



Research Article

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Teachers' Perceptions of the Application of Dyslexia-Friendly Schools in Saudi Arabia

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Abstract

This study contributes to the exploration of the most promising practices for dyslexic students in overcoming difficulties. In this study, I investigate teachers' views regarding the instillation of dyslexia-friendly schools (DFS) in Saudi Arabia. I use the qualitative approach through semi-structured interviews. The sample addressed eleven teachers who specialized in learning disabilities (LD) in public schools. The results showed generally positive attitudes toward DFS. However, there were differing views regarding the possibility of currently applying this model. Different reasons for this view were given, such as the lack of appropriate conditions (e.g., funds, time and awareness) for applying DFS' criteria. Some implementation challenges, however, seemed surmountable. Different suggestions were proposed to help schools become friendly for dyslexic students, such as developing school environments by providing the necessary support and providing appropriate training for teachers besides the planning offered by the school administration. In light of these results, I recommend the implementation of DFS in some model schools in Saudi Arabia in addition to studying the results and effects of such a practice.

Keywords: dyslexia-friendly, inclusion, learning disabilities, qualitative approach

1. Introduction

Students with dyslexia vary in terms of the difficulties they face, which results in an inability to find ideal answers on how best to support them. Brooks (2003) points to evidence revealing that individuals who suffer from severe reading and writing difficulties usually make modest progress compared to their peers, even with the best designed and executed reading programs. Therefore, inclusive practices have spread in the UK. The British Dyslexia Association (BDA) has played a major role in directing these practices (Riddik 2006). BDA defines "dyslexia" as follows:

Dyslexia is a learning difficulty that primarily affects reading and writing skills. However, it does not only affect these skills. Dyslexia is actually about information processing. Dyslexic people may have difficulty processing and remembering information they see and hear, which can affect learning and the acquisition of literacy skills. Dyslexia can also impact other areas such as organizational skills. (BDA 2022)

The British Psychological Society (BPS) offers another definition, which is one of the most prominent reference definitions of dyslexia in the UK and abroad:

Dyslexia is evident when accurate and fluent word reading and/or spelling develops very incompletely or with very great difficulty. This focuses on literacy learning at the “word” level and implies that the problem is severe and persistent despite appropriate learning opportunities. (Reason et al. 1999, 64)

Both definitions indicate that dyslexia is mainly related to difficulties associated with reading and writing. In Saudi Arabia, the term used is “learning disabilities” (LD), which indicates difficulty in reading, writing, and doing mathematics. It is defined as follows:

Disturbances in one or more of the basic psychological processes, which involve understanding and using of written or spoken language, appear in disorders of listening, thinking, speaking, reading and writing (spelling, expression, handwriting) and mathematics, which are not due to mental, audiovisual, or other disabilities, or other types of disabilities, learning conditions, or family care. (Ministry of Education 2020)

Both BPS’ and Saudi Arabia’s definition indicate that these difficulties appear even when appropriate learning opportunities are made available. This implies that students receiving low-standard education may display learning difficulties. However, these difficulties do not prove the existence of LD/dyslexia; they may instead refer to disadvantaged education. Therefore, education in a proper learning environment are essential to begin introducing reforms for dyslexic students. This first stage is highly regarded in some approaches and models, such as the response to intervention (RTI) and dyslexia-friendly schools (DFS).

The UK and Saudi Arabia may have similar practices regarding the support of students with LD/dyslexia. However, the new framework of special practices and standards known as DFS is not applied in Saudi Arabia. Although DFS shows advantages in the UK, it could be unsuitable or difficult to apply in other environments. Therefore, this study sought to identify the attitudes of teachers familiar with LD toward the implementation of DFS in Saudi Arabia and to investigate the means necessary to achieve such an application.

1.1 Learning Disabilities in Saudi Arabia

The services, support, and facilities provided by the Kingdom vary for people with disabilities. In 2000, the Kingdom issued a care system for the disabled under the royal decree. The second act of the Saudi Arabian constitution states that the state guarantees the rights of the disabled in preservation services, care, and rehabilitation, and it encourages institutions and individuals to contribute to related charity work. These services are provided by specialists in many areas (i.e., health, education, training, rehabilitation, social services, cultural fields, sports, and media) (Bureau of Experts 2022).

The Kingdom also issued regulations that direct and organize the work of special education teachers. This includes determining the general goals of special education (i.e., building the personalities of disabled students and upgrading their education). To achieve this aim, different means have been applied, such as providing a stimulating educational and learning environment and supporting teachers. This improves the teaching and learning process and develops creative, innovative practices (Ministry of Education 2021).

Among the groups that received major attention are individuals with LD, who are supported in public education through wide-reaching LD programs