

Proposing the Introduction of Personalised Learning and Differentiated Learning into Saudi Arabian Education

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Abstract: Personalised learning and the differentiated curriculum are ideal strategies to explore the needs of students and take full advantage of students' abilities so they can achieve better outcomes in the learning process. This study focuses on the differentiated curriculum and explores its suitability for Saudi Arabia considering the country's current education policies and vision. The study consists of three stages: reviewing the global personalised learning and differentiation literature, investigating the current education policies in Saudi Arabia, and reviewing the available differentiation literature conducted in Saudi Arabia. The findings suggest that despite the obstacles found in the application including low family participation and resistance from teachers this teaching strategy is suitable for Saudi Arabia. The Saudi vision for education and the country's current policies do not conflict with the principles of differentiation, although success may require patience and building teacher capacity. With only a limited number of studies about differentiation in Saudi Arabia, more research about the impact of school management on the implementation of the differentiated curriculum is necessary.

Keywords: Differentiated education approach, Education Strategies, Personal Learning.

مقترح إدخال التعلّم الفردي والتعلّم المتميّز في التعليم السعودي

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المستخلص: يعدّ التعلّم الفردي ونهج التعليم المتميّز استراتيجيتان مثاليتان لاكتشاف احتياجات الطلاب والاستفادة الكاملة من قدراتهم حتى يتمكنوا من تحقيق نتائج أفضل في عملية التعلّم. تركز هذه الدراسة على هاتين الاستراتيجيتين وتستكشف مدى ملاءمة نهج التعليم المتميّز في التعليم السعودي بالنظر إلى سياسة ورؤية التعليم السعودي الحالية. تتكون الدراسة من ثلاث مراحل وهي: مراجعة للدراسات العربية والأجنبية السابقة التي ركزت على التعليم الفردي والتعليم المتميّز. بالإضافة إلى بيان سياسات التعليم الحالية في المملكة العربية السعودية، وأخيراً مراجعة لبعض الدراسات التي أجريت في المملكة العربية السعودية في مجال التعليم المتميّز. أشارت النتائج إلى أنه على الرغم من وجود بعض العقبات في تطبيق التعليم المتميّز في التعليم السعودي إلا أن الدراسات التجريبية التي أجريت في التعليم السعودي أثبتت أن استراتيجية التعليم المتميّز تعتبر مناسبة للتعليم في المملكة العربية السعودية. ولا

تتعارض مع سياسات وروى التعليم السعودي، على الرغم من أن نجاح تطبيق هذه الاستراتيجيات التعليمية يتطلب الوقت والصبر وبناء قدرات ومعارف المعلمين على التكيف مع هذا النهج. ولوجود عدد محدود فقط من الدراسات حول التعليم المتميز في المملكة العربية السعودية، فمن الضروري إجراء المزيد من الأبحاث حول نهج التعليم المتميز وكيفية تأثير إدارة المدرسة على تنفيذه بالطريقة الصحيحة.

الكلمات المفتاحية: نهج التعليم المتميز، استراتيجيات التعليم، التعليم الفردي.

1. INTRODUCTION

1.1 Background

Education is considered one of the most important areas for a nation to focus on, particularly in terms of quality of life outcomes for its young people. However, with the rapid explosion of knowledge in today's world and the increasing diversity of the student population, education faces many challenges (Hobgood and Ormsby, 2010). Because students are at several different educational levels, teachers are now required to find several modern teaching methods to use in the classroom in order to keep up with the educational process and achieve the desired educational goals (Alrabat, 2014). This paper argues via the examination of current educational policies in Saudi Arabia that two types of modern educational strategies—personalised learning and the differentiated curriculum—can successfully be applied there. As personalised learning and the differentiated curriculum are innovative approaches in the Saudi context, the researcher examines five recent research investigations into the possibility of introducing these concepts into Saudi schools.

1.2 Research Aim and Question

This research seeks to explore how appropriate a differentiated instruction approach would be for the education system in Saudi Arabia. In addition, I investigate the nature of personalised learning and how it can be endorsed within the differentiated curriculum. This paper is a literature review that explores the nature of personalised learning and the differentiated curriculum and how these pedagogical principles could be applied in the educational system in Saudi Arabia. This paper consists of three sections. The second section reviews the literature on personalised learning and the differentiation curriculum. It focuses on definitions of personalised learning, its most important principles, and some obstacles to its application. In addition, the differentiation approach is defined together with some of its most important underlying principles. Section three of this paper focuses on education in the Saudi context by examining its structures and policies. Section four and five focus on differentiation studies applied in Saudi Arabia and discuss the possible findings of this paper. The last section summarises the significant findings and implications and clarifies limitations and the potential direction of future studies.

The research question is: How would applying the differentiated curriculum in Saudi schools be realised in the current climate of Saudi education policies?

2. Personalised Learning and the Differentiated Curriculum

The diversity of the classroom in the twenty-first century forces teachers to engage with many challenges and tasks, the most important of which is meeting different and varied students' needs within the classroom. To do this, teachers must find a balance between their students' needs and formal education requirements (Hobgood and Ormsby, 2010). As Bloom (1982) points out, it is necessary to consider the individual differences among learners in terms of their abilities, willingness, and orientations because each student differs in their ability and processes of their learning. Each learner has his or her own way of learning and receiving information, and responding to and dealing with the information, according to his or her own ability.

Because of these differences and discrepancies among learners, Tomlinson (1995) argues that there is no common system capable of teaching all students, and thus it is neither logical nor acceptable to teach all students the same way. On this point, Hobgood and Ormsby (2010) raise a relevant question: "if we have learned that there are many effective teaching aids and methods that meet the required standards, and which may lead to the development and improvement of the performance of students in classrooms, then why do not we use them?" (p. 1).

In response to the above, many modern educational trends have emerged in the field of teaching that focus on the need for diversity in the learning and teaching methods used in an education system. This has been referred to as the differentiated curriculum (DC), and it is considered an appropriate gateway for any teacher looking for a strategy that deals with the diversity of learners' patterns (Obydat, and Abu Samyd, 2013).

It is understood that the teacher is fundamental to the educational process and that modern educational philosophy calls for the development of the teacher's role from a source of knowledge to a director, a mentor, and a facilitator for students. More recent developments have focused on students in such a way that the learner becomes a partner in the educational process and bears part of the responsibility that gives him a more active role alongside his teacher in making curriculum decisions and learning. The increased responsibility in learning may lead to self-regulation as students get to know themselves as learners (Alcalipha, 2007; Leadbeater, 2004). Consequently, Leadbeater (2004) has used a simple concept to define the personalised learning approach as "putting the learner at the heart of the education system" (p. 3).

There is no doubt that teachers face many obstacles in the classroom with which they must deal appropriately. One of the most significant challenges comes from student diversity in areas such as cultural background, language, economic status, and even learning difficulties (Hobgood and Ormsby, 2010). In Saudi Arabia, students are likely to share the same language; however, they differ in their social and economic status, their learning abilities, and their needs. Therefore, differentiation is a catalyst for the development of students' academic achievement (Tomlinson, 1995; Alhalisy, 2011; Almahdawi, 2014).

