiry, dimensional depiction, doing things or using their hands to learn, consideration of others, and consideration of themselves. Therefore, people vary in their armamentaria of assets in these different intelligences and can complete diverse tasks, solve different problems, and improve their skills in widely differing fields. To better understand the implications of this theory, Nolen (2003) lists Gardner’s eight intelligences as: verbal intelligence, including the capacity to use language, by using reading, writing, telling stories, memorizing dates, and thinking in words; logical-mathematical intelligence, which is the ability to comprehend cause and effect and to work on statistics, quantities, and processes, as used in calculating, rationalizing, reasoning, problem solving, and identifying configurations; spatial intelligence is the capacity to perceive the dimensional realm symbolically inside the human brain as in reading maps and charts, drawing, solving puzzles and understanding mazes, imagining and visualizing; kinaesthetic intelligence, the aptitude to make use of an individual’s entire body or of his individual body parts, as in sports, hopping about, drama, building structures, and using tools; musical intelligence, the ability to imagine sequences of sounds in music; the ability to listen, to identify, and to recall configurations, as in singing, classifying notes, and in memorising tunes and tempos; interpersonal intelligence, the ability to meet other people at their own level, as in the empathetic interpretation of other people’s situations, the capacity of leadership and the ability to bring people together, to collaborate with others, and to solve problems; intrapersonal intelligence, the capacity to delve inside oneself, as in recognising personality differences, in identifying one’s individual assets and faults, and in having particular goals; naturalistic intelligence, the competence to distinguish

between types of flora, nature, climates, as in recognizing differences in environments and in various other kinds of discriminative reasoning. Furthermore, Gardner's theory (1993) proposed that diverse and independent intellectual capabilities can affect a number of different ways to identify, comprehend, and acquire information about the universe. In what way the individual mind functions, in what way it varies in the task allotted to each sex, by what means feelings influence logical perception, and by what means heredities and background separately affect our children's' intellectual capabilities: these are all topics that provide us with a continuous influx of new information.

Recently, Gardner's theory has had significant impact on education and more specifically, in ESL classes (Dorata & Tahriri, 2017). Supporters of Gardner's theory (1993) claim that teachers can recognise the diverse strengths of students by taking the eight types of intelligence into consideration. It is also probable that teachers can provide competencies for a diverse student body more efficaciously if they can coordinate language acquisition for their students. Similarly, Hattie (2011) points out that catering for learners with various means to acquire content expands their scope of learning. This is supported by Darling-Hammond (2010), who is of the opinion that providing students with multiple approaches to learning can enhance learning and increase participation; in addition, teachers are provided with a deeper understanding of information about learners and their abilities. In the same vein, Tomlinson (2014) maintains that perceptions of learners' evident strong points and needs must be constructed on detailed knowledge about them, which will be based on Gardner's (1993) theory. On the other hand, Yenice and Aktamis (2010) argue that potential problems may occur such as failure in participation, undesirable manners of students, and isolation from a lesson. Likewise, in his study Coskungonullu (1999) found no significant impact of MI theory on the perspectives of Grade 5 students in maths classes. Overall, these studies outline the critical role of MI theory potentially resulting in both failure and success in EFL/ESL classes.

## **2.2 Differentiated Instruction**

Learner diversity is increasingly recognised as an educational problem in terms of meeting the needs and interests of students, as it obliges teachers to use a variety of teaching methods (Aldossari, 2018). As has been explicitly demonstrated, it is significant that in learning environments where the facilitators do not adjust learning



to student readiness level and who focus solely on those students who are already working at grade level, students would be uninterested because of the absence of challenge or that others might be discouraged from attending classes (Gregory & Chapman, 2002). A broader perspective has been adopted by Howard Gardner (1993) who argues that the consideration of all the students as having the same personalities has been the worst mistake of former eras (Siegel & Shaughnessy, 1994).

Tomlinson (2005), a foremost professional in the field of MAC, defines DI as taking full advantage of each pupil's language acquisition skills and the learning atmosphere in which teachers give much consideration to their learners' needs. In Benjamin's (2006) study, DI is defined as a range of classroom activities that are engaged in regarding the learning styles, interests, prior knowledge, socialization needs, and comfort zones of students. For Attia (2009), DI is an academic structure that focuses on augmenting learning production with the assistance of various academic systems using MI strategy. This definition is close to that of Kogec (2008) who defines DI as understanding a variety of needs, interests, and learning preferences of students encountered in the teaching process. Delli Carpini (2006) draws attention to DI by saying that it is systematic, and ingenious and that it focuses both on mixed levels and a variety of needs, interests, and the strong points of students, rather than focusing on what was aimed at in the widespread practice of personalized training recommended from the 1970s onwards and rather than focusing on a method that directs students to work low-level at a computer, while the teacher works with middle-level students. According to Mulroy and Eddinger (2003), it is the diversity of the student body that causes DI to come to the fore and thanks to the favourable learning environment that it creates, facilitators manage to involve students in learning in what might be said to be an ideal way. Tomlinson (2000) supports this idea by expressing her conviction that DI is a ground-breaking effort resulting from this particular point of view in teaching and learning, instead of merely being one of many instructional approaches or being a mere simplistic teaching formula. Similarly, Laturus (2010) regards DI as an essential strategy in designing an instruction that is applicable to all learners differing age, sex, gender, culture, religion, socioeconomic status, and intellectual or physical disabilities. She also puts an emphasize on differentiation by recognizing its valuable feature of

making teachers focus on recognising the ways in which students “can do” rather than keeping an eye out mainly for what students “cannot do”. This view is supported by Goleman (1995) who wrote that people can be taught by means of expert management to produce more than what standard level instruction requires and that people appear to focus best when expectations of them are aimed slightly above the ordinary pressures. If there is little expected from students, they will lose interest; if too much is demanded from them, they will be anxious and stressed.

As far as the need for DI is concerned, Corley (2005) states that a classroom where DI is made use of will provide a reasonable amount of challenge to students of varying profiles, abilities, and interests by getting the most out of them and realizing their potential. The need for differentiating the instruction has its source in teachers’ desire to provide the finest, the best possible learning experience (Tomlinson, 2000, p.2). According to Gregory and Chapman (2002), now that students are regarded as digital experts in the 21<sup>st</sup> century, they are in need of using integrated skills such as critical thinking, problem-solving, creativity, and innovation. Therefore, they suggest DI as an occasion to encourage students to perform at the highest level they are capable of reaching. Moreover, Tomlinson (2000) believes that in classrooms where DI is adopted teachers regard teaching as an art rather than a series of mechanical exercises and he/she interfaces with students more than in settings which strive to suit all students at the same time and in the same way. Tomlinson’s (2000) ideas about DI are complemented by McBride’s (2004) which point out that DI avoids the drawbacks of the one-size-fits-all program. For every student there are requirements for acquiring the language as systematically as possible and by making use of the advantages created by DI teachers by their ability to adapt time and resources to increase productivity (Tuttle, 2000). Last but not least, DI provides a basis on which students with multiple intelligences and different learning styles can be supported in doing their best to learn (Tomlinson, 2003), and which makes an enormous difference in the way teachers think, taking them away from a mere routine processing of the national curriculum, and more productively in the direction of fostering a variety of student needs (Tomlinson, 2014).

Taken together, while teachers facilitate the establishment of student boundaries, it is essential for them to recognize their students’ strong points by considering student diversity in their teaching spaces (Mulroy and Eddinger, 2003).

Therefore, it should be agreed upon by all interested educators that learning taking place in any modern teaching and learning environment must be constructed on the notion that all students are fundamentally diverse (Brighton, 2002).

**2.2.1 The ways to differentiate instruction.** It has been suggested that teachers should not be in a hurry to use DI materials, in contrast, they need to proceed step by step, as they should always keep in mind that they are introducing a brand new way of studying and learning (Koutselini & Valiande, 2009). Instructors who want to introduce the use of DI into their teaching should pace themselves and their students and proceed gradually, constantly and unfalteringly in its use, and adjust their use of DI in the same way they would in teaching an infant to take his first steps (Wehrman, 2000). On the whole, though, methodical preparation of teaching progressions is what is called for in DI. As Clark and Callow (1998) suggest, methodological preparation, careful consideration of the setting and the organization of learning practice are some of the most significant elements in productive education throughout the process of differentiated learning.

With regard to students' readiness, interest, or learning profiles, curricular elements can be differentiated under four classroom headings: (1) content, (2) process, (3) products, and (4) learning environment (Tomlinson, 2000). Similarly, Lewis and Batts (2005) consider the importance of what is taught (content), the reinforcement (process), and the facility of a diversity of selection for students to show what they have acquired (product) as having valuable educational consequences in the differentiation process. The content element of the differentiation has been defined by Tomlinson (1999, p.11) as "what a student should come to know (facts), understand (concepts and principles), and be able to do (skills) as a result of a given assignment of study (a lesson, learning experience, a unit)". Corley (2005) is of the opinion that the same content should be studied in the classroom, yet teachers should adjust the difficulty of it according to the different levels of each student, which insures that the same content is being learned by various means. At this stage, Tomlinson and Alan (2000) suggest using pre-assessment in order to identify how learners should start out, with the help of various activities such as KWL charts, writing journals, student-teacher conferences etc. They also recommend using 'hands on' activities, approaching content from whole-to-part and part-to-whole, using Bloom's Taxonomy to foster the approach to content

by taking into consideration different dimensions, and using graded readers for different levels of students. Process is thought to consist of a variety of methods in which content is shown and where the tasks that assist learners are set forth and understood and where students ultimately acquire the notions and abilities taught by the teacher (Corley, 2005). According to differing content, plans, and assessments, flexible groupings should be set up where learners must cooperate in learning in various ways. By making use of DI, teachers must take into account the setting and the necessary instructional approaches. Last but not least, Tomlinson (2001) describes product as the demonstration of what the students have learned and how they relate to what they have learned so as to solve various kinds of problems. It is of great importance that students should be given a variety of choices at the product level so that they can demonstrate the learning process (Corley, 2005). While Koutselini (2006) believes this way of differentiating instruction to be effective, he also believes that that this is not the only way implicit in providing instruction. Teachers should also consider other factors that affect learner needs, such as their readiness level, their learning profiles, their favourite things, and their family backgrounds. He also believes that, besides being equipped with a wealth of information about DI, teachers should above all be able to identify different needs and individualities among their students in a fairly detailed way.

In view of that all has been mentioned so far, Tomlinson's (2000) model proposes that with the help of the differentiation of high quality content, process, product, and learner preferences, teachers can give their endorsement to correspondence and superiority (Santangelo & Tomlinson 2009, p.308). As stated by Vygotsky (1986), an awareness of students' readiness level is of great significance in the creation of an active and energized classroom environment.

**2.2.2 Assessment in DI classes.** Much of the current literature on superior types of education pays particular attention to five main teaching fundamentals: learning environment, curriculum, assessment, instruction, and classroom leadership/management (Tomlinson, Tonya & Imbeau, 2015). In the implementation of these fundamentals, the recognition of the connection of these fundamentals will be extremely helpful to teachers in the achievement good results for each pupil. Weakness in any of these elements diminishes the efficiency of the other fundamental points and this inefficiency may result in a decrease in the strength of

any of the fundamental features. Tomlinson and McTighe (2006) recommend that it is possible to differentiate instruction established in a more precise assessment, once we acquire the habit of collecting a "photo album" instead of a "snapshot" of our learners.

In a differentiated context, Tomlinson and Moon (2013) suggest sets of potential interrogations that will help teachers improve their insights into the rudiments of the course or unit and to develop their assessment of what they are faced with. To begin with, the assessment should be able to mirror learners' position with respect to ideal standards, without being unable to perform because of the particular language used in setting out guidelines or achieving whatever the desired answer mode is. Moreover, assessments should provide hints of upcoming instruction. With the exception of students who have adopted schooling procedures designating different objectives, differentiated assessment ought to concentrate on all of the students who have the same basic learning objectives. It is highly important to evaluate learners in a way that facilitates the generation of occasions on which they can show their knowledge, understanding, and skills (KUDs). Lastly, in spite of the fact that students are evaluated in terms of differentiation, the scoring system used for elaborating assessments that are differentiated should be correlated. Likewise, Guskey (2007) expressed the importance of three essential elements of the instructional method that are currently used for assessment by teachers. One of the approaches that teachers ought to alter is to practice their assessment as a basis for data for both instructors and for pupils, as well. Secondly, assessments should be undertaken from the viewpoint of first-rate remedial instruction. Guskey's (2007) final suggestion is that students should always be given another chance to show what they have accomplished.