Differentiation is also an effective and viable approach to restructuring and arranging the traditional classroom, as the main goal of education is to take full advantage of the ability of each student to learn (Subban, 2006; Tomlinson, 2014). In this paper, Tomlinson's definition of the differentiated curriculum will be used to investigate the feasibility of differentiation in Saudi education. Tomlinson (2005) defines differentiation in education as a teaching philosophy that supposes that better learning for students depends on their teachers' understanding of students' differences in their level of readiness to learn, their interests, and learning profiles.

The main purpose of this study is to explore the possibility of the application and use of personalised learning and differentiation, to assess their relevance to classrooms and learning in Saudi Arabia, and to see if these innovative curriculum approaches align with the vision of the Saudi government and its policy for educational innovation and reform (Alshagham, 2016).

According to the 2017 budget reform files, Saudi Arabia spends more than 200 billion Saudi riyals on the many efforts it makes towards the development of education (Ministry of Finance, 2017). The Saudi government has built modern universities and supported many students in continuing on to higher education locally and abroad; the government has also made a commitment to introducing modern technology to the field of education (Hugail, 2016; Ministry of Education, 2017). In addition, the Saudi Education Ministry's vision focuses on promoting the quality of educational outcomes by developing students' skills and learning abilities and encouraging creativity (Ministry of Education, 2017). To do this, the Saudi Education Ministry has developed curricula in line with modern scientific developments (Nasr, Al-Zubayani, & Al-Leithi, 2010). Even so, personalised learning and the differentiated curriculum are new concepts for education in Saudi Arabia, and these approaches may need to build from the education platform that currently exists. Therefore, this paper will investigate to what extent these two approaches are applicable to Saudi education.

2.1 Personalised learning in education

Personalised learning is considered a modern education approach. It is a simple concept that can be defined as "putting the learner at the heart of the education system" (Leadbeater, 2004, p. 3). The concept of personalised learning has been developed through different international education systems, resulting in the creation of different understandings and definitions based on specific national contexts. Multiple definitions of personalised learning have been found in various books, published papers, and reports about the exact meaning of the term. The Department for Education in the UK (2007) defined personalised learning in its 2020 vision report (DfES) as "focusing in a more structured way on each child's learning in order to enhance progress, achievement and participation" (p 8), where the focus is on the students' and parents' efforts to contribute to the learning process. The U.S. Department of Education has

defined personalised learning or personalisation by the emphasis on instructions and learning objectives that are tailored to students' needs and interests by enhancing the students' motivation.

Moreover, Fullan (2009) refers to a significant feature of personalised learning, which is that every student creates his own meaningful learning experience that meets his own needs and interests, thus supporting the students as they grow into effective individuals in their society.

Regarding the main principles of personalised learning, Williams (2013) identifies six major principles or themes in order to achieve the objectives and the goals of personalised learning in a school environment, which can be summarised as follows:

- 1- Locus of control: the learning process should be student-centric, where the student can play an essential role in planning and designing the activities and the instructions.
- 2- Knowing students as learners: personalised learning approaches tend to identify each student by their interests, needs, motivational aspects, and progression.
- 3- Student engagement: the personalised learning environment should allow students to effectively participate in the classroom. This approach may help students control their own directions and be a part of what they learn, increasing their self-esteem. The role of teachers is to lead and manage the discussion and learning process.
- 4- Collaboration: in the personalised learning environment, students are both learners and contributors. They simultaneously share with their teachers the features of teaching and learning.
- 5- Effective use of ICT: effective use of ICT is considered a key element of personalised learning since it extends the learning resources for the students from only a few textbooks to unlimited and different sources of information. This helps the students to expand their knowledge and access information any time they need it.
- 6- Classroom culture: an effective personalised learning environment requires effective, highly qualified teachers, as well as classrooms that are already prepared for this type of learning.

In addition to these principles, the Department for Education in the UK (DfES) (2007) and the Office for Education Policy and Innovation (2006) mention one more significant principle of personalised learning: community engagement in the learning process—including parents, carers, and local support institutions—in order to remove any barriers and increase the effectiveness of personalised learning.

It is significant in this research to discuss the difference between the concepts of personalisation, individualisation, and differentiation. Although all three of the concepts are used synonymously to refer to the idea of personalised learning, each has a specific focus. While personalisation is learner-centric, both individualisation and differentiation focus on the instruction aspects. Based on the U.S. Department of Education's definitions, personalisation is more comprehensive and includes both individualisation and differentiation (2010). In differentiation, instructions are designed based on learning preferences, while

instructions in individualisation are designed based on learning needs. However, personalisation allows instruction to be tailored and based on learning needs, preferences, and students' individual interests.

Personalised learning goals and features have been discussed in depth by the Centre for Educational Research and Innovation report (2006). The reports indicate that personalised learning focuses on providing education based on every student's strengths and also their learning difficulties. Each student has a profile that shapes his or her assessment based on the particular student's learning needs and interests. A personalised learning approach encourages teachers and educators to promote students' confidence and competence, which could be achieved by promoting and developing teaching strategies based on every student's needs. Furthermore, personalised learning allows students to engage differently with the same curriculum, taking into consideration their interests and needs when classroom participation activities differ according to ages and learning needs.

Saudi Arabia is positioning itself within a global context wherein all young learners should have the ability and expectation to be able to understand, solve, and engage with complex world problems and developments. The shared goal is that all students will achieve the highest standard, learning about themselves as learners in the process. Although the practical application may be rigid in some schools, personalised learning suits the positioning of learning within a global context.

2.1.1. Barriers and Contentions with the Personalised Learning Approach

It appears that the personalised learning approach has spread widely, having been applied in many educational institutions around the world. The greater prevalence of this approach has only increased its importance. However, there are many critics who believe that this approach is still ambiguous. Among these critics is Fielding (2006), who believes that personalised learning and the differentiated curriculum as concepts are ambiguous, while others such as Pykett (2009) claim that this approach fails to address broad educational problems including the right to learn. In addition, some critics have pointed out that the pedagogy in a personalised learning approach cannot suit the students because personalised learning advocates claim to give freedom to the learner, in comparison to the traditional learning pedagogy (Prain et al., 2013). This view has been confirmed by Campbell and his colleagues (2007), who have mentioned that this is contrary to the current reality of a prescribed and age-related curriculum, which is considered mandatory for students. It seems there is no room for choice. In addition, there are fears of a lack of cohesion that is thought to affect the academic achievement of learners since teachers' expertise is depended upon to help students set their own learning goals. In addition, this approach is affected by the provision of curricula that supports and provides materials to address students' learning goals (Prain et al., 2013).

The previous arguments show that the personalised learning approach faces many critiques and obstacles as alleged by some critics. However, it has gained approval from many educators, academics,

and those who want to improve the educational process. Moreover, the majority of schools have a group of students, comprised of gifted students and students with learning difficulties, who require special and ongoing support and skills development to improve their learning abilities. This undoubtedly requires continuous work and everyone's effort—whether from inside the school, home, or even from the wider society—to draw up clear learning objectives and future plans for the learning process. On the other hand, proponents of the personalised learning approach have proposed solutions for different learning issues that have emerged in schools, and these deserve to be applied to see if they do indeed provide solutions to such common arguments (The glossary of education reform, 2015).

2.2 Differentiation in Education

Differentiation approaches in education suppose that every individual in the education system has a unique learning style and ability, and also that every student has varying interests and strengths (Sarason, 1990). Tomlinson (2009) indicates that it is difficult to find two people of the same age who have the same educational methodology and the same patterns or way of thinking. Thus, there is no uniform way to deliver a curriculum. The basic goals of differentiation in the educational process are to advance education and to find the most effective way to teach each student (Tomlinson, 2009). These goals require that teachers understand and address any disparities between students in terms of their thinking, experience, ways of learning, orientations, and attention spans. George (2005) refers to the effectiveness of using differentiated curriculum within classrooms based on his 40 years' experience in education. Therefore, differentiated education is not just considered a learning strategy or an educational recipe—the main objective of differentiation in education is that students obtain maximum benefits from their learning (Tomlinson, 2000).

There are multiple definitions of differentiation in education. In Oxford Online Dictionary, to differentiate is "to make (someone or something) appear different or distinct" (2017, Para. 3). There are many definitions that mainly focus on the student. Hall (2002) defines differentiation as acknowledging students' differences in their backgrounds, readiness levels, languages, interests, and learning profiles. Through this definition it is clear how important it is for teachers to be familiar with the historical backgrounds of their student and to seek appropriate solutions to overcome any learning problems of students, as these may affect the future of students' learning.

Another comprehensive definition of differentiation in education is Tomlinson's (2005), born of her own popular and convincing approach to differentiation. Tomlinson (2005) defines differentiation in education as a teaching philosophy that supposes that better learning for students depends on their teachers' understanding of students' differences in their level of readiness to learn, their interests, and learning profiles. Akos, Cockman, and Strickland (2007) are consistent with this definition. They believe that students' levels differ among themselves, and the principle of differentiation in education is that every

student has different interests and varying abilities. Supporting differentiation in education, Tomlinson and Kalbfleisch (1998) confirm that the basic differences between students have to be considered because ignoring these differences may lead to students' lack of success, disengagement, and failure.

The attraction of the differentiation approach for teachers is that it invites them to consider the benefits of all students of different affiliations, cultures, and abilities (Subban, 2006). Noble (2004) mentions that when teachers have used the differentiated approach, their students have experienced a sense of competence, motivation towards education, and an increase in self-efficacy. However, the differentiated education approach does rely heavily on teacher performance, putting the burden primarily on the teachers' shoulders and on the school in general.

In this study I argue that applying differentiation in Saudi schools would require much time and effort. In addition, the resources required to build teacher capacity and prepare suitable programs may present a complex barrier to implementation. All the same, the pedagogical logic and benefits behind personalised learning and curriculum differentiation are too important to ignore, and the progress towards differentiation must begin at some stage. This study positions the differentiated curriculum within current Saudi policies and practices to evaluate how progress may continue. The Saudi 2030 vision is keen to develop curricula that align with the global changes, in addition to increasing training programs for teachers and educators (Ministry of Education, 2017).

3. Saudi context

As the focus of this research is on education in Saudi Arabia, I will now discuss the Saudi Arabian education system and its policies. In this section, I will explore the basic concepts of the Saudi education system and the related policies, the factors affecting these, and the most important sources, principles, and characteristics that have been adopted by the Saudi government in the composition of its education policy. This section also includes a discussion of the educational reform models in the Saudi education system and the vision of Saudi Arabia in 2030 in the field of education. In addition, it is significant to discuss the main educational levels in Saudi Arabia, their objectives, and the challenges faced by the educational process there. At the end of this section, there is a discussion of the use of technology in education in Saudi Arabia and one of its important applications.

Throughout this section, I focus on the Saudi education system and its policies. This discussion introduces the next section of this research, which includes an exploration of how the differentiated education approach could be proposed for the Saudi education system, why this approach could be beneficial, and whether or not the Saudi education system is flexible enough to implement such an approach. In addition, I discuss some studies dealing with the differentiated approach that were conducted in Saudi Arabia. Through these studies and through Saudi education policies, I will be able to

investigate the most important factors that could contribute to the success of this approach and identify the obstacles that could be a hindrance to its application.

3.1 Educational Policies in Saudi Arabia

3.1.1 Establishment and History of the Saudi Ministry of Education

The Ministry of Education is responsible for the development of educational policies in Saudi Arabia, and it is also the executive of these policies. The first education system in Saudi Arabia was established in 1925 under the name of the Directorate of Knowledge. In 1951 the Ministry of Knowledge was established, and its name was changed to the Ministry of Education in 2002. Earlier, in 1975, the Ministry of Higher Education was established to execute the formulated higher education policy. Recently, in 2014, the Ministry of Higher Education and the Ministry of Education were merged into one ministry under the name of the Ministry of Education (Ministry of Education, 2015)

3.1.2. Vision and Mission

The Vision of Education in Saudi Arabia is summarised as quality education to build a global competitor society through gained knowledge (Ministry of Education, 2015, para. 1). The Mission of the Saudi Ministry of Education focuses on providing educational opportunities for all through appropriate educational environments and, under the umbrella of the Saudi education policy, on achieving better educational outcomes and encouraging scientific research. In addition, it encourages the development of social partnership, innovation, and creativity, as well as the development of skills and abilities of employees in the educational field (Ministry of Education, 2015).

3.1.3. Objectives

The Saudi Ministry of Education (2015) highlights several main objectives on which it bases its policy:

1. "Building students' Islamic, national, and intellectual personality in terms of knowledge, skills, and values.
2. Providing opportunities for students to gain admission to educational pathways.
3. Developing the criteria needed for the selection and qualification of teachers, as well as developing teachers' competencies and motivating them.
4. Promoting quality in education and upgrading the qualitative level of education.
5. Expanding the construction and maintenance of educational buildings and facilities.
6. Producing, disseminating, and employing scientific research and knowledge, and expanding higher postgraduate programs.
7. Expanding private education to achieve development objectives.

8. Upgrading the level of educational outputs in compliance with the requirements of development, as well as with the needs of society.
9. Developing a regulatory environment and implementing governance.
10. Granting overseas scholarships to talented students to meet the needs of development and to exchange knowledge.
11. Optimally employing information technology and telecommunications.
12. Diversifying education funding resources and investing in education.
13. Enhancing local and international partnerships". (para. 1).

Educational policies in Saudi Arabia depend on these objectives. Considering personalised learning and differentiation strategies, these goals do not conflict with them; rather, they support their achievement by improving and enhancing education and its quality.