In an attempt to create a learning atmosphere that is encouraging to language learners in terms of assessment, it is an undeniable fact that a teacher's capabilities have a notable contribution to make (Hattie, 2009). In the same way, beyond the shadow of a doubt, an instructor's capability of conscripting pupils in the generation and application of good classroom habits and in the ensuring of progressions that regulate familiarity and probability is fundamental. By the same token, such regularity is crucial, on condition that the students act with deliberation and comprehend the subject matter, instead of simply duplicating it; this deliberate action

permits students to take into account the individual learning differences seen in most modern teaching spaces (Hattie, 2009; Tomlinson & Imbeau, 2010). It is hard to overemphasize the effect of these fundamentals on young individuals, whether they are considered pupils, or simply as human beings. Therefore, two pertinent questions are set forth by Stiggins (2002) of the criticism teachers make of learners and of its emotional effect on their enthusiasm and self-confidence; he notes that teachers may ask themselves the question: How is assessment used to assist all learners who wish to acquire a language? And, how can they be encouraged to feel that they are capable of learning?

Stiggins, Arter, Chappuis, and Chappuis (2004) propose several important points useful in helping learners take part in the process of assessment. To begin with, it is highly important to devise a pure and comprehensible image of the learning product and to offer learning consistency by way of making learners feel dedicated to high standards in their learning objectives and to intuit an association with an image of excellence, so long as the learning procedure takes place, by the repeated description and re-evaluation of the learners' anticipation of the education they will achieve. Next, putting instances of below-level and above-level student work to use is vital in helping them to comprehend the features of a desirable kind of excellence in their work and to encourage them in the practice of self-evaluation. To further these ends, teachers need to get students to work out and develop task examples and to negotiate the standards they have been using, to use the rubrics provided or follow the scoring guidelines. In addition, another important issue to take into consideration is what is intended to involve the learner in the assessment process. This is to propose that they should constantly provide their feedback. The student learning process is improved by the constant offering of feedback. On the other hand, a distinction should be drawn between evaluative feedback that includes grades or letter marks, which will indicate to students that the learning process relevant to each section of their work has been completed. Well-considered feedback also provides learners with a vision for ongoing accomplishment and will give them an understanding of their progress going forward. It is also a very well-known fact that the exactness and descriptive quality of the feedback provided is far more meaningful than the quantity of it. One final important point is that proposed by Stiggins, Arter, Chappuis and Chappuis (2004), namely that teaching learners how to

use techniques of self-evaluation and how to establish objectives. This can be accomplished by getting learners to participate in activities by showing them the potentialities for improvement inherent in self-evaluation and by assisting them frequently in learning so as to gather proof of their individual development. What is more, in order to break lessons down into manageable sections for learners planning a lesson, it is important to show them how to concentrate on one aspect at a time. Teaching learners how to review their work intensively, especially their own personal work and how to make use of feedback so as to make good progress while reviewing their previous work is also a significant positive factor in encouraging their improvement.

It is beneficial to take into consideration Tomlinson and Moon's assertion (2013) that "pre- and formative assessments can be formal (direct) or informal (indirect)." Formal assessments are designed to be made in situations where instructional time focuses exclusively on collecting data at the individual learner level throughout an entire lesson. As a matter of fact, pencil-and-paper questions, structured observation or interviews, journal entries, problem sets, and so on can be regarded as falling into this category. On the other hand, informal or unstructured assessments offer arcs or examples of rankings of learner knowledge. To illustrate this point, class-developed KWL charts and thumbs up/thumbs down checks can be taken into account. Unstructured formative assessments are valuable in order that teachers can develop intelligence about how the students as an entire class can be put in charge, when they are instructed to do so in the learning atmosphere. Needless to say, in order for the teacher to comprehend the contingencies of each student in the classroom, these contingencies must be considered to be less accommodating. On the other hand, for the most part, an influential instrument in supporting educators to provide a grounding for learning on behalf of teaching for exposure, would be an arrangement of formal and informal pre- and formative assessments. To increase learning products for learners is the fundamental objective of pre- and formative assessment. When instructors manage to make these evaluations yet make few or no modifications in their instructional and educational programmes, the evaluations will only be a vain attempt at time management. In point of fact, an assessment cannot be categorised as pre- or formative, unless instructors apply proof from their evaluations so as to familiarise themselves with their educational perspectives in order to

correlate them with the needs of learners (Black & Wiliam, 2009). To disclose the development of the learners' level of willingness, the presence of a variety of learning levels that is connected to KUDs is critical to the regulation of learners' concerns and to the regulation of their learning profiles. What is also critical for academic improvement is to define the readiness level of each student. If the duration of each continuous task is too long or too short, or too hard or too easy, it is very unlikely that learners will improve their KUDs (Sousa & Tomlinson, 2011; Tomlinson, 2014).

One of the most problematic points in present-day assessment approaches such as quizzes or tests is that they encourage convergence in the thinking of students, a situation which causes them to believe that they are profiting from all of the information that they have obtained and which encourages them to get used to a specific question. On the other hand, in the intervening time when open-ended questions are made use of, and utilized with a diversity of probable responses, these questions will encourage students to strengthen their brainpower in that activity. This improved result stems from the fact that a diversity of answers will function as a higher-level strategy (Sausage & Tomlinson, 2011).

### **2.3 Reading Classes**

In the field of language teaching, various definitions of reading can be found; however, the provision of a single sentence description is still crucial (Glakjani & Ahmadi, 2011). Described as the most significant element of educational language skill (Grabe & Stroller, 2014), reading requires special attention in EFL/ESL classes (Richards & Renandya, 2002). This view is supported by Kent (2005) who stresses that reading is a primary skill in terms of learners' academic success. As Hall and Piazza (2008) confirm, learners' improvement in their reading skills is highly significant for the reason that it has considerable influence on the academic proficiency of learners in all levels.

**2.3.1 DI reading classes.** Evidently, it is not necessarily always the best practice to provide all the students with the same level of reading material (Ankrum & Bean, 2008). Given the fact that teachers widely focus on middle-level student performance, as in most classrooms, a situation is created in which both low-level and high-level students will not get adequate instruction. To make progress using the concept of 'leave no child behind,' it is a requirement that teachers need to apply DI



in every classroom, even though this fact has only been recognized until now in the classrooms of the most proficient teachers (IRA, 2000).

With respect to efficient reading instruction, Ankrum and Bean (2008) suggest five basic approaches: assessment, grouping formats, classroom management, choice of materials, length and frequency of instruction, and lesson focus. To put it more precisely, they suggested that assessment tools used in the classroom ought to be comprehensive, ongoing, classroom-based, and easy to administer and interpret. A selection of group formats such as whole-class, and pair work, combined with some individual activities, is regarded as an integral part of this process. Moreover, it is essential for teachers to choose classroom managements technique that meet their teaching perspective and are satisfactory to them. Regarding materials in the differentiated reading classroom, Allington (2005) stresses the importance of the application of a suitable level of reading material to match the levels of the students and their interests. The instructional conventions must shift during the teaching year because approachable teaching shifts over time, as do the requirements and strong points of the students. The final suggestion made by Ankrum and Bean (2008) is that teachers should make the focus of the lessons be to enhance the skills of low-level students, to accelerate the skills of on-level students and to keep on challenging high-level readers in reading classes.

On condition that the facilitator has a growing awareness of the practice of reading, consideration of their pupils' talents and essentials, and the capability of providing a rapid grounding in a subject; once that has been done, it is then possible to make use of DI. In this process, facilitating instructors require guidance in how to apply DI in reading most efficiently and how to organize groups in the classroom (Schumm, 2000).

**2.3.2 Traditional reading classes.** In traditional reading classrooms, direct instruction is used to focus on low-levels to compensate for their academic lag behind (Grossen, 2004). Grossen (2004) also stresses the importance of direct instruction as the most effective method. In the literature the term, 'direct instruction' is used to refer to the supplying of students with information that completely clarifies the notions and processes that they are supposed to obtain understanding of Kirschner, Sweller, and Clark (2006). According to a statement provided by Flores

and Kaynor (2007), all students can acquire knowledge, given suitable instructional strategies and application.

In an attempt to describe the characteristics of traditional classrooms, Tomlinson (2000) points out that diversity of students is often ignored or is not applied when there is a problematic situation. In addition, in traditional reading classrooms, multiple intelligence, learning profiles, and student interest are overlooked or an extremely superficial appreciation of these factors is conveyed. The focus of lessons is on the mastery of knowledge, on whole-class activities, and on the superiority of learning output. As Tomlinson (2000) pointed out in her book; assessment, in its single form, should be done at the end of the learning process in order to understand what students have learned. Finally, traditional reading classrooms are educational places where only instructors find the answer to complex problems and curriculum guidelines dominate the reading instruction. A good example of this description is found in the study of Maccini, Gagnon, Mulcah, and Leon (2006), in which traditional reading was implemented and the participant teacher used five strategic aspects of direct instruction: (1) revision of the former units; (2) providing a model text, directed and autonomous learning; (3) observing learner activity and making evaluation; (4) providing retraining; (5) providing overall assessment.

With respect to the analysis of reading texts in traditional reading classes, Sinatra (2000) draws our attention to pre-reading, while-reading, and post-reading activities that cause apprehension. This view is supported by Keaton, Palmer, Nicholas, and Lake (2007) who point out that traditional instruction endorses achievement of developing students. Similarly, in their study of learning styles Cook, Gelula, Dupras, and Schwartz (2007) have not noticed any proof of reading achievement. However, there is still a large empirical gap in the effects of DI strategies on EFL/ESL reading classes (Keaton et al., 2007).

#### **2.4 Extrinsic and Intrinsic Motivation.**

As well as being highly significant in EFL/ESL classes, motivation has been thought as a key factor in the development of all human disciplines (Ordem, 2017). It has been widely investigated that motivation is regarded as a source to achieve the ultimate aims (Alkaabi, Alkaabi, & Vyver, 2017). In the review of literature, Gardner's works are regarded as a basis for motivation (Kim, 2015). In his book,

Gardner (1985, p.10) describes motivation as “a combination of effort plus desire to achieve the goal of learning the language plus favourable attitudes towards learning the language”. For Oletic (2015), motivation is the major stimulus that an individual possess to complete a specific deed. Similarly, Topalov (2011) describes it as being an incentive to start an action and to continue to maintain it (cited in Oletic, 2015).

With respect to language learning, Dörnyei (2001) points out that motivation is broadly accepted as the achievement or failing factor. Brophy (2004) draws our attention to learners’ personal involvements such as enthusiasm and individual incentives in terms of stressing the importance of learner motivation. When students lack adequate motivation, long-term goals cannot be achieved, even though they may have the most noteworthy abilities, have studied appropriate curricula and possess autonomy in learning (Dörnyei, 2005). In the same vein, Palmer (2009) claims that it would be difficult for learners to initiate the learning process when they are deprived of motivation. Simanova (2010) stresses the importance of motivation by stating that it an essential feature which should be supported from the very starting point of language learning. Moreover, Karaoglu (2008) clearly states that in order to generate motivational methods, it is significant for teachers to recognize the needs and aims of learners. She also suggests some strategies to increase student motivation, such as the creation of a friendly classroom atmosphere, the encouragement of students to personalize the classroom environment, the creation of situations in which students can feel a sense of accomplishment, and the connecting of language learning to the students’ interests outside of the classroom.

In an attempt to understand the various types of motivation, Gardner and Lambert (1972) propose the most commonly used frameworks that are referred to as instrumental motivation and integrative motivation. While instrumental motivation is composed of learning a language for practical reasons, integrative motivation is referred to as the learning of a language to understand the people in the target culture.

Deci, Vallerand, Pelletier and Ryan (1991) divided motivation into two broad types: intrinsic motivation and extrinsic motivation; and over the past few years, there has been major concern on the field of extrinsic and intrinsic motivation (Oletic, 2014). Ryan and Deci (2000) define intrinsic motivation as an instinctive propensity to explore uniqueness, to encompass and practice one’s capabilities, and

to learn. In their article, Akpınar, Batdı, and Dönder (2013) highlight that intrinsic motivation comprises self-rewarding, and self-regulated manners of students for engaging purposeful activities. To put it precisely, in a school atmosphere, when their inborn emotional needs are satisfied, learners intrinsically motivated (Brophy, 2004). Furthermore, intrinsic motivation was found to be more worthwhile than extrinsic motivation in learning environment (Deci, & Ryan, 2000). To illustrate extrinsic motivation, Ur (1991) mentions appeasing parents and getting good grades as examples; and for intrinsic motivation he uses the examples of having fun, learner inner satisfaction.