3.1.4 Educational Reform in Saudi Arabia

The significance of this section owes to its brief discussion of the educational renovation in Saudi Arabia by looking at the reasons why the search for new education models and objectives was encouraged. Accordingly, this opens the way to proposing some new strategies for Saudi education, such as the differentiated education approach, and to considering the possibility of benefiting from some of the educational techniques that have emerged as a result of the technological revolution and the technical progress made globally, and to employing them in the development of Saudi education.

The development plans implemented by Saudi Arabia are considered a prominent factor in educational renovation in Saudi Arabia (Nasr, Al-Zubayani, & Al-Leithi, 2010). Nasr and his fellows (2010) also add some goals for this educational renovation, like finding innovative alternatives to the current education system in order to improve the quality of education and to develop its form and substance. In addition, the development of educational policies is considered consistent with both the local and global changes that the government seeks (Nasr, Al-Zubayani, & Al-Leithi, 2010). Moreover, Nasr and his fellows (2010) refer to the importance of focusing on scientific research and development and benefiting from the experiences of the developed countries. These goals are good reasons to consider both the differentiated approach and the personalised learning approach in Saudi schools since the core of these educational strategies is renovation. The differentiated curriculum approach and the personalised learning approach have been adopted by developed countries and have had their effectiveness proved not only in these countries, but also in some Saudi schools that have applied a differentiated education approach in limited classrooms trials. These trials have shown the positive impact of such an approach on students and their educational performance. These studies are discussed in more depth in the next section of this paper.

3.1.5 The Saudi 2030 Vision in Education

The Saudi 2030 Vision, a roadmap for economic and development work in Saudi Arabia (Alshagham, 2016), was announced on 25 April 2016. Alshagham (2016) adds that the vision has a great interest in education and its outcomes where the 2030 vision comes in line with the vision of education and supporting its objectives to build educated generations who are able to take responsibility and make decisions in the future. It also looks at raising the quality of educational outcomes, increasing the effectiveness of scientific research, encouraging creativity and innovation, developing community partnership, and upgrading the skills and abilities of educational personnel (Alshagham, 2016). One of the most important goals to meet, as discussed by Alshagham (2016), is to bridge the gap between higher education outputs and labor market requirements and the development of public education. Another goal of the vision is to promote at least five Saudi universities to be among the top 200 international universities in 2030. Dr. Abdulrahman Al-Qahbani, Chairman of the Board of Directors of Advanced Schools Company, confirms that the company has investment opportunities in differentiated education in schools as well as in kindergartens because the Saudi society needs excellent education (Alshaalan, 2017).

3.2 Terms and Definitions

3.2.1 The Concept of Educational Policy in Saudi Arabia

In order to discuss educational policy in Saudi Arabia, it is important to explain and define the concept of educational policy and to put it in perspective. Educational policy is defined as "a set of principles and standards that define the process of education, the main trends that determine its movement's direction within the community about the major objectives, and the ideal models that society considers valid for children during certain period of time" (Nasr, Al-Zubayani, & Al-Leithi, 2010, p. 37). By this definition, it is clear that educational policy represents the vision of a society and the convictions of its various institutions about the quality of life for future generations. Such convictions contribute to the making of a nation's culture in particular and the development of human civilisation in general (Hugail, 2016).

In 1969 the Supreme Committee for Education Policy in Saudi Arabia penned an official document that included a vision of Saudi society and aspirations for the future. This document included a definition of the Saudi educational policy as "the general lines upon which the education process in the Kingdom is a duty to define God and religion for individuals, to lead individuals' behavior according to God's Law, to meet the needs of the community, and to achieve the objectives of the nation" (Hugail, 2016, p. 115). Azazi (2010) adds that the principle of educational policy in Saudi Arabia emerges from Islam, to which is owed the state's doctrine, worship, ethics, law, judgment, and an integrated system for living. It is noted here that the principle of the Saudi educational policy is derived from Islamic thought and expresses Saudi thought as based on the teachings of Islam.

3.2.2 Sources of the Educational Policy in Saudi Arabia

Nasr and his fellow (2010) indicate that the objectives of educational policy are derived from five sources: Islamic faith, socio-economic conditions, the need for development in Saudi Arabia, age trend requirements and characteristics, and the characteristics and needs of Saudi citizens and the demands of growth (p. 69).

3.2.3 Principles of the Educational Policy in Saudi Arabia

The Supreme Committee for Education Policy in Saudi Arabia has determined several principles identifying a reliable education system, as pointed out by Hugail (2016): the principle of faith and humanity; the principle of justice and equality of educational opportunities; the principle of scientific development; the principle of education for work, power, and construction; the principle of integrated continuous education; the principle of originality and innovation; and finally, the principle of education for life (p. 125).

3.2.4 Properties of Saudi Educational Policy

Nasr, Al-Zubayani, and Al-Leithi (2010) point out that the Saudi educational policy is characterised by a number of features that have differentiated it from other educational policies around the world. The main feature is that it has emerged from the religion of Islam, which is the main religion in Saudi Arabia. These characteristics can be identified as being the basis on which Saudi Arabian educational policy was formed, stemming from the true Islamic religion in which unity of purpose is considered prominent in the education system. This approach led to the cohesiveness of the Saudi educational policy since it was not influenced by the exotic ideas of other countries, such as those affected by colonialism where there has been a clear impact on language and educational policy. Another feature of Saudi educational policy is the supporting of religious and social sciences through the curriculum, as well as seeking to disseminate correct Islamic culture, to apply the principle of equal educational opportunities, and to strengthen cultural identity through the preservation of the Arabic language (the language of the Quran). The last of the features that have characterised educational policy in Saudi Arabia is single-gender education. Saudi Arabia may be one of the few countries in the world that does not allow co-education in schools or universities, except for the nursery, kindergarten, and the first three grades of primary school.

3.3 Educational Levels and Their Objectives in Saudi Arabia

Education in Saudi Arabia is divided into several levels by age group, like in other countries around the world. Each level in the Saudi education system has particular characteristics and objectives that have emerged from the education policy (Nasr, Al-Zubayani, & Al-Leithi, 2010). This section focuses

on three aspects: the educational goal statement; the overall objectives of education and their sources; and the education levels and their objectives in Saudi Arabia.

3.3.1 The Educational Objective

Nasr, Al-Zubayani, and Al-Leithi (2010) point out that the educational objective defines what it would be like after the successful learner's acquisition of educational experiences that represent the final outcome of the educational process and the purpose for which we need to obtain knowledge after school. Moreover, Albany (1979) points out that the main goal of education is "to achieve a coherent integrated overall growth, which includes the growth of body and mind" (p. 145).

3.3.2 General Objectives of Education and Learning in Saudi Arabia

Having reviewed the documents on Saudi educational policy, Hugail (2016) states that educational goals are categorised as follows:

- 1- Goals related to the faith aspect.
- 2- Goals related to the development of the moral aspect of the student's personality.
- 3- Goals related to the development of individuals' affiliation feeling.
- 4- Goals related to the development of the mental side of an individual's personality.
- 5- Goals related to the development of psychological aspects.
- 6- Goals related to education for work and being productive.
- 7- Goals related to students with special needs.
- 8- Goals related to positive interaction with other civilisations' development.

Through these general objectives of education in Saudi Arabia, the author can say that personalised learning and differentiation strategies support these goals. For instance, there are goals that are related to students with special needs, and the differentiated curriculum concerns individuals' differences in abilities to learn. In addition, there are goals that focus on improving students' mental proficiency, and personalised learning and differentiation could help students to think and search for information and solutions.

3.3.3 Educational Levels and Their Objectives in Saudi Arabia

Childcare and Kindergarten (Pre-school)

Saudi education policy focuses on childhood, a stage of life that is seen also as a preliminary stage of education characterised by forbearance in the treatment and the orientation of childhood (Hugail, 2016). Nasr, Al-Zubayani, and Al-Leithi (2010) clarify that the kindergarten stage ends by the age of six in the Saudi education system.

Primary Schools

The primary level, starting at age six, is considered the first stage of formal education in Saudi Arabia. During the next six years, the student moves from one grade to another at the end of each academic year if he or she passes successfully (Azazi, 2010).

Through the above, it is clear that the primary stage is the fundamental basis that prepares young children for the next stage, which is the intermediate stage. Therefore, the primary level can be considered one of the most appropriate educational stages at which to use the differentiated education strategy (Altwairqi, 2013). Using this approach, a teacher could find many different ways in which students could learn, like mimicking the sounds of animals. Students could also be taught with tones and rhythmic sound. Through these child-friendly ways, students could learn in smart and easy ways, apart from the traditional methods.

Intermediate Schools

Hugail (2016) notes that the duration of this phase is three years, beginning at 12 years old when children finish primary school.

Secondary Schools

The secondary stage occupies the top of the general educational structure in Saudi Arabia. It lasts for three years like intermediate school and is attended by students mostly at the age of fifteen. This stage, which ends the public education phase, is completed at the age of eighteen (Nasr, Al-Zubayani, & Al-Leithi, 2010). A course system approved in 2004 by the Ministry of Education in secondary schools allows students to graduate in two and a half years.

Higher Education

Higher education refers to all types of education that follow the secondary level, as indicated by Nasr, Al-Zubayani, and Al-Leithi (2010). They add that there are many institutes and centers that offer various specialised courses, varying in the duration of study and qualifications. Training in these institutes ranges from one to three years, after which the trainee receives a diploma in their field of specialisation.

Universities in Saudi Arabia are like most other universities in the world in terms of purpose and structure. Qualified staffs are prepared to contribute to meeting the needs of the society after graduation. The duration of university study in Saudi Arabia ranges from four to seven years, depending on the different disciplines, and ends with students receiving a bachelor's degree. Saudi universities are keen to encourage students to pursue scientific research and to keep up with development that will help the country as a whole achieve its educational policy objectives. The differentiated learning approach would be best applied at this stage, as discussed by Almuhaimeed (2016) in his study, and this is discussed in the next section.

3.4 Educational Challenges in Saudi Arabia

General education in Saudi Arabia faces many issues, whether educational issues, problems related to the schools as an educational system, or even management problems related to the Ministry of Education. This section addresses the most important problems according to the differentiated curriculum approach or personalised learning.

Multiple issues are discussed by Nasr, Al-Zubayani, and Al-Leithi (2010). One of the problems facing Saudi education is the traditional role of the teacher. Despite the efforts of the Ministry in training teachers, there are some teachers who insist on using the traditional methods of indoctrination and memorisation (Nasr, Al-Zubayani & Al-Leithi, 2010). Differentiated education may have a way to deal with such cases where the role of the teacher is supposed to be based on the search for knowledge and the use of modern teaching strategies to learn within the classroom. Thus, the development and adoption of effective strategies in education should begin with the teacher.

Another problem is the poor relationship between schools and families. This is what Nasr, Al-Zubayani, and Al-Leithi (2010) have pointed out that this relationship is very important because schools may not be able to function properly if there is little or no communication between the school and the student's family. The personalised learning approach and differentiated approach may be solutions that could connect schools and families. These approaches would lead to schools and families more often checking up on the students, for example by activating the student's online account where parents can regularly check the duties and messages that belong to the student. In addition, one significant goal of the 2030 Vision is the implementation of the "Irteqa" system, which aims to involve families in 80 percent of school activities by 2020, as well as the development of indicators to measure the outputs of education (Alshagham, 2016). Therefore, this is what personalised learning seeks to achieve by engaging all of society into the learning process (DfES, 2007).

3.5 Technology in Saudi Education

Over the last few decades, Saudi Arabia has witnessed a great deal of development in the use of technology in all its various fields, especially the educational field (Alasmari, 2007). Technology has started to play an active role in the education system through the applications, means, and various educational techniques that serve education and its inputs, which have contributed to the advancement of education and the progress of research (Alasmari, 2007). The Saudi government understands the importance of the use of technology in education. Therefore, it has studied and implemented several projects that have contributed to the development of education, such as the King Abdullah Project for Computer, National E-learning and Distance Learning Center, Computer and Internet Placement in Teaching and Learning Processes Project, introducing information technology in curricula, and the Digital

Library Project, as well as the provision of training courses for educational personnel in the use of information technology (Abu Amma, 2003).

Alobeid (2005) points out that the Ministry of Education implemented e-learning as a pilot step in 180 secondary schools in 2005-2006 with a budget of 56 million Saudi riyals. Alobeid (2005) adds that this is one of the objectives of the National Plan for Communications and Information Technology, which calls for optimal placement of information technology in the field of education and training in all its stages. I note that, in the current situation of the educational field in Saudi Arabia, the Ministry of Education is racing to keep pace with developed countries in the field of education by using the latest educational techniques in most modern schools. However, there are many schools that have not had the benefit of these modern educational techniques, possibly due to the infrastructure of those schools, which the Ministry of Education seeks to replace with modern buildings.

Saudi Arabia is the world's top spender in the area of educational technology, according to Pearson, the world's largest provider of education services (Alamiri, 2013). The Government of Saudi Arabia, represented by the Ministry of Education, is seeking a digital transformation in e-learning. This is a realisation of the 2030 Vision, as announced by the National Center for e-Learning and Distance Education (Ministry of Education, 2017). In addition, the center announced the launch of four e-learning initiatives, all focusing on "digital skills". These initiatives are the unified e-learning and training platform initiative, the virtual school initiative, the digital content initiative, and the governance and operation initiative (Ministry of Education, 2017). I would like to point out that the interest of the Saudi government in the use of technology in education could be an input and support for the introduction of the differentiated approach since differentiated education depends heavily on educational technology, as does personalised learning, which may rely more on the use of technology.