## **2.5 Previous Studies**

**2.5.1 Previous studies on DI and traditional classrooms.** Fisher and Rose (2001) points out that every student acquires language in different ways. As a result, in order to develop their own theories, numerous well-known academics have examined various approaches which have been instrumental in shaping modern education (Brooks, 2004). However, a small number of educators have succeeded in applying these changed perceptions to their learning own environments, even though they now comprehend that learners learn in different ways and that their needs vary enormously and could sometimes even be described as miscellaneous (Guild, 2001). Likewise, Gavin and Casa (2012) confirm that there is still insufficient data for the empirical findings although several studies suggest that DI is effective in terms of providing an enriched classroom

Lawrence-Brown (2004) demonstrated evidence in her study that suitable learning can be achieved with the help of DI, where she uses a multilevel lesson plan which includes some very fruitful instructional approaches, in both skilled and unskilled students. Her research has also made clear the fact that instructors need to facilitate an environment where they can adjust the curriculum of the classroom to contain various supplementary materials such as visual aids, diagrams, and tape-recorders. In addition, working with 31 Mathematics teachers and 645 learners, Tieso (2005) confirmed the efficiency of differentiation so as to create a stimulating environment for above-level students. With the modification and differentiation of the curriculum which she developed, in a focused flexible setting, she found out that this kind of setting can increase students' academic success in mathematics.

Overall, these results indicate that the effectiveness of DI is confirmed in several studies, there is still limited evidence in the long run. As Ernest (2018) states, teachers are required and suggested to gather data in order to decide the impact of DI in their classes.

**2.5.2 Previous studies on motivation and DI.** Several studies have revealed that the promotion of learner diversity and needs seems to accelerate their motivation to learn a language whilst it inspires them to be fully engaged and remain positive (Stronge, 2004).

Servilio (2009) found out that there were more engaged students and that the language acquisition process was enriched by the combination of DI and the existence of some personal freedom of choice among the students. Throughout the program, during which Sevilio (2009) observed the impact of differentiation on reading motivation, she concluded that there were some positive outcomes in the participation of low-level students and some feelings of pleasure among all types of students. However, her research paper stated that time and energy spent on the preparation of differentiated reading lessons was so abundant in quantity that it would have discourage the teachers involved. In addition, it was difficult to spot those students with special needs and a chaotic atmosphere obtained when she tried to apply differentiated reading lessons. Nevertheless, she also addressed solutions to such problems like setting up a differentiated lesson plan ahead of time, identifying student profiles at the very beginning of the term and simply expecting students to be engaged. At the end of her article, she discussed some statistics that showed the grades of 83.4% of the students improved in reading, 12.5% remained the same and %4.1 declined. In her study of the impact of DI on the motivation of talented and gifted students in DI, Kondor (2007) used the DI strategy of a learning style record, a task choice board formed on learning types, and math patterns in order to increase engagement and motivation. According to the results of the study, there were some indications for its application in general education and for the education of talented and gifted learners. A minor but not insignificant growth of learner engagement and motivation through the use of a project choice board and math exemplars was observed, and teachers were recommended to make use of student choice boards and set the students authentic tasks. Similarly, Fenner, Mansour, and Sydor (2010) found increase on motivation of student through differentiated intervention where they

targeted low-level middle school students and students with lack of motivation. In another major study, Chen (2007) scrutinised the perceptions of students on some DI strategies such as tiered assignments. The data revealed that DI activities increased students' motivation, struggle, and self-confidence.

Overall, these results suggest that a number of studies revealed the positive effect of DI in educational context.

### **2.5.3 Previous studies on reading achievement.**

A number of studies have found that there has been serious decrease in middle school students' reading achievement because of their diversity of backgrounds (Lewis, James, Hancock, & Hill-Jackson, 2008). Therefore, a number of studies attempted to see the impact of DI on the academic achievement of students in different settings.

In the study of Baumgartner, Lipowski, and Rush (2003), when lesson plans were used to develop primary and middle school students' academic achievement in reading classes via DI, they observed significant development in students' interpretation, and in their developing phonemic and comprehension proficiencies, for which they offered their subjects flexible classroom setup, the learners' selection of readers, and various texts that students themselves could choose. Similarly, in Missouri, McAdams (2001) conducted research with teachers, in which he focused on the students with low test results. The study revealed that there was noteworthy improvement in the achievement of the students. Although this study was begun in some individual classrooms in the Rockwood School District, it was hidden from the whole school, because in the beginning, the school administration and staff resisted the application of DI settings. Nevertheless, with careful teaching conferences and careful guidance of teachers, the positive impact of differentiation was clearly seen. On his comprehensive study, that includes 7,675 students, about the effectiveness of DI; Borman (2015) found out evidence in statistically higher scores of students that were applied online DI strategies. On the other hand, in the experimental study of Little, McCoach, and Reis (2014), carried with 2,150 students and 47 teachers in a middle school, it is revealed that similar reading scores were found in the DI classroom and non-DI classroom. In the same vein, Barbara (2017) conducted a quantitative, quasi-experimental in which she explored the impact of differentiation on academic achievement of students. In experimental group, she applied the

framework that was based on Vygotsky's constructivist theory by making use of cooperative learning, and differentiated instruction whereas she used direct and traditional instruction for the control group. The study revealed no significant difference in achievement of students between DI and non-DI groups.

Taken together, a number of studies have revealed the positive impact of DI on the academic reading achievement of students. However, few studies also found no significant difference in academic achievement.

**2.5.4 Previous studies on behavioural problems in ESL classes.** Gregory and Chapman (2002) give prominence to safety in the learning environment on the level of intellectuality as well as in terms of physical or corporal conditions. The thing that causes the rational part of the brain to function poorly stems from cognitive functioning that is taken control of by the emotional centres in the brain, when learners are under stress. It would be extremely difficult for students to give their complete attention to learning if they feel that they are in danger of being laughed at or intimidated by their peers. Inevitably, if they cannot manage to envisage or recognize what they can accomplish, they will lack motivation to attempt anything challenging. In the study of Johnsen (2003), he encouraged them to use instruction differentiated as to content and practice, including learning centres, graded reading texts, and various other techniques. He found that the study had made possible worthwhile involvement for the student-teachers, where they were able to demonstrate mastery of the practice of differentiation techniques that led to improvement in the engagement and behaviours of the students. Likewise, Danzi et al. (2008) studied the effects of DI on motivation in MAC. The group of 72 students who participated in the study was comprised of 3<sup>rd</sup>, 5<sup>th</sup> and 8<sup>th</sup> grade students. First of all, when the classroom researchers noted a pervasive feeling of dullness and obstruction in the classroom, they were able to gather all the evident data for the cause of the problem. The results showed the many distracting behaviours derived from the students' inability to select satisfying free-time activities. Therefore, DI was provided as a possible solution; and in the interventional part of the study, free-time activities, tiered homework, and authentic assessment were made use of. As a result, fewer students were observed to experience distraction while working on a task and so the researchers conducting this study suggested that DI be continued. In summary,

these results show that DI has a positive effect on the behaviours and involvement of students in EFL/ESL classes.





## **Chapter 3**

### **Methodology**

In this chapter methodological approach in terms of the design of the study is analysed. Research design, setting, participants, DI intervention lesson plan, participants, procedure and limitations are described in this section.

#### **3.1 Research Design**

The purpose of this study is to understand the effect of DI on the student intrinsic motivation, academic achievement, and behaviours in reading classes. Basically, in this study, quasi-experimental research design, that is widely chosen in education context (Creswell, 2014), was used since participants were available and the groups were intact. Pre-test post-test design approach was applied to the quasi-experimental study. The experimental group was formed in order to understand the effect of 10-week DI lesson plan (APPENDIX A) based on the review of literature. On the other hand, in the focus group, traditional instruction was used. To provide quantitative data, Reading Motivation Questionnaire (RMQ) was conducted both in the experimental and control groups and it helped to have an understanding about how their intrinsic motivation changed through DI in reading classes. In addition, the BC that was kept both in the experimental and in the control groups during the intervention process were utilized to explore how DI had an impact on the behaviours of the students. Moreover, the effect of DI on the academic reading achievement of the students was provided by the data of Reading Achievement Test (RAT). Overall, in this current study, quasi-experimental, pre- and post- test design approach was adopted that used RMQ, BC, and RAT in the experimental group, with treatment, and in the control group, with no treatment, to understand the impact of DI on intrinsic motivation, behaviours, and academic achievement.

#### **3.2 Setting**

This study is conducted in the teaching setting of a middle school to collect information about the learning process of students in Bornova Bahçeşehir College where Personalized Education Modal (PEM) is applied. Learning styles of the students are analysed with the help of technology and academic staff program in the beginning of the education year. At Bornova Bahçeşehir College, at the kindergarten level, 70% of the weekly program is English, and 30% is Turkish. The students are

accompanied by one native teacher and one Turkish teacher. They are exposed to English both inside and outside of the classroom. From grade 1 to 5, 55% of the weekly schedule is English while 45% is Turkish. A balanced bilingualism is followed at these levels. Moreover, from the kindergarten level and on, students learn a second foreign language two hours a week, which they are expected to choose apart from English. At Grade 1 and 4, the medium of instruction is English for some lessons such as Engineering, Art, and Computer. From Grade 1 to 5, English is taught 18 hours a week, and second foreign language is taught 2 hours a week. As Content and Language Integrated Method (CLIM) is used, in these 18 hours English, 1 hour is Art, 1 hour is Science, and 1 hour is Computer lesson. The other lessons are taught in Turkish by classroom teachers and other branch teachers such as PE and Chess.

### 3.3 Participants

A total of 46 Turkish EFL Grade 5 elementary level students and a non-native English teacher voluntarily participated in the study. Before the study was administrated, the participant teacher had been teaching English for 17 years. The participant students were elementary and pre-intermediate level students studying at Middle School at Bornova Bahçeşehir College. Students have a 9 hour of Integrated Skills lesson, which is regarded as the main course. A textbook for English as a Foreign Language Learners is used by non-native teachers. 4 hours of Communicative Skills lessons are done by native teachers mainly focusing on reading, writing, speaking and listening. 2 hours of mixed skills lessons in which literacy is focused are taught by non-native teachers. Lastly, CLIM lessons include 1 hour of Art, 1 hour of Science, and 1 hour of Computer. Table 1 shows the weekly program of the students:

Table 1

*Weekly English-medium Instruction in the Curriculum*

<b>Course Name</b>	<b>Weekly hours</b>
Communicative Skills	4
Integrated Skills	9
Mixed Skills	2
Art	1

Table 1 (cont.d)

Engineering	1
Computer	1

Of the 23 participants in the experimental group, 11 of them were male and 12 of them were female. Their ages were between 11 and 12. 16 of the students had all passed two different English proficiency tests of *Common European Framework (CEFR)* including all productive and receptive skills to study A2 level. 3 of the students had come from government schools where English was taught 2 hours in a week and 4 of the students had come from non-bilingual private schools. Of the 23 participants in the control group, 12 of them were male and 12 of them were female, all of whom were at the age of 11 or 12. 21 of them had all passed two different English proficiency tests of *Common European Framework (CEFR)* including all productive and receptive skills to study A2 level. 2 of the students had come from government schools where English was taught 2 hours in a week and 4 of the students had come from non-bilingual private schools. Table 2 shows the demographic information about the experimental and control groups:

Table 2

*Demographic Information about the Experimental and Control Groups*

	<b>Experimental group n=23</b>	<b>Control group n=23</b>
Age	Between 10-11	Between 10-11
Gender	11 females 12 males	12 females 11 males
From private schools	19	21
State schools	4	2

### 3.4 Procedure

**3.4.1 Sampling.** The participants of this study are Grade 5 students from Bornova Bahçeşehir College where the classrooms are composed of mixed level

students. Therefore, convenience sampling (Creswell, 2014) was chosen as the practitioner and students were enthusiastic to participate in the study. On the categorization of the students' levels, Pre- RAT results and classroom observations were used. In the experimental group, out of 23 students: 8 of them were high-level students, 10 of them were on-level students and 5 of them were low-level students. In the control group, 9 of them were high-level students, 10 of them were on-level, and 4 of them were low-level students.

**3.4.2 Sources of data.** In this study, a mixed-method design was adapted throughout the data collection procedure. Quantitative data was collected through Reading Motivation Questionnaire (RMQ), Behaviour Checklist (BC) and Reading Achievement Test (RAT). Table 3 shows the summary of the data collection tools:

Table 3

*Data Collection Tools and Aims*

Data type	Instrument	Aim
Quantitative data	RMQ	to understand students' motivation on their learning in reading classes
	BC	to observe and record student behaviours during intervention
	RAT	to assess the effect of DI on reading achievement

**3.4.2.1 Reading motivation questionnaire (RMQ).** In order to measure the impact of DI, pre- and post- RMQ (Appendix B) were administrated in the experimental and control groups. The questionnaire was adapted from the study of Danzi et al. (2008), and it includes five Likert-type questions. The scale offers the choices of always, sometimes, and never. The students are asked how excited they are for reading classes at school, how often they get distracted during reading classes, how often their work is too hard in reading lessons, how often they feel bored when

their work finishes in reading lessons and to what extent they would like to have a choice in the kind of work they need.

**3.4.2.2 Behaviour checklist (BC).** The purpose of using BC was to observe the behaviours of students during the intervention process. BC (Appendix C) was adapted from Danzi et al. (2008). There are ten items in BC where score letters were utilized to demonstrate at what time each behaviour happened. The BC includes the number of students talking while doing the reading task, talking while listening to the instruction, playing with objects, distracting others, making disrespectful comments to one another, having a chance to select and activity when they finish fast, working on the assignments while doing the instructed activity, working slowly, doing the tasks reluctantly.

**3.4.2.3 Reading achievement test (RAT)** In order to assess the impact of DI on the reading achievement of the students, the RAT was administered in the experimental and control groups and it was prepared under the benchmarks of Common Core State Standards (CCSS). RAT included 12 multiple-choice and 3 gap filling questions which measured the levels of fact or opinion, main idea and details, make inferences and draw conclusion, cause and effect, compare and contrast, story elements, analysing characters, and problem-solution.

**3.4.3 DI intervention process.** Under the light of the review of literature, a 10-week lesson plan was prepared in order to differentiate the reading instruction for all levels of students in the experimental group. The plan was applied during the period of October 14, 2016, through January 16, 2017.

#### **3.4.3.1 Getting to know the learners**

**3.4.3.1.1 Understanding the readiness of students.** At the beginning of each unit or lesson, students' readiness level was defined by the help of materials such as diagnostic tests, pre-assessment tests, exit cards, concept maps, and brainstorming activities.

Once learners are provided with activities at modest levels of difficulty, they tend to maintain to learn, yet then the instructions are too hard or non-challenging they discontinue their learning process. Therefore, in the DI classroom, in order to differentiate the readiness level of students, the activities were aimed to engage low-levels and challenge on-level and high-level students. In some cases, low-level students were provided with anchor charts, key vocabulary, and simplified passages;

and above-level students were given higher order thinking questions. In the application of BC, the researcher also acted as a peer-teacher in order to help struggling students. In addition, tiered assignments were also used to vary the difficulty of the given task. Considering the proficiency level of the students, they were provided with graphic organizers, reading supports for some challenging reading materials.

The procedure was applied to the whole lesson plan; the practitioner was directed to make sure that students were all prepared to acquire new information and differentiation occurred at various levels of complexity. The notion of learning will be sustained when learners are attracted according to their interests.

**3.4.3.1.2 Understanding the interests of students.** Since the rudimentary aim of the current study is to understand the impact of DI on the intrinsic motivation of students through, several techniques were utilized in order to determine the interests of the students. To begin with, community circles in the classroom were created based on the classroom observations and interest questionnaires. These groups were aimed to enhance group investigation skills, collaboration and have students make presentations for their findings. Secondly, comprehensive access to the internet and technology provided many opportunities to find materials for their projects. They had a chance to read several graded reading materials both for pleasure and implement what they had learned. Thirdly, students were offered many choices of activities, topics, and products where their interests were taken into consideration. Last but not least, participation frequencies and abilities of students were respected and some activities were designed to meet this principle.

**3.4.3.1.3 Understanding the learning preferences of students.** Valuable effort was given to the analysis of students' learning preferences that include students' group orientation, learning styles, the knowledge of multiple intelligences and environmental factors. Learning Style Analysis (LSA) was conducted at the beginning of the education year as pre-assessment for the students' grouping orientation and learning styles. Table 4 shows the results of LSA of the experimental group:

Table 4

*Learner Preferences of the Experimental Group*

Student	Learning style	Multiple intelligences	Classroom design preferences
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Table 4 (cont.d)

(S1)	visual, kinaesthetic	logical-mathematical, kinaesthetic	pair
(S2)	auditory	interpersonal	group
(S3)	visual, kinaesthetic	kinaesthetic	group
(S4)	auditory		individual
(S5)	visual	interpersonal	pair, group
(S6)	auditory, kinaesthetic	musical, kinaesthetic	group
(S7)	auditory, kinaesthetic	intrapersonal	pair
(S8)	visual	interpersonal	group, pair
(S9)	auditory	musical	pair
(S10)	visual, auditory	musical	pair
(S11)	visual, kinaesthetic	logical-mathematical, kinaesthetic	pair, group
(S12)	visual	spatial	individual
(S13)	auditory	intrapersonal	individual
(S14)	visual, auditory	musical	pair, individual
(S15)	auditory	intrapersonal	individual
(S16)	visual, kinaesthetic	interpersonal, kinaesthetic	group, pair
(S17)	visual, auditory	musical, interpersonal	group
(S18)	visual	spatial	pair, individual
(S19)	auditory	intrapersonal	individual
(S20)	visual	spatial	individual
(S21)	visual, auditory	musical	group
(S22)	visual	kinaesthetic, interpersonal	group
(S23)	visual, kinaesthetic	kinaesthetic, interpersonal	group
(S24)	visual	spatial	individual

In terms of altering the design of the classroom, different alternatives were adopted for the whole-group, small group, individual, and pair instructions. The selections of the groups were occasionally decided by the teacher, occasionally by the students, and occasionally randomly. The whole-group instructions were created where students were able to see the board and all instructional materials used in the lesson where students were also able to work individually and in pairs. In the application of small groups, students were differentiated according to their readiness

and interests. Practice stations were created to meet the needs of struggling, on-level, and advanced students in which they were directed to use graded materials and tiered assignments.

Learning centres, named by students, remained permanent during the intervention process. Students had a chance to express themselves with various activities that are applicable to their learning styles. As a matter of fact, while kinaesthetically dominant students were asked to role play or act out the concepts of the learning; intrapersonal learners were directed to keep a journal of thoughts and feelings of their learning; musically dominant students were asked to create a jingle or compose a song; interpersonal students were asked to form debate groups; logical-mathematical students were directed to use the statistics and numbers.

In order to conduct the way of how students acquire information and considering their learning styles, 'learning stations' were formed which were trivial techniques to teach learners. The activities were designed to appeal all senses of students and a combination of styles was preferred for kinaesthetic, visual, and auditory learners for each lesson. Learning style components were implemented for the classroom by giving students a chance to choose what activity to follow, and which groups to work with.

All in all, in the implementation of the differentiating the learning profiles it was aimed to generate a language learning atmosphere in which students could work in flexible setting and learning choices. Students were also permitted to work individually, in groups, and with their peers where they found an option for reasonable, supportive and autonomous learning practices. Numerous activities were provided in a variety of intelligences that are suitable for visual, auditory, and kinaesthetic learners.

**3.4.3.2 Structural perspective of the DI classroom.** During the intervention process, a variety of structures were implemented. In many occasions, 'tic-tac-toe' boards were utilized for activities, projects, assignments. The aim of using them was to assess and evaluate the students' work with the same rubric while addressing their various interests, learning styles, or learning preferences. Another structural element that was used for the DI class was learning stations that was aimed to offer various activities at different spaces in the learning atmosphere. For some activities learners were directed to work independently according to their interests, they were also



separated according to their level of readiness. In addition to this, tiered assignments whose aim was to generate multiple forms of an activity were applied. After pre-assessments were done for a unit or for a lesson, activities were tiered according to different levels of students while meticulous attention was given for them to be appealing, motivating and stimulating for each student.

**3.4.4 Data collection procedure.** The central focus of this study is to understand the impact of DI on learners' intrinsic motivation, behaviour, and achievement in reading classes. Prior to the study, the researcher explained the aim of the study to the participant students and the participant teacher. The ethical clearance was obtained from the parent consent letter (APPENDIX A). The study took place in October 14, 2016, through January 16, 2017.

Before the intervention process, in order to identify students' intrinsic motivation about the reading classes at school, all of the participant students were asked to fill out the pre- RMQ (APPENDIX B). For the purpose of determining about the levels of students and their initial reading averages, the participant students took pre- RAT (APPENDIX D). The text took approximately 40 minutes. The participant students were informed that the results of RAT would not affect their grades. After the collection of pre- RAT and LSA, the classroom design was prepared to fit participant students' readiness, interests, and learner preferences.

During the process of intervention, DI lesson plan was applied for 10 weeks to the experimental group while the control group was applied the traditional instruction. In the experimental group, contingency plans for fast finishers were provided; games, competitions, and act-outs were included; students were encouraged to work in groups and pairs. In addition, every week tiered assignments were given in which students had a chance to work on different levels of the same material depending on their levels. Moreover, diagrams, charts, and portfolios were collected in order to assess the performance of the students. Visual aids and authentic materials were made use of when introducing the key elements and vocabulary items in order to attract the attention of different learner styles. The classroom design was created in such a way that it creates language learning atmosphere that is suitable for students' needs, interests, and readiness. In collaboration with the practitioner, DI-based language learning environment was created. On the other hand, in the control group, traditional instruction was applied. Reading instruction was formed on the

basis of revising the previous units, providing a model text and autonomous learning, observing students' activity, providing retaining, and providing overall assessment. BC (APPENDIX C) was conducted three times both in the experimental group and in the control group to see how the two different kinds of instructions affected the learners' behaviours.

After the intervention process, post- RMQ was administrated both in the experimental and the control group for the purpose of assessing their post- averages of intrinsic motivation; and post- RAT was conducted to assess their post- averages of reading achievement. The results of RMQ, BC, and RAT were analysed and compared to understand the impact of DI on the learners' intrinsic motivation, behaviours, and reading achievement.

**3.4.5 Data analysis procedure.** Data management and analysis were performed using SPSS 22.

First, in order to reveal the impact of DI on students' intrinsic motivation, the researcher examined the differences on the RMQ averages before and after the DI intervention lesson plan. Single-item scores provided a comprehensive analysis of each student's response to each question. The paired sampling t-test procedure was used to define the impact of DI on the intrinsic motivation of the experimental group and the control group to understand whether there was a meaningful difference between the motivation of students before and after the DI intervention lesson plan. The independent t-test analysis that is utilized to determine whether motivation pre-test averages differ meaningfully in the experimental and control groups.

Second, the purpose of the BC was to assess the occurrences of the behaviours listed on the checklist. The BC included 10 items in which tally marks were utilized to demonstrate when each behaviour happened.

Third, to measure the impact of DI on learners' reading achievement, the overall pre- and post- test scores were examined before and after the DI intervention lesson plan. The paired sampling t-test procedure was used to determine the impact of DI on the reading achievement of the experimental group and the control group to understand whether there was a meaningful difference between the average points of students before and after the intervention. Independent t-test that was used to

determine whether academic achievement averages differ meaningfully between the experimental and control groups.

In the usage of the t-test, the data must have a normal distribution (Mulder, 2014). Within the implementation of this study, the data analysis for RMQ and RAT have a normal distribution. Table 5 shows the quantitative statistics of RMQ and RAT.

Table 5

*The Quantitative Statistics of RMQ and RAT*

	<b>Pre- RAT</b>	<b>Post- RAT</b>	<b>Pre- RMQ</b>	<b>Post- RMQ</b>
Mean	72,0870	81,8913	2,4217	2,2478
Median	73,0000	84,0000	2,4000	2,2000
Mode	55,00	100,00	3,00	3,00
Variance	216,659	210,277	0,267	0,362
The lowest score	44,00	49,00	1,40	1,00
The highest score	95,00	100,00	3,00	3,00
Skewness	-,268	-,665	-,416	-,261
Kurtosis	-,958	-,438	-,760	-,906

In a normal distribution the mean, median, mode values are expected to be equal or alike. Kurtosis should be between  $-1 < x < +2$  and skewness should be  $-1 < x < +1$ . Histogram graphics of the data should be normally distributed (Can, 2014). According to the results of Table 5; mean, mode, median values are reported to be equal or alike and skewness and kurtosis values are in the expected range. Therefore, parametric analysis was used in the data analysis process. Figure 1 shows the histogram graphics of RMQ and RAT