3.5.1 A model of the Use of Modern Technology in Saudi Education: Digital Content Portal for Curricula

The Saudi Ministry of Education's Digital Content Portal is a recent project. It provides interactive books according to the educational and technical specifications provided with the supporting media for the courses. Each student can obtain the courses by entering a student number (Digital Content of Curricula, 2017). The educational content includes multimedia types that provide active interaction between the learner and learning experiences to facilitate learning. In addition, the content provides students with a sense of excitement and attraction, self-motivation for learning, multi-source environments, and a comprehensive platform that looks at individual needs and differences among learners (Digital Content of Curricula, 2017). In addition, it seeks to provide opportunities for learning, exploration, creativity, and building new knowledge by addressing a problem and seeking to solve it in order to encourage students to search for and request information. In this sense, considering what the

approaches of differentiated education and personalised learning depend on, we find that the Digital Content of Curricula provides what these strategies seek. Therefore, the Digital Content of Curricula may be a primary goal in presenting and discussing a differentiated education strategy and personalised learning in Saudi Arabia.

The Digital Content of Curricula is intended to transform paper books into interactive e-books, with activities and materials in all curricula in accordance with the latest international technical specifications. The project, which includes 245 books and 4330 media (Digital Content of Curricula, 2017), will benefit students, teachers, supervisors, and learning resource centers.

4. Previous Studies in the Differentiated Education Approach in Saudi Arabia

Based on my research, few studies in Saudi Arabia have been conducted in comparison to differentiated approach studies conducted around the world. Also, the objectives of these Saudi studies were different. Some were intended to determine the extent to which students and teachers benefited from a differentiated approach in education, such as the study conducted by Alghamdi (2014). Other studies focused on the impact of the differentiated approach on the development of teachers' planning, the implementation and evaluation of skills through training programs, as well as in rural areas, (Arifi, 2015; Alghamdi, 2015). There is no doubt that these studies will help significantly in this research. In fact, it is the basis on which this research lies: looking at the findings of the studies to investigate whether the differentiated approach can be applied effectively in Saudi education. This research may differ from previous studies conducted in Saudi Arabia since it is an exploration of the extent to which this approach can be applied in Saudi schools in general, whereas previous studies focused on different and specific topics.

In this section I review these five contemporary studies completed on differentiation in Saudi Arabia. I intend to gauge the current status of personalised learning and differentiation by describing the study focus, findings, and the implications of the study outcomes.

Table (4.1) Contemporary Studies of differentiation in Saudi Arabia

	Study Title	Year	Author
1	The impact of the application of differentiated learning strategies by English language teachers on the achievement of general education students in Yanbu City.	2014	Alghamdi
2	The effect of using differentiated education strategy on the development of achievement and creative thinking skills among second-grade secondary students in physics in Alquwaiya City.	2015	Algahtani
3	Effectiveness of a training program based on differentiated education in the development of teaching skills in primary school teachers.	2015	Alghamdi

	Study Title	Year	Author
4	The extent of the use of differentiated education strategy with religious sciences teachers at an intermediate school in Alquwaiya City.	2015	Arifi
5	Teaching program based on differentiated education and measuring its effectiveness in the development of multiple thinking skills for the students of the Faculty of Theology in Imam Muhammad bin Saud Islamic University.	2016	Almuhaimeed

4.1 Study One: The impact of the application of differentiated learning strategies by English language teachers on the achievement of general education students in Yanbu city.

This study was conducted by Alghamdi in 2014. It aimed to address the problem of the low level of female students' achievement in the English language through applying the differentiated education strategy and using the semi-experimental method. The study sample consisted of students from intermediate and secondary schools in Yanbu. To achieve the objectives of the study, the researcher used two tools: an achievement test at the beginning and at the end of semester and another training program during the semester. Descriptive statistical methods were used to correlate the grades of students before and after the application of the strategy and the training program. The findings showed that the differentiated education strategy improved the students' level of academic achievement in the English language.

Alghamdi (2014) claimed that Saudi education policies promoted differentiation to improve education. He found that the use of differentiation approaches in a Saudi school helped to improve students' poor performance. This study's findings support the application of modern educational strategies, including personalised learning and differentiation to current educational issues.

4.2 Study Two: The effect of using differentiated education strategy on the development of achievement and creative thinking skills among second-grade secondary students in physics in Alquwaiya City.

This thesis was conducted in 2015 by Algahtani. The researcher used an experimental method on a sample consisting of 36 students from the second grade of secondary schools. The study revealed the existence of significant differences in achievement between the experimental group and their peers. The focus of the differences was on planning, implementation, and evaluation skills.

Algahtani's study (2015) focuses on using multiple strategies that suit students' abilities, interests, needs, and intelligence; all of these are linked to differentiation. Algahtani's findings suggest that applying differentiation strategies in Saudi schools is feasible and conducive to extending learning outcomes for students.

4.3 Study Three: Effectiveness of a training program based on differentiated education in the development of teaching skills in primary school teachers.

This thesis was submitted in 2015 by Alghamdi for a master's degree. The purpose of this thesis was to measure the effectiveness of an existing training program that focused on differentiation in the development of the planning, implementation, and evaluation of skills for teachers in primary schools. The researcher used the descriptive approach with a sample consisting of 25 teachers of primary grades in Riyadh. The researcher gave the participants a training program on differentiated teaching strategies and measured their performance with pre- and post-achievement tests in information and knowledge. The research found the following:

- There is a difference between the average scores of teachers in the acquisition of information and knowledge, relating to differentiated education, before the training program and after.
- There is a difference between the average scores of teachers in teaching skills.

In light of these research results, the researcher made a number of recommendations, including:

- The need to use the differentiated approach, in particular by language teachers but also in other subjects in general.
- The need to implement further training courses in the field of differentiated education for teachers and supervisors, both during service and before, in order to inform them of the advantages and benefits of this modern strategy.
- The need to establish educational workshops to discover aspects of differentiation in the developed curricula activities and use them to achieve the goals of differentiated education.

This study is significant as it makes the importance of personalised learning and differentiation explicit. Teachers from Saudi Arabia were actively involved in the processes and products of differentiation, and the findings were encouraging.

4.4 Study Four: The extent of the use of differentiated education strategy with religious sciences teachers at an intermediate school in Alquwaiya City.

This thesis was submitted in 2015 and presented by Arifi as a requirement to obtain a master's degree. The study aimed to identify the extent of the practice of using a differentiated education strategy in teaching religious sciences in the intermediate level in Alquwaiya City. It also aimed to detect how the sample's responses were different and what the impact of the academic qualifications, the number of years of experience, and the training courses was on these differences.

In order to achieve the objectives of this study, the researcher used a descriptive survey with 20 religious science teachers in an intermediate school in Alquwaiya City.

The researcher found a range of results:

- The religious sciences teachers have not applied a differentiated curriculum effectively in planning compared to their use of differentiation in the implementation and evaluation.

- There was not a clear indication of the extent to which the use of differentiated education strategies in teaching religious sciences by the participating teachers could show the effect of qualifications, the number of years of experience, or the training courses taken.