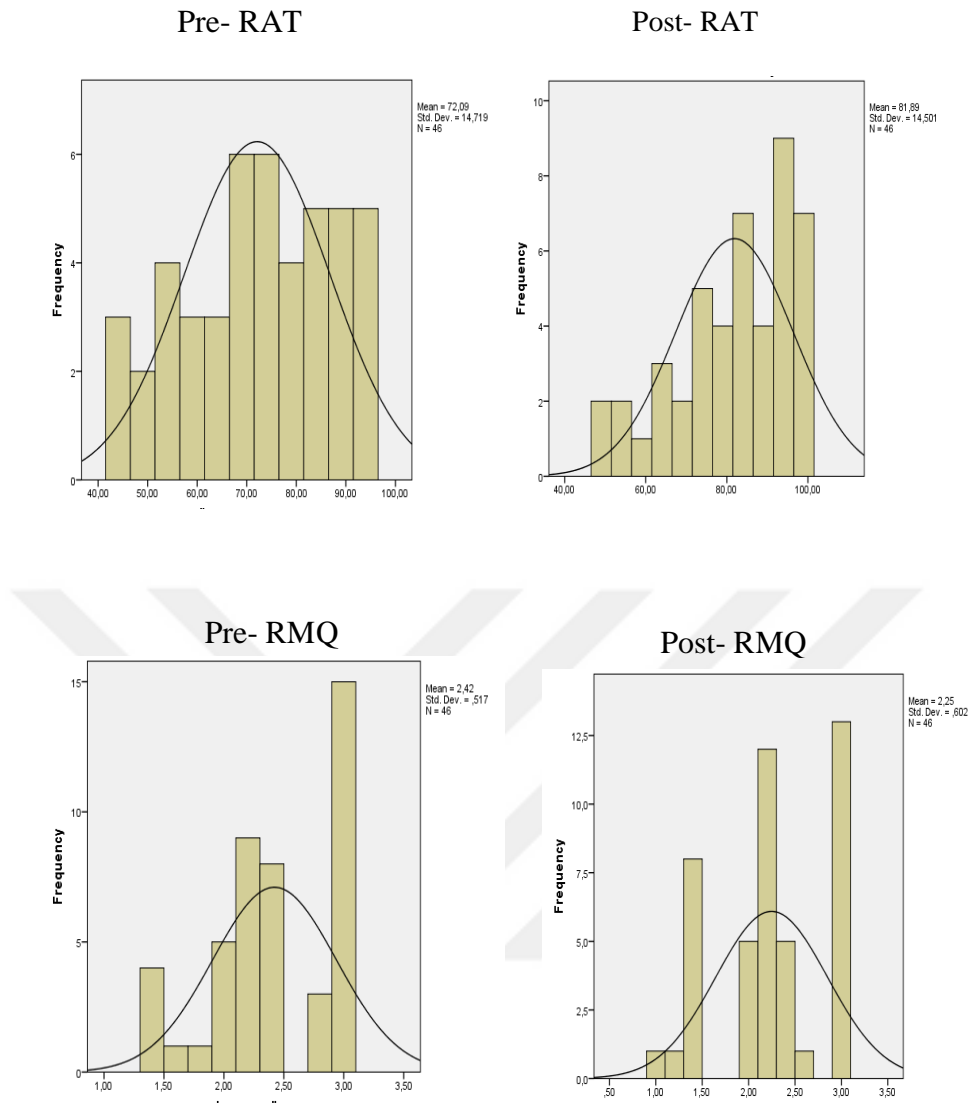


Figure 1. Histogram graphics of RMQ and RAT

**3.4.6 Validity and reliability.** The two dependent variables of this study, RMQ and BC, were based on the study of Danzi et al. (2008), which provided test-retest reliability as it was administrated twice at different time intervals. The study was administrated to 73 students in 2007. The other dependant variable, RAT was based on the levelling criteria that was outlined in Common Core State Standards (CCSS).

### 3.5 Limitations

In this investigation there are several sources for limitation. The main limitation is that this study has been conducted in only elementary and pre- intermediate level students. Therefore, it is not conceivable to oversimplify the findings to all language

proficiency levels. The second limitation of the study was sample size of the experimental and control groups. Because of the insufficient availabilities, the researcher carried out the study with 24 participants in each group, which limited the generalizability of the results. The last limitation of the study was absenteeism. Some of the participants did not attend the experimental and control groups because of health problems, which might be effective on the efficacy of the findings

The data was collected from 30 students enrolled at middle in Turkey. Consequently, the results of the study are valid for non-native learners of English in the context of Turkey.



## Chapter 4

### Results

In this chapter, the results of the three research questions are documented in this quasi-experimental study. Data analysis of these questions is based on empirical evidence gathered during this study through RMQ, BC, and RAT. The findings of the study are indicated below:

#### 4.1 Research Question 1: To what extent has DI influenced student intrinsic motivation in L2 reading lessons?

The purpose of using RMQ was to assess to what extent the student intrinsic motivation has changed throughout DI intervention process. RMQ aimed to seek an answer to what extent: a) students are excited about reading classes at school, b) they get distracted during reading classes, c) their work is too hard in reading lessons, d) they feel bored when their work finishes in reading lesson and e) they would like to have a choice in the kind of work they need. After the 10-week intervention process, students were given RMQ again.

Table 5

*The Paired t-test Results of the Average of Pre- and Post- RMQ of the Experimental Group*

Data Instruments	N	Mean	Std. Deviation	df	t	p
Pre- test	23	2,11	0,42	22	-4,356	0,00
Post- test	23	2,63	0,47			

Table 5 shows the paired t-test results of the average of pre- and post- RMQ of the experimental group. The paired sampling t-test procedure is used to define the impact of DI on the intrinsic motivation of the experimental group and it is implemented whether there is a meaningful difference between the intrinsic motivation of students before and after the intervention. The results show that there is a meaningful difference ( $t_{(22)} = -7,238$ ,  $p < 0,05$ ) between the averages of pre- RMQ ( $\bar{X} = 2,11$ ) and the averages of post- RMQ ( $\bar{X} = 2,63$ ). According to these results,

the methods and techniques that are used in the experimental group (DI) has a meaningful impact on the intrinsic motivation of students.

Table 6

*The Paired t-test Results of the Average of Pre- and Post- RMQ of the Control Group*

<b>Test</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>df</b>	<b>t</b>	<b>p</b>
Pre- test	23	2,73	0,41	22	9,192	0,00
Post- test	23	1,86	0,45			

Table 6 shows the paired t-test results of the average of pre- and post- RMQ of the control group. The paired sampling t-test procedure, that is used to define the impact of DI on the intrinsic motivation of the experimental group, is implemented whether there is a meaningful difference between the intrinsic motivation of students before and after the intervention. The results show that there is a meaningful difference ( $t_{(22)}= 9,192$ ,  $p<0,05$ ) between the averages of pre- RMQ ( $\bar{X} = 2,73$ ) and the averages of post- RMQ ( $\bar{X} =1,86$ ). According to these results, it is identified that standard methods and techniques that are used in the control group decreases the intrinsic motivation of students.

Table 7

*The Independent t-test Results of the Pre- RMQ of the Experimental and Control Groups*

<b>Groups</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>df</b>	<b>t</b>	<b>p</b>
Experiment group	23	2,11	0,42	44	-5,026	0,00
Control group	23	2,73	0,41			

Table 7 shows the independent t-test results of the pre- RMQ of the experimental and control groups. In the independent t-test analysis that is used to determine whether pre- RMQ averages differ meaningfully, it is identified that there

is not a meaningful difference ( $t_{(44)}=-5,026$ ,  $p>0,05$ ) between the average points of the experimental group ( $X= 2,11$ ) and the average points of the control group ( $X= 2,73$ ). In this regard, the pre- RMQ test averages of the experimental groups are found to be higher than the test averages of the control group.

Table 8

*The Independent t-test Results of the Post- RMQ of the Experimental and Control Groups*

Groups	N	Mean	Std. Deviation	df	t	p
Experimental group	23	2,63	,47	44	5,664	0,00
Control group	23	1,86	,45			

Table 8 shows the independent t-test results of the post- RMQ of the experimental and control groups. The independent t-test, that is used to determine whether intrinsic motivation test averages differ meaningfully, shows that there is a meaningful difference ( $t_{(44)}=5,664$ ,  $p<0,05$ ) between the average points of the experimental group ( $X= 2,63$ ) and the average points of the control group ( $X= 1,86$ ). It is identified that the experimental group's post- RMQ averages are higher than the control group's post- motivation test averages.

According to these results, educational techniques and methods that are used in the experimental group (DI) are more effective on the intrinsic motivation of students than the traditional methods and techniques used in the control group.

**4.2 Research Question 2: To what extent has DI influenced student behaviours in reading lessons?**

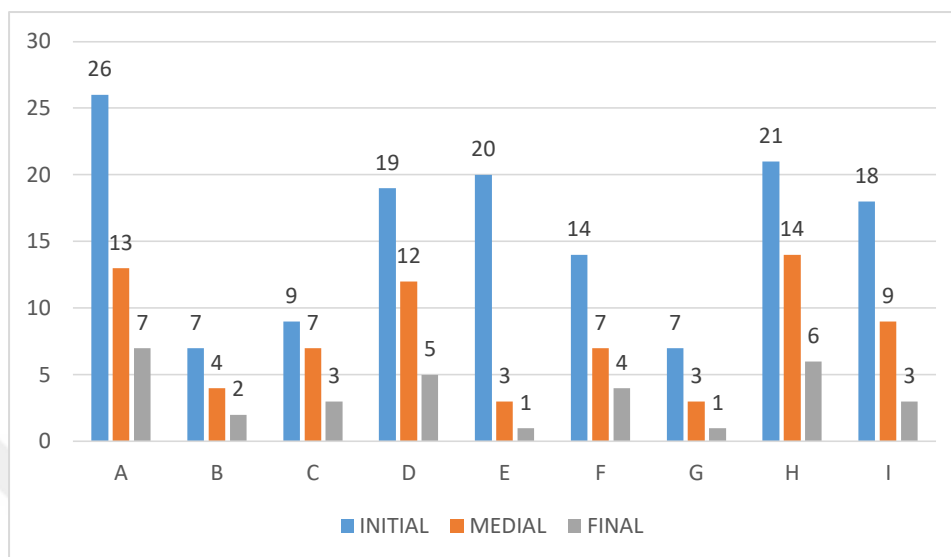
Research question 2 aims to explore the impact of DI on the students' classroom behaviours in reading lessons. During the 10-week intervention process, the researcher used BC, on which tally marks demonstrated when each behaviour happened, in order to observe the behaviours of the experimental and control groups.

On BC, the number of students a) talking while doing the reading task, b) talking while listening to the instruction, c) playing with objects, d) distracting



others, e) making disrespectful comments to one another, f) having a chance to select and activity when they finish fast, g) working on the assignments while doing the instructed activity, h) working slowly, i) doing the tasks reluctantly were specified.

### *Experimental Group*



*Figure 2.* The results of the BC in experimental group

Figure 2 demonstrates the initial, medial and final states of the BC which was recorded during the period of intervention. The initial process covered the first 3 weeks (14 November – 2 December), the medial process covered the next four weeks (5 December – 30 December) and the final process covered the final 3 weeks (2 January – 21 January). Each letter on the table symbolises a specific behaviour as follows:

- A) Talking while doing the reading task
- B) Talking while listening to the instruction
- C) Playing with objects
- D) Distracting other students
- E) Fast finishers do not have a chance to select an activity
- F) Disrespectful comments to one another
- G) Working on other assignments while doing the instructed activity
- H) Working slowly
- I) Doing the task reluctantly

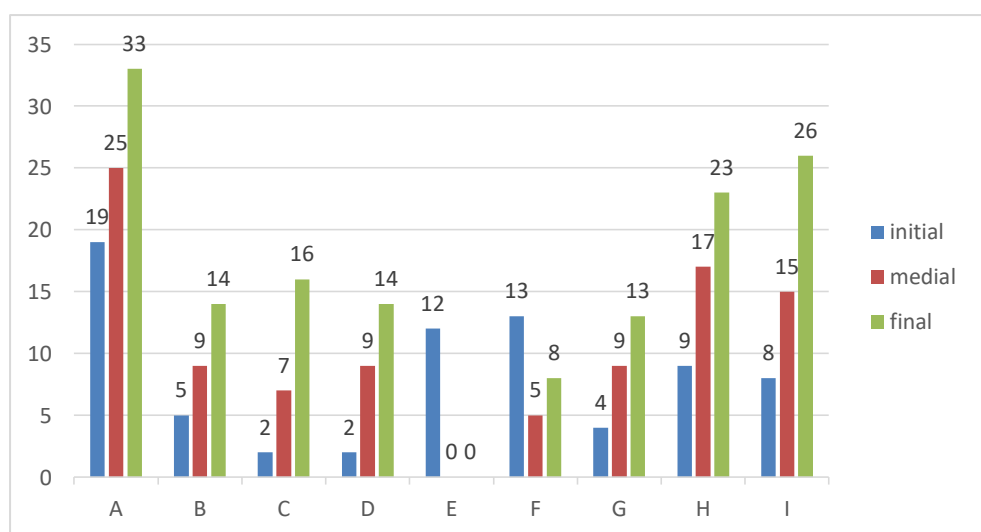
During the initial stage, the number of students talking while doing the reading activity was 26 and the number of students talking while the teacher was giving an instruction was 7. 9 students played with an object and 19 students distracted other

students. The number of fast finishers who did not have a chance to choose an activity was 20. In addition, 14 students made disrespectful comments to one other, 7 students worked on other assignments while doing the instructed activity, 21 students worked slowly and 18 students did the task reluctantly.

Medial stage covered the process between week 4 and week 8. During this process, the number of students talking while doing the reading activity was 13 and students talking while the teacher was giving an instruction was 4. 7 students played with an object, 12 students distracted other students. The number of early finishers who did not have a chance to choose an activity was 3. Moreover, 7 students made disrespectful comments to other students, 3 students worked on other assignments while doing the instructed activity, 14 students worked slowly and 9 students did the task reluctantly.

During the final stage, which composed the last three weeks, the number of students talking while doing the reading activity was 7 and the number of the students talking when the teacher was giving an instruction was 2. The number of the students playing with objects was 3, and distracting each other was 5. 1 early finisher did not have a choice to select an activity, 4 students made disrespectful comments to each other, 1 student worked on other assignments, 6 students worked slowly and 3 students did the tasks reluctantly.

*Control Group*



*Figure 3. BC in the control group*

According to the findings of BC that was conducted at the initial stage, the number of students talking while doing the reading activity was 19 and 5 students were observed talking while the teacher was giving an instruction. The number of

students that played with an object was 2 and the number of students that distracted other students was 2 as well. 12 fast finishers did not have a chance to choose an activity. Moreover, 13 students made disrespectful comments to one other, 4 students worked on other assignments while doing the instructed activity, 9 students worked slowly and 8 students did the task reluctantly.

During the process of medial stage, the number of students talking while doing the reading activity was 25 and students talking while the teacher was giving an instruction was 9. 7 students played with an object, 9 students distracted other students. The number of early finishers who did not have a choose an activity was 0. Moreover, 5 students made disrespectful comments to other students, 9 students worked on other assignments while doing the instructed activity, 17 students worked slowly and 15 students did the task reluctantly.

During the final stage, which composed the last three weeks, the number of students talking while doing the reading activity was 33 and the number of the students talking when the teacher was giving an instruction was 14. The number of the students playing with objects was 16, and distracting each other was 14. 0 early finisher did not have a choice to select an activity, 8 students made disrespectful comments to each other, 13 student worked on other assignments, 23 students worked slowly and 26 students did the tasks reluctantly.

This combination of findings of BC provides some support for the conceptual premise that DI has positive influence on the behaviours of students.

### **4.3 Research Question 3: To what extent has DI influenced L2 reading achievement?**

RAT was administrated in the experimental and control groups to assess the impact of DI on the reading achievement of the students. RAT included 12 multiple-choice and 3 gap filling questions which measured the levels of fact or opinion, main idea and details, make inferences and draw conclusion, cause and effect, compare and contrast, story elements, analysing characters, and problem-solution.

Table 9

*The t-test Results of the Average of Pre- and Post- RAT of the Experimental Group*

<b>Data Instrument</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>df</b>	<b>t</b>	<b>p</b>
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Table 9 (cont.d)

Pre- test	23	70,04	16,24	22	-7,238	0,00
Post- test	23	82,08	15,26			

Table 9 shows the t-test results of the average of pre- and post- RAT of the experimental group. The paired sampling t-test procedure, which is used to determine the impact of DI on the reading achievement of the experimental group, is adapted whether there is a meaningful difference between the average points of students before and after the intervention. The results show that there is a meaningful difference ( $t_{(22)} = -7,238$ ,  $p < 0,05$ ) between the average points before the intervention ( $\bar{X} = 70,04$ ) and the average points after the intervention ( $\bar{X} = 82,08$ ). The effect size ( $d = 0,77$ ) that is calculated regarding test results show that the difference is found high. According to this result, the methods and techniques that are used in DI has a meaningful impact on the academic reading achievement of students in the experimental group.

Table 10

*The t-test Results of the Average of Pre- and Post- RAT of the Control Group*

<b>Data Instrument</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>df</b>	<b>t</b>	<b>p</b>
Pre- test	23	74,13	13,05	22	5,059	0,00
Post- test	23	81,69	14,03			

Table 10 shows the t-test results of the average of pre- and post- RAT of the control group. The paired sampling t-test results are used to determine how DI effects the reading achievement of the control group and whether there is a meaningful difference between the average points of students before and after the intervention. The results of the control group show that there is a meaningful difference ( $t_{(22)} = 5,059$ ,  $p < 0,05$ ) between the average points before the intervention ( $\bar{X} = 74,13$ ) and the average points after the intervention ( $\bar{X} = 81,69$ ). The effect size ( $d = 0,51$ ) that is calculated regarding test results show that the difference is found medium.

Table 11

*The Independent t-test Results of the Pre- RAT of the Experimental and Control Groups*

<b>Groups</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>df</b>	<b>t</b>	<b>p</b>
Experimental group	23	70,04	16,24	44	-,940	0,35
Control group	23	74,13	13,05			

Table 11 shows the independent t-test results of the pre- RAT of the experimental and control groups. According to the independent t-test that is utilized to determine whether academic achievement averages differ meaningfully, there is not a meaningful difference ( $t_{(44)} = -0,940$ ,  $p > 0,05$ ) between the average points of the experimental group ( $X = 70,04$ ) and the average points of the control group ( $X = 74,13$ ). In this respect, the pre- achievement test results of the experimental and control groups are found the same.

Table 12

*The Independent t-test Results of the Post- RAT of the Experimental and Control Groups*

<b>Groups</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>df</b>	<b>t</b>	<b>p</b>
Experiment group	23	82,08	15,26	44	,090	0,92
Control group	23	81,69	14,03			

Table 12 shows the independent t-test results of the post- RAT of the experimental and control groups. The independent t-test analysis, which is utilized to determine whether academic achievement averages differ meaningfully, shows that there is not a meaningful difference ( $t_{(44)} = 0,090$ ,  $p < 0,05$ ) between the average points of the

experimental group ( $X= 82,08$ ) and the average points of the control group ( $X= 81,69$ ). However, the average post- RAT points of the experimental group are found to be higher than the control group's average post- RAT points.

According to these results, in terms of reading achievement, there is not a significant difference of DI based lesson plan that is used in the experimental group (DI) in comparison with the traditional instruction used in the control group.



## Chapter 5

### Discussion and Conclusion

In this chapter, the researcher discusses the results of the data analysis given in the previous chapter in detail in relation to the research questions. Herein, the researcher will discuss the main findings regarding the research questions. At the end of the discussion, the researcher will address their implications and provide conclusions, suggestions and recommendations for further studies in foreign language learning.

#### 5.1 Discussion and Findings for Research Questions

This study set out with the aim of assessing the impact of DI on middle school students' motivation, behaviours, and reading achievement. In this section, the discussions of the results were provided in the same order as the results were given. The quantitative data findings of the study were gathered through Reading Motivation Questionnaire (RMQ), Behaviour Checklist (BC) and pre- and post-Reading Achievement Test (RAT).

**5.1.1 Discussion of RMQ findings.** This study revealed that teaching instructions and approaches used in the experimental group (DI) were more effective on the motivation of students than traditional based instruction that was used in the control group. The analysis of the pre- RMQ about the motivation of students on the reading lessons showed lack of motivation towards reading. Before the intervention process, they were asked how excited they are about reading lessons, how often they get distracted, how often they thought their work is too hard, how often they feel bored when their work finishes, and to what extent they would like to have choice in the work they do. The findings of motivation analysis are resonant with numerous studies:

To begin with, the study of Danzi et al. (2008) revealed the positive effect of DI on motivation in MAC. The research was done with 22 Grade 3 students, 23 Grade 5 students, and 28 Grade 8 students. Similar to the findings of this research, most of the students (79%, n=58) were sometimes or never excited about reading lessons while some of them were excited (21%, n=15). The percentages of students who got distracted easily also alike in both studies. Majority of students (90%, n=66) sometimes and always got distracted while a few of them (10%, n=7) never got

distracted. In addition to this, the results are parallel to the question that students think they get distracted in reading lessons. A great majority of the students think that they get distracted in reading lessons in both studies. As for the bar graph showing the results of students' thoughts of how often their work is too hard in reading lessons, the results also revealed that most of the students (77%, n=56) found their work is sometimes and always too hard in reading lessons. Bar graphs that show how often students feel bored when their work finishes in reading lessons tell similar findings. Most of the students (60%, n=44) feel bored when their work finishes in reading lessons on the study of Danzi et al. (2008). There is also an important similarity between the two studies about the students' preferences about having a choice in the kind of work they read. Almost all of the students (99%, n=72) would like to have a choice in the kind of work they read.

Secondly, the results also resonate with the study of Stonge (2004) who supports the encouragement for the needs of students and student diversity that lead to motivation by providing them engaging activities and positive language environment. Current study adopted plenty of options in order to engage students of different levels. The choice boards contained activities and homework assignments that were suitable for the needs, interests, and learning preferences of students. As a matter of fact, struggling students were provided with simplified reading text with anchored lists that made them involved in the given task which provided a supportive language learning environment.

Thirdly, similar to the research of Servilio (2009), DI classroom resulted in generating more motivated learners in which language acquisition procedure was developed. Findings of the research also revealed that DI had a positive effect on the participation of struggling students and pleasure of all students as well as the improvements in the academic achievement in reading classes.

Lastly, the results are correlated with the research of Kondor (2007) that used DI strategies for the record of learning styles as well as 'tic-tac-toe' boards that are based on learning types, and Math Pattern to enhance participation and motivation. Though the results showed a minor growth for the participation of the learners, the current study showed a meaningful difference on the motivation of students within the enrichment of DI structures and strategies.



**5.1.2 Discussion of BC findings.** The data gathered through BC showed a decrease in negative behaviours of students in the classroom where DI was adopted.

The results of the BC are consistent with many other studies. Firstly, the ideas of Gregory and Chapman (2007) for the fact that students will be more involved in the learning process when they are provided with diversity of materials. As the fundamental aim of the current research was to reach all types of learners through differentiation, the behaviours were also effected in a positive way. Learning centres which were constructed according to different levels and interests of the students made them participate in the activities willingly. When they had difficulty in comprehending long texts, they were provided with supporting materials such as anchor charts and key vocabulary which made disruptively and students who made disrespectful comments to each other participate in the activities. In addition to this, students that were working slowly were provided with scaffolding that made their task challenging rather than overwhelming. Secondly, Tomlinson's (2001) "on task behaviour" was confirmed that DI removes meaningless distractions that are made by the learners that are uninterested and feel they are not challenged. In the experimental group, the data revealed a decrease in the number of students who did the tasks reluctantly. The reason for this is the incontrovertible effect of DI that appealed for the various interests of the students. Furthermore, DI was also prominent for early finishers that had a choice to select levelled reading materials that included a number of selections. To illustrate this point, the number of fast finishers who did not have a chance to choose an activity was 20, in the medial stage, this number fell to 3; at the final stage, it was 1. Thirdly, in correlation with the study of Heacox (2012) adopting DI, rather than traditional instructional alternatives, advances the students that have a variety of learning levels, particularly those who have behaviour disorders in view of the fact that it braces the hyperactive, troublemaking, and impulsive learners. During the initial stage of the behaviour observation process, the number of students talking while doing the reading activity was 26; this number decreased by 7 on the final observation. The last but not least, the study of Bender (2012) revealed a sharp decrease in the number of students that had behavioural problems through the interaction of a variety of techniques and methods that met their needs and interests. He also revealed that on the contrary to the approaches and methods that are used in a traditional classroom atmosphere, the

approaches and methods used in DI classrooms give disruptive students the ability to demonstrate their numerous capacities along with providing them chances to make them involved with a variety of activities that suit their learning styles.

**5.1.3 Discussion of RAT findings.** The results of this study did not show any significant difference in the reading achievement of the DI classroom and the traditional classroom. However, average post- test scores of the DI classroom were found higher than the control group's average post- test scores.

In the experimental study of Little, McCoach, and Reis (2014), no significant difference was found in the DI classroom and non-DI classroom. Likewise, in Barbara (2017) quasi-experimental study, she found no significant difference in achievement of students between DI and non-DI groups. The findings of the current study are in agreement with Little, McCoach, and Reis' (2014) and Barbara's (2017) findings which showed no significant difference in academic achievement of students between DI and traditional groups.

On the other hand, the approval that is proposed by Lawrance-Brown (2004) about the effectiveness of language acquisition through DI showed diverse outcome in this study in which the unit plans of the DI classroom included several materials such as visual aids, charts and graphic organizers. Similar to his study, Baumgartner, Lipowski, and Rush (2003) had utilized a curriculum to improve school success of elementary and secondary school students' in reading lessons through DI, and they noticed noteworthy improvement in pupils' interpretation skills, phonemic and comprehension skills where they proposed flexible grouping system, levelled-books, and the choice of several reading materials. In addition, Tieso (2005), who worked with 31 Mathematic teachers and 645 learners, revealed the efficiency of DI in order to generate motivating atmosphere for high achievers. Along with DI curriculum, she shaped intensive flexible setting and she revealed that this could improve academic success of students in Maths. Correspondingly, it can be said that flexible setting that was used for this study also improved the academic success of middle school students in reading classes. However, the findings of the current study do not support the findings of these studies.

## **5.2 Conclusion**

This study scrutinised the impact of DI on behaviours, motivation, and academic achievement of middle school students in reading classes. Within the analysis of quantitative data, the research questions were explicated. The procedural perspective and main findings of the research may be summarized as follows:

Firstly, considering the diversity of the students that created classroom management issues and boredom in the classroom, the researcher obtained an impression to meet the needs, interests, and their learning preferences regarding their academic achievement, participation, and motivation. Under the light of the review of literature, it was DI that gained the most prominence in terms of providing a learning environment for the benefits of different levels of students. In order to understand the impact of DI two groups were formed. While the experimental group was provided with DI unit plans for 10 weeks including strategies, structures, and materials that are specific to DI; the control group was facilitated with traditional education approaches.