Through Arifi's study (2015) it becomes clear that differentiation approaches require good planning before the implementation and the assessment. This requires teacher training and capacity building. This study helps confirm that successful implementation for modern teaching strategies requires preparation and planning before implementation.

4.5 Study Five: Teaching program based on differentiated education and measuring its effectiveness in the development of multiple thinking skills for students of the Faculty of Theology in Imam Muhammad bin Saud Islamic University.

This thesis was submitted in 2016; the study was conducted by Almuhaimeed as a requirement for a doctoral degree. The study aimed to develop multiple thinking skills of students in the seventh level in the Faculty of Theology at Imam Muhammad bin Saud Islamic University.

The researcher used the descriptive survey, quasi-experimental approach and constructed three tools to collect data for this study: a teaching program based on differentiated education in the development of multiple thinking skills; a test to determine the learners' styles (e.g., visual, auditory, motor); and a test to measure multiple thinking skills.

The main result of the study is that there were significant statistical differences found between the mean scores of the experimental group in the pre- and post-test stages, and this is evidence of the effectiveness of the teaching program based on differentiated education in multiple thinking skills.

In light of the findings of the study, the researcher suggested a number of recommendations. First was that the differentiated approach in education is an educational gateway to redesign the curriculum in line with personalised learning styles. Second, the researcher also recommended that teachers should build an interactive environment within the classroom and should consider individuals' differences and meet those with the appropriate teaching and learning styles.

Although the research question uses a sample of university students and focuses on investigating to what extent differentiation is applicable in Saudi schools, Almuhaimeed's study (2016) is useful in this topic. I intended to include this study here due to its importance. Considering my experience in the education field, I contend that Saudi students need to improve their thinking skills in general and learn how to use these skills (instead of memorisation) in the correct ways to improve their learning skills.

In previous studies, all the sources dealing with differentiated education in Saudi Arabia were produced in recent years. This shows that the differentiated education approach is still quite new in Saudi Arabia. Although these studies did not give much information and past experiences, there remains a hope that this proposal may be considered and accepted in Saudi education based on what can be observed in the next section.

5. The Current Status of Personalised Learning and Differentiation in Saudi Arabia

Based on my experience in education in Saudi schools, I have found that differentiation or personalised learning had not been applied formally in public schools until the present moment. However, there have been some trials conducted by teachers and private schools to apply modern teaching strategies, including differentiation. This was proven by the previous studies in Saudi schools that were trials to examine modern teaching strategies feasibly.

There are multiple themes that can be concluded from the previous studies: applying differentiation strategies, improving teachers' skills, and focusing on improving students' performance and education outcomes and creating a safe learning environment.

5.1 Applying Differentiation Strategies

The previous studies all agree that the motivating factor was found when applying differentiation through studies done in Saudi schools, as mentioned in the studies of Almuhaimeed (2016) and Algahtani (2015). In addition, Almuhaimeed's study (2016) shows that the use of differentiated learning strategies, such as the use of multiple thinking skills, created significant differences in average scores among students. This is consistent with Alghamdi's (2015) study, which shows that the use of some differentiated education strategies has a positive impact on student achievement. These findings offer clear evidence of the answer to the research question and prove the effectiveness of applying the differentiation approach in Saudi education.

5.2 Improving Teachers' Skills

Alghamdi (2015) proves in her study that using the differentiation approach has helped to develop teachers' planning, implementation, and evaluation skills. Although Arifi (2015) noted that she did not find significant differences for teachers in her sample in terms of developing planning, implementation, and evaluation skills, she pointed out that the reason for this may be due to the type of courses, the number of years of teaching experience of the teacher, or the lack of training courses. Arifi's study (2015) refers to the lack of training courses for teachers as a potential reason for not reaching a clear conclusion in her study, especially since she conducted the study in only one semester in 2015. It is known that the duration of a semester is too short a time in which to conduct training courses for teachers who basically have daily workloads. In addition, Arifi (2015) conducted tests for teachers to measure the effect on their use of planning and implementation as well as evaluation. I believe that measuring the impact requires a longer period, especially when training teachers on how to use a differentiated education approach.

5.3 Improving Students' Performance and Education Outcomes and Creating a Safe Learning Environment

Most studies agreed on the benefits of differentiation in improving performance and learning outcomes for all students. Alghamdi's study (2014) aimed to find a solution to the problem of low scholastic achievement and motivation to learn among the students. Her experience in using the differentiated education approach has had a positive effect on improving the level of academic achievement among female students in the English language. The high academic achievement in specific aspects is due to the individual differences among the students, as discussed by Algahtani (2015) in his study. Algahtani (2015) indicates that there are significant differences in the test scores between the experimental group and their peers on tests that focused on levels of analysis, synthesis, and evaluation. Almuhaimeed (2016) posits that the safe classroom atmosphere that allows students to discuss, respect opinions, and accept errors as part of education has the greatest impact on increasing student motivation in education. This surely has a positive impact on student performance.

It is clear from previous studies that the use of the differentiated education strategy in improving student achievement is effective. In addition, it is found in most cases that a safe classroom environment that supports students and takes into account and accepts errors within the classroom as part of education is extremely important; these factors all help to develop the educational motivation of students. Moreover, studies show the impact of differentiated education on teachers, namely that it has contributed to the development of their teaching skills and acquisition of information and knowledge through the training courses offered to them, as in Arifi's (2015) and Alghamdi's (2015) studies. The importance of these studies was that they included all levels of education in Saudi Arabia: primary, intermediate, secondary, and higher education as in Almuhaimeed's study (2016).

6. Discussion

In this section, I discuss the Saudi studies and some international studies about differentiation and how it is suitable considering Saudi education policies. Tomlinson (2014) points out that the primary goal of differentiated curriculum is that all students benefit from education as much as possible. The Saudi education policy focuses on the idea that the Saudi learner must acquire many skills related to the cognitive, mental, and emotional aspects of the Saudi education system, which are known as the 3H's (head, heart, and hand) (Nasr, Thubiani, and Laithi, 2010). There is a clear relationship between what the Saudi education policies seek and what the differentiation approach contains. Differentiated curriculum covers all these requirements by providing students with lessons about thinking, problem solving, team work, and so on. Tomlinson's model and the Universal Design for Learning model of differentiation agree with the idea that every student should be supported through the learning process by focusing on the individual response for each student (Tomlinson and McTighe, 2006; CAST, 2011).

In addition, the previous studies applied to the situation in Saudi schools unanimously agreed that the use of the differentiated approach in Saudi education contributed to the improvement of the students' educational attainment. The Saudi literature recommends using this approach and training teachers on how to use it properly, and it also calls for addressing the obstacles that may impede the application of differentiation in education (Alghamdi, 2015). This could be considered helpful for the application and the provision of differentiated education in Saudi education, as well as for answering the research question.

One of the key supporting capabilities is the use of technology, which is one of the most important tools enabling the success of these strategies. According to Williams (2013), the effective use of technology is an essential matter in using modern strategies.