Secondly, in order to perceive the effect of DI on the motivation of students, pre- and post- RMQ were analysed. The analysis of independent and t-test results showed educational techniques and methods that are used in the experimental group were more effective on the motivation of students than the traditional methods and techniques that were used in the control group.

Secondly, BC was conducted both in the experimental group and in the control group provided an insight of the effect of DI on the behaviours of the students. In contrast with the control group, the number of negative behaviours decreased and positive behaviours increased in the experimental group. Moreover, students that were provided with choice elements and contingency plans felt engaged in the lessons.

Thirdly, the data of pre- and post- RAT provided an awareness on the effectiveness of DI in reading lessons. According to the results, there was not a significant increase on the academic reading achievement of the students. Nevertheless, the average scores of DI classroom were higher than the average scores of the traditional class.

Last but not least, although the participant teacher had some difficulties in the implementation of the activities at the beginning, she observed invaluable effect of DI during and after the intervention process.

All in all, the results of the current study proved that DI has a positive impact on motivation, behaviours; although academic achievement of the DI classroom was not significant. Likewise, the practitioner-teacher that facilitated a language learning environment through DI observed the noticeable effects that gave her an insight about meeting the needs, interests, and learning preferences of her students.

### **5.3 Recommendations for Future Research**

The current study has demonstrated positive outcome in terms of increasing the middle school students' motivation, and positive behaviours in reading classes through DI. However, there was not a significant difference in the reading achievement scores of students. Regarding the main findings and limitations following recommendations can be considered for future studies.

To begin with, the study was administrated on a small size of students that comprised only one classroom out of six in Grade 5 students. Consequently, in order to make broad analysis, it can be implemented to larger groups of various levels. In addition, there was a disadvantage of time and energy that were required for the preparation of the intervention lesson plan; however, the lesson preparation procedure becomes more automatic as it is practised when the whole unit plans are completed. Finally, at the beginning stage, the classroom can be chaotic as students are not accustomed to this type of instruction. Nevertheless, careful planning and classroom routines will create a simple DI lesson to conduct.

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## APPENDICES

### A. PARENT CONSENT FORM

**Title: “The Impact of Differentiated Instruction on Learners’ Motivation, Behaviours, and Achievement”**

Dear parents,

The purpose of this form is to provide you (as the parent of a prospective research study participant) information that may affect your decision as to whether or not to let your child participate in this research study. The person performing the research will describe the study to you and answer all your questions. Read the information below and ask any questions you might have before deciding whether or not to give your permission for your child to take part. If you decide to let your child be involved in this study, this form will be used to record your permission.

If you agree, your child will be asked to participate in a research study about the impact of differentiated instruction on their motivation, behaviours, and academic achievement. The purpose of this study is to understand the impact of differentiated instruction in comparison with traditional instruction by seeking answers to these questions: (1) To what extent has DI influenced students’ L2 intrinsic motivation in reading lessons? (2) To what extent has DI influenced students’ classroom behaviours in reading lessons? (3) To what extent has DI influenced students’ L2 reading achievement?

If you allow your child to participate in this study, they will be observed during the process of research and they will be asked to complete Reading Motivation Questionnaire before and after the research. In addition, they will be assessed in terms of reading achievement before and after the intervention process. The study will take place in October 14, 2016, through January 16, 2017

Although all studies have some degree of risk, the potential in this investigation is quite minimal. All activities are similar to traditional classroom procedures, and all performance is anonymous. Your child will not benefit in any way by taking part in this study. Your child’s grades will not be affected in any way,



whether they want to take part in the study or not. The data that is collected may lead to an increased understanding of the role differentiation in reading lessons, and whether students feel more challenged and engaged in reading curriculum due to differentiation. We will record no information about you or your child that could identify you. In addition to your permission, your child must agree to participate in the study. If your child does not want to participate they will not be included in the study and there will be no penalty. If your child initially agrees to be in the study they can change their mind later without any penalty.

Your child's participation in this study is completely voluntary. Please sign and return the attached permission slip below if you are willing to allow your child to participate. Your support is greatly appreciated.

Sincerely,

\_\_\_\_\_ has my permission to participate in the above mentioned (Child's name) research study that will be conducted by the school vice principal Mr. Aras.

Signature of

Parent/Guardian\_\_\_\_\_

Date\_\_\_\_\_

## B. READING MOTIVATION QUESTIONNAIRE (RMQ)

Please circle one response that shows how you feel about each statement. This survey must remain anonymous, therefore do not write your name anywhere on this paper.

1. I am excited about reading classes at school.

Always



Sometimes



Never



2. I get distracted during reading lessons.

Always



Sometimes



Never



3. My work is too hard in reading lessons.

Always



Sometimes



Never



4. I feel bored when my work finishes in reading lessons.

Always



Sometimes



Never



5. I would like to have a choice in the kind of work I read.

Always



Sometimes



Never



## C. READING ACHIEVEMENT TEST (RAT)

### (PRE- AND POST- TEST)

Name \_\_\_\_\_ Date \_\_\_\_\_

#### We Love Bamboo

Bamboo is a great plant.

It grows faster than most other plants. Trees take many years to grow tall.

Some bamboo can grow tall in three or four months.

One bamboo plant can have many stems.

A few bamboo plants can grow into a whole forest.

We use bamboo to make many different things. Bamboo can be used to make paper or a floor for a house.

We can even use bamboo to make music. Giant pandas and other animals eat young bamboo.

We can eat young bamboo, too!



**Instructions:** Read each question carefully and choose the best answer.

1- Which sentence from the passage tells an opinion about bamboo?

- a) Bamboo is a great plant.
- b) Bamboo grows faster than most other plants.
- c) Bamboo is used to make many different things.

2- How long does the passage say it takes bamboo to grow tall?

- a) Three or four weeks
- b) Three or four months
- c) Three or four years

3- Which building material is most like bamboo?

- a) wood
- b) paint
- c) glass

4- What do giant panda do with young bamboo?

- a) They make music
- b) They wear it.
- c) They eat it.

5- Circle *True* or *False* for the statements about bamboo

- a) It is a tall plant with many stems (True / False)
- b) It is a small plant with a few stems (True / False)
- c) It is a large plant that only grown in very small areas. (True / False)

## Quick Check Answer Sheet

### We Love Bamboo

1. Which sentence from the passage tells an opinion about bamboo?  
A Bamboo is a great plant. *Fact or Opinion*
2. How long does the passage say it takes bamboo to grow tall?  
B three or four months *Main Idea and Details*
3. Which building material is most like bamboo?  
A wood *Make Inferences / Draw Conclusions*
4. What do giant pandas do with young bamboo?  
C They eat it. *Main Idea and Details*
5. T, F, F

Name \_\_\_\_\_

## Leopards

Leopards are big cats that like to climb and hide.

They can be as big as a person, but they run much faster.

Leopards are great at climbing trees.

They carry big animals up into the trees to eat them.

They also carry their kittens up into the trees to protect them.

Leopards are great at hiding, too. Some have yellow fur with dark spots. Others have dark brown or black fur.

Their fur can be so dark that you can't see their spots. The special colors help them hide high in the trees.



**Instructions: Read each question carefully and choose the best answer.**

6. The leopards climb the trees because .....
7. Leopards have\_\_\_\_\_.
  - a) no spots
  - b) stripes
  - c) darkspots
8. All leopards are alike because .....
9. What helps a leopard hide?
  - a) its specialcolours
  - b) its kittens
  - c) its fast speed
10. Read this sentence from the passage:*Theycarrytheir kittens up into the trees to **protect** them.* What does **protect** mean?
  - a) feed
  - b)keep safe
  - c)visit high places

## Quick Check Answer Sheet

6. the want to eat food *Cause and Effect*
7. Leopards have \_\_\_\_\_.  
C dark spots *Main Idea and Details*
8. How are all leopards alike?  
B They are great at hiding. *Compare and Contrast*
9. What helps a leopard hide?  
A its special colours *Cause and Effect*
10. Read this sentence from the passage: *They carry their kittens up into the trees to **protect** them.* What does **protect** mean?  
B keep safe *Vocabulary*



Name \_\_\_\_\_

### The Great Zoo Escape

“I promised we would escape,” the old ostrich told her flock. A younger ostrich said, “Yahoo, no more zoo!”

Each creature looked happy. The animals had run away on tiptoe past the zoo patrol.

“We’re free!” two donkeys shouted.

“But I’m hungry,” one of the amphibians said. “Who will feed us?”

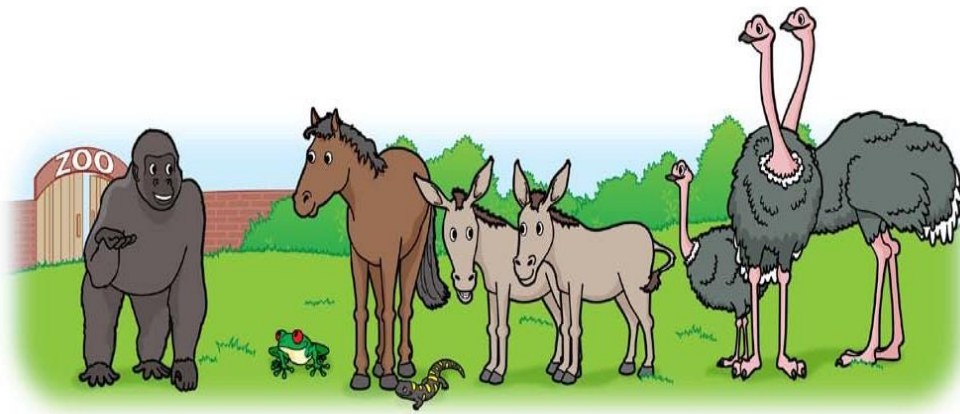
The animals looked at each other.

“I’m tired,” said the mare, “and I miss my bed.” Nobody knew what to say.

Then the gorilla made a speech. “This was fun,” he said. “Now, shall we tiptoe back inside?”

The animals cheered and shouted,

“Let’s go home!”



**Instructions:** Read each question carefully and choose the best answer.

11. The animals escaped from .....
12. How did the feelings of the animals change during the story?
- a) from calm to nervous to calm again
  - b) from bored to excited to bored again
  - c) from angry to joyful to angry again
  - d) from happy to sad to happy again
13. Read these sentences from the passage: *The animals had run away. They had **tiptoe** past the zoo patrol.* What does **tiptoe** mean?
- a) walk quietly
  - b) dance happily
  - c) race quickly
  - d) stomp loudly
14. Which of the animals solved the problem at the end of the story?
- a) the old ostrich
  - b) one of the amphibians
  - c) the gorilla
  - d) one of the donkeys
15. Why did the rest of the animals not know what to say after the amphibian and the mare complained?
- a) They realized they were not so happy outside the zoo.
  - b) They were shocked that the amphibian and mare had been so rude.
  - c) They did not understand what the amphibian and mare had said.
  - d) They did not agree with the amphibian and mare.

## Quick Check Answer Sheet

### The Great Zoo Escape

11. Where did the animals escape from?  
B a zoo *Story Elements*
12. How did the feelings of the animals change during the story?  
D from happy to sad to happy again *Analyse Character*
13. Read these sentences from the passage: *The animals had run away. They had to **tiptoe** past the zoo patrol.* What does **tiptoe** mean?  
A walk quietly *Vocabulary*
14. Which of the animals solved the problem at the end of the story?  
C the gorilla *Problem and Solution*
15. Why did the rest of the animals not know what to say after the amphibian and the mare complained?  
A They realized they were not so happy outside the zoo.  
*Make Inferences / Draw Conclusions*

### D. BEHAVIOUR CHECKLIST (BC)

Observed behaviours	WEEK1	WEEK2	WEEK3	WEEK4	WEEK5	WEEK6	WEEK7	WEEK8	WEEK9	WEEK10
Talking while doing the reading task										
Talking while listening to the instruction										
Playing with objects										
Distracting other students										
Fast finishers do not have a chance to select an activity										
Disrespectful comments to one another										
Working on other assignments while doing										

the instructed activity										
Working slowly										
Doing the task reluctantly										



**E. DI UNIT PLAN**

**Subject/Course Code/Title/Curriculum Policy:**

**Duration:** Number of X-minute periods

**WHAT DO WE WANT STUDENTS TO LEARN?**

Overall Expectation(s)/Specific Expectation(s): *Students will:*

Prior to this lesson, students will have:

- .....

**PRIOR LEARNING**

**HOW WILL WE KNOW STUDENTS HAVE LEARNED IT?**

<p><b>Assessment/Success Criteria</b></p> <p><i>Achievement Chart Category</i></p> <ul style="list-style-type: none"> <li>• ... criterion</li> <li>• ... criterion</li> </ul>	<p><b>Assessment Tool(s)</b> (i.e., checklist, rubric, rating scale, anecdotal comments, marking scheme)</p>
<p><b>Evaluation: Culminating Task(s)</b></p>	
<p><b>HOW WILL WE DESIGN INSTRUCTION AND ASSESSMENT TO HELP STUDENTS LEARN</b></p>	
<p><b>Knowledge of Students</b></p> <p>Differentiation based on student:</p> <p><b>Need to know:</b></p> <ul style="list-style-type: none"> <li>• Students' ...</li> </ul> <p><b>How to Find Out</b></p> <ul style="list-style-type: none"> <li>• ...</li> <li>• ...</li> </ul> <p><b>Differentiated Instruction Response</b></p>	

<b>POSSIBLE LEARNING EXPERIENCES</b>	
<b>Whole Class or Groups: Learning Experience—Strategy and/or Structure</b>	
<i>Note: the DI THREE-PART LESSON PLANNER MAY BE USED HERE TO OUTLINE INDIVIDUAL LESSNS.</i>	
Materials and Resources— Teacher	Materials and Resources—Student
<b>Differentiated Instruction Lesson Planner</b>	<b>SUBJECT/COURSE</b> <b>CODE/TITLE/CURRICULUM</b> <b>POLICY</b>
	DURATION: NUMBER OF X-MINUTE PERIODS  1. (strategies* and structures**) 2. 3. 4.
<b>DI INSTRUCTION DETAILS</b>	



**Knowledge of students**

Differentiation based on student:

**need to know**

. Students' ...

**How to find out**

.....

**Differentiated Instruction Response**

**CURRICULUM CONNECTIONS**

**overall expectation(s):**

. ...

**specific expectation(s):**

. ...

**Learning Goal(s):**

**ASSESSMENT AND EVALUATION**

**assessment/success Criteria**

**assessment tool(s):** (i.e., checklist,  
rubric, rating scale, anecdotal

<i>Achievement Chart Category</i>  ... criterion  Etc.	comments, marking scheme):
--	----------------------------

### **PRIOR LEARNING**

Prior to this lesson, students will have:

- 
- 
- 

### **MATERIALS AND RESOURCES**

--

**MINDS ON**

- . Establishing a positive learning environment
- . Connecting to prior learning and/or experiences
- . Setting the context for learning

**Whole Class or Groups Learning experience including structures/Instructional strategies**

Description



**ACTION**

- Introducing new learning or extending/reinforcing prior learning
- Providing opportunities for practice and application of learning

Whole Class or Groups: Learning Experience including Structures/Instructional Strategies

Description

**CONSOLIDATION AND CONNECTION**

- . Helping students demonstrate what they have learned
- . Providing opportunities for consolidation and reflection

**Whole Class or Groups Learning experience including structures/Instructional strategies**

Description

**F. DI LESSON PLAN ACTIVITIES**  
**TIERED ACTIVITY FOR BELOW-LEVEL**

Name: \_\_\_\_\_

Directions: Compare and contrast Charlie McButton, Isabel Jane in the squares below. Some information has been completed for you.

Charlie McButton

loves computer  
games  
He is rude

enjoy watching TV  
enJoy ahting

Isabelle Jane

loves playing with her dolls  
She is kind

TIERED ACTIVITY FOR MIDDLE LEVEL

Name: \_\_\_\_\_

Directions: Compare and contrast Charlie McButton, Isabel Jane in the squares below.

Charlie McButton

Play's  
computer  
games.

Isabelle Jane

Likes TV.  
Like eating  
together.

Play's with  
her dolls.

TIERED ACTIVITY FOR ABOVE-LEVEL

Name: \_\_\_\_\_

Directions: Compare and contrast Charlie McButton, Isabel Jane, and yourself in the squares below.

Charlie McButton

Isabelle Jane

Hates singing Hates modeling a clay hates cleaning			Playing with dolls
Playing computer games	Playing watching TV		
Playing the guitar Singing a song			

PRE- AND POST- ASSESSMENT

KWL CHART

© Pearson Education

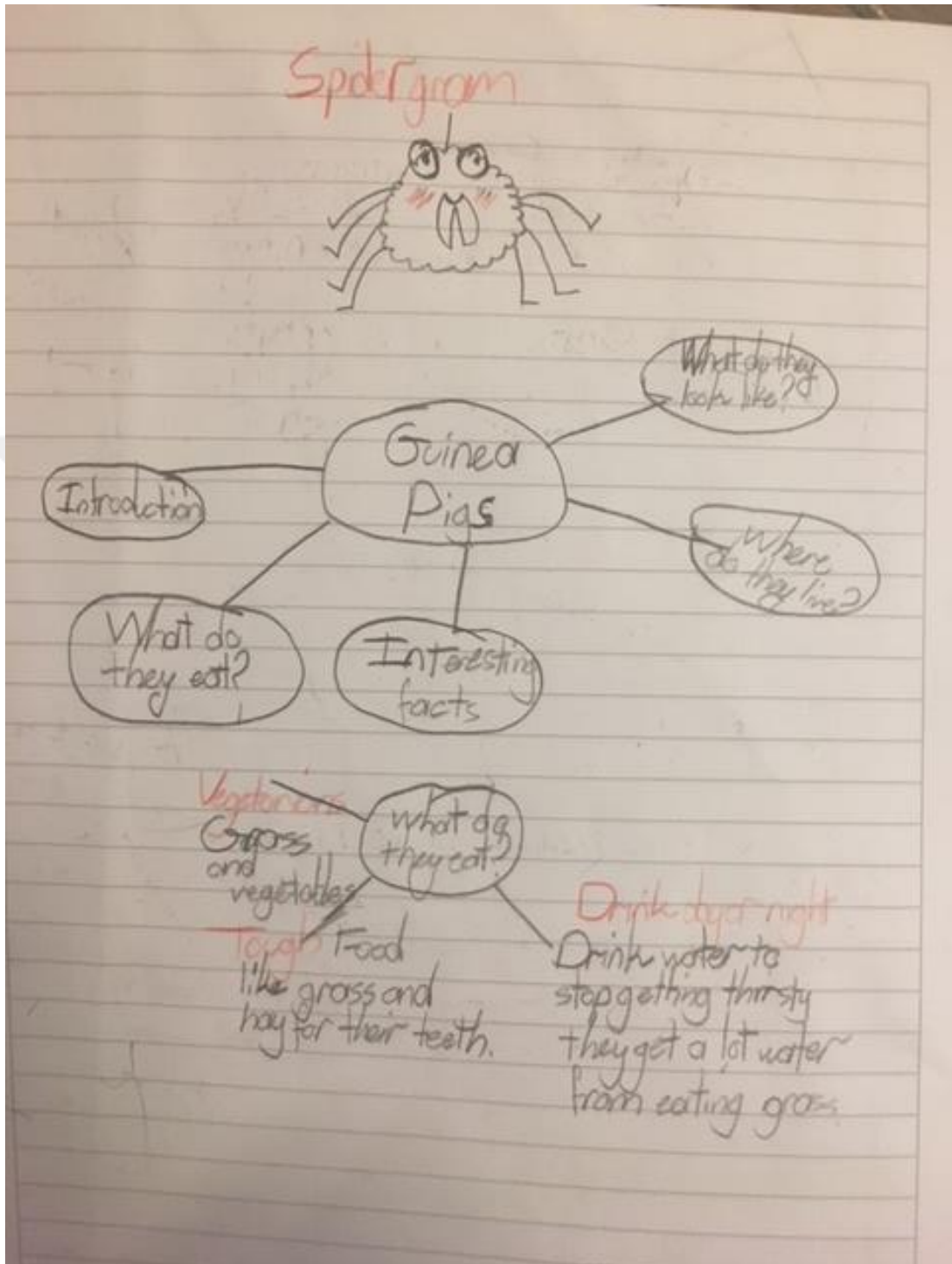
## K-W-L Chart

Topic Bats

What We <b>K</b> now	What We <b>W</b> ant to Know	What We <b>L</b> earned
<ul style="list-style-type: none"><li>- Bats can fly.</li><li>- Bats can see at night.</li><li>- Bats are black.</li><li>- Bats have sharp teeth.</li></ul>	<ul style="list-style-type: none"><li>- Do they swim?</li><li>- Where do they live?</li><li>- Do they have other colors?</li></ul>	<ul style="list-style-type: none"><li>- They sleep all day</li><li>- They eat fruit</li><li>- They drink the Juice</li></ul>



**CONCEPT MAP ACTIVITY  
(PRE- ASSESSMENT)**




# FACT DIAGRAM

**ANIMAL RESEARCH REPORT** by: \_\_\_\_\_


Animal Name: Goat Wonderful work

This animal is a:  Amphibian  Bird  Fish  Insect  Mammal  Reptile

Here is a picture of my animal



My animal's habits at 15,.....



**Animal Facts**

Height/size: 41-58 heights

Weight: 20-140 kilograms

Colour: White

It has fur / Feathers / Skin: Goats have fur

What it eats: weeds bushes and leaves

Where it lives: In barns

Predators: Cats

Lifes pan: 15-19 years

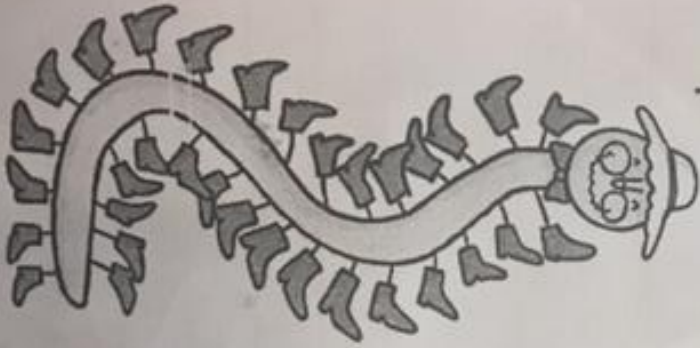
Three interesting facts about

1	Goat milk is the most consumed milk per capita worldwide
2	Goats can be taught their name and to count down to 5
3	The lifespan of a goat is 15-19 years

KEY VOCABULARY FOR BELOW-LEVEL

Name \_\_\_\_\_

# Centipede



caring	rude	happy
beautiful	friendly	rude
angry	ugly	sly
evil	handsome	kind
clever	nasty	gentle
honest	wicked	cross
pretty	horrible	brave
grumpy	mean	noble
shy	wise	calm
bold	polite	smart
helpful	scary	unkind
smart	furious	cunning
unkind	cruel	charming

Word  
Meaning

**TIERED ACTIVITY**  
**CHARACTER DEPICTION**

Name \_\_\_\_\_ Grade \_\_\_\_\_

## Character Description

My character's name is: StarG Bow



Circle some words that describe your character:

bold friendly fierce  
clever kind beautiful  
caring rude unkind  
angry furious calm  
moody shy smart  
handsome helpful honest  
happy ugly wicked  
nasty scary pretty  
cross polite grumpy  
horrible mean

Write some sentences about your character:

StarG Bow is really caring. Her party makes people want her to help even more. She's really happy but like every person she can be sad. She is really shy she likes to be friend but she can't get social. She is smart when she's against to forces of evil she can think of a strategy.

# READING COMPREHENSION

## GRAPHIC ORGANISERS

**Habitat**  
Where do they live  
They can live in deserts, jungles, underwater and in their web.



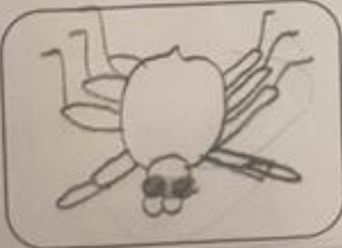

**Food**  
What do they eat?  
Lizards, birds, insects and mice.

**Appearance**  
What do they look like?  
Number of legs: 8  
Number of eyes: 8  
Other: They have 2 body parts which makes them not insects.

**Interesting Facts:**  
- Female spiders eat their husbands if they're hungry  
- Their blood is blue.  
- They jump in droplines.  
- Spider webs contain venom.  
- Mother spiders can lay over 3,000 eggs on one time.

Fill in the life of the Spider: \* Lay eggs \* Egg Sac \* spiderling \* Adult \* Web

Draw a picture to go with each



## CURRICULUM VITAE

### PERSONAL INFORMATION

Surname, Name: Aras, İsmail

Nationality: (T.C.)

Date and Place of Birth: 18 February, 1987

Marital Status: Single

Phone: +90 555 748 21 57

Email: ismail\_aras1@yahoo.com

### EDUCATION

Degree	Institution	Year of Graduation
High School	Akhisar Anatolian Teacher Training High School	2005
BS	Hacettepe University English Language Teaching	2010

### WORK EXPERIENCE

Year	Place	Enrolment
2010-2014	TED College	English Teacher
2014-2018	Bahçeşehir College	English Teacher