As discussed in section 3, the Ministry of Education strives to keep pace with technological progress in education through the use of the latest educational technology. The strategies of the differentiated approach and personalised learning depend heavily on the use of these technologies in education. I argue that the provision of such teaching techniques may be helpful in providing and applying modern education strategies appropriately. However, in the use of the differentiated approach especially, there is a high dependence on teachers. Teachers' efforts combined with the use of educational techniques, even if simple, could equal success. Noble (2004) confirms that the differentiated approach does depend heavily on the performance of teachers.

Saudi education has achieved these two requirements, the existence of the best education techniques, and the provision of training programs for teachers. This is undoubtedly a great opportunity for the implementation of the differentiated curriculum approach and personalised learning in Saudi education.

On the other hand, there are some issues that stand in the way of the use of the differentiated curriculum approach in Saudi education. For example, Alghamdi (2015) notes the lack of reliable models in the performance of differentiated education, as well as some teachers' fear of failure in implementing it. This may be due to the lack of knowledge of some teachers concerning the manner of implementation and a fear of losing control within the classroom. Tomlinson (1999) confirms that teachers must understand each element of the differentiated education distinctly and how to implement it before it can be applied. I add that during a tour of some Saudi schools, I found that many teachers did not know anything about the differentiated education approach; some had not even heard about differentiated education before. I also found that some teachers confused the differentiated education approach with other education strategies. A way must be found to overcome these obstacles, and this is discussed in the recommendations that follow.

Another aspect that could be considered a barrier is that public schools in Saudi Arabia are not very diverse; the students do not come from different backgrounds, cultures, or nationalities, and they all

speak the same language. Most classrooms contain students who speak one language (or one dialect), have one culture, and may even be hail from one tribe. Therefore, there may be a question of whether the differentiated approach or personalised learning in Saudi education are even necessary. In addition, we may not find students with disabilities or people with learning difficulties in every school, so why would we want to generalise the use of these strategies for all Saudi schools? I offer answers to such questions. First of all, these strategies do not aim to change the curriculum, policy, or system; rather, the goal is for all students to benefit from education in ways that suit their preferences and needs and that expand their methods and resources to suit their abilities, as Subban (2006) suggests. The other point is that these strategies increase students' motivation for academic achievement and participation in the classroom and foster a passion for learning, as demonstrated by many previous studies like those by Alghamdi (2015) and Almuhaimeed (2016). The students, especially those in the early grades, like to move, play, and participate in the classroom, and this is what differentiated curriculum can provide. Moreover, personalised learning also encourages students to work with each other to find solutions and work in groups since this strategy encourages the students to self-organise and save time (Williams, 2013).

One of the issues that might hinder the application of differentiation in Saudi education is that Saudi teachers do not study or receive training in the differentiated approach or personalised learning during university studies; this may be considered a handicap. In addition, some teachers may resist the change and the application of modern strategies. However, it is not difficult to conduct training courses for teachers on how to implement these strategies (Almuhaimeed, 2016).

I believe that the application of the differentiated curriculum approach and personalised learning in Saudi education does not need to be difficult. As evidenced by the previous studies undertaken in Saudi Arabia, which are in unanimous agreement on the effectiveness of this approach in Saudi education, it has been proven possible. Further, I believe that Saudi education policies are looking to improve education by using modern strategies and absorbing such learning approaches as seen in the third section of this paper. In addition, the Saudi Ministry of Education is striving to develop education and has so far been willing to provide all the possible resources needed by teachers to implement these strategies, for example with the use of educational technology. The Saudi Ministry of Education could also play an important role by taking the lead in implementing these modern educational strategies, both in the Gulf countries and in the Arab world in general. However, it is very important that they are applied correctly and wisely.

7. Conclusion and recommendations

7.1 Conclusion

Personalised learning and differentiation are not new approaches. They have slowly made great changes so that every learner can gain knowledge based on his or her needs, abilities, and interests. As discussed in section two, the Tomlinson differentiation model and the Universal design for Learning

provides an applicable framework with which to start implementing differentiation in any environment. Proper implementation requires multiple conditions, including teacher training and step-by-step application.

This paper has discussed the possibilities of applying differentiation in Saudi Arabia. I chose to consider Saudi education policies since they are hieratical and require a review of the original policies to ensure that personalised learning and differentiation objectives will not conflict with them. Since the Saudi education policies and vision are looking to improve the quality of education and to enhance the learning process by training programs for teachers and increased availability of technology in schools, obstacles like family engagement and teachers' resistance could be overcome in time.

This paper has shown that personalised learning and differentiation are not simply strategies for better learning outcomes. They look at how to individualise learners and are strategic approaches to how individuals learn best. They hand over a lot of the decision-making in education to the learner, and it may be difficult for Saudi Arabia to adopt that holistic approach for the whole country. It would be much more convenient to start implementing these approaches in small areas around the country, at least until teachers become qualified and experienced to facilitate the positive outcomes of these approaches. However, this will take time, and teachers will need lots of support to do that since differentiation and personalised learning involves handing over the power of the teacher to the students, which will result in much resistance from both sides.

7.2 Recommendations

Based on the literature of the differentiated approach and personalised learning and their introduction to education in other countries, together with my knowledge of previous studies and research conducted in some Saudi schools, I would like to make the following recommendations. The most important consideration is that it is natural to face a lot of criticism and to make mistakes in the first application of any new policy or strategy, whether in the educational field or elsewhere. Therefore, it is important to explain any introduction of new ideas and not to rush judgement on the success of this approach or other modern methods in education. Altuwairqi (2013) points out that "the essence of differentiated education is the professional growth towards professionalism, and some educators give a range to the establishment of differentiated education between seven to ten years" (p. 150). I recommend that the Ministry of Education, in cooperation with the universities, develop a training program for teachers to explain how to implement modern educational strategies, including the differentiated education approach and personalised learning. It is also recommended that teachers should understand that a diligent teacher will work with whatever resources are available, even if they are not adequate. Classroom sizes and large numbers of students should not impede excellence, and the lack of access to technology should not in itself stop learning. Therefore, the teacher must always seek to fulfill the

education mission for which he or she was chosen. A teacher's fear of failure to implement a differentiated education approach, or any other new strategies, may be an obstacle for the teacher as long as they are in the education field. In reality, teachers have the ability to overcome such obstacles and even turn them into opportunities if they are convinced of the effectiveness of these educational strategies and make them part of their professional and academic work. In order to adopt these recommendations, the Ministry of Education, the school administration, and parents should all cooperate with teachers in order to ensure the success of these proposed educational strategies.

7.3 Research Limitations

Due to the limited sources available in Saudi literature, there was a gap in the holistic understanding of all main factors that may affect the application of personalised learning and differentiation in Saudi Arabia. I would suggest deeper investigation into the influence of school management and educational leadership to encourage high-level management to implement personalised learning and differentiation in Saudi Arabia.

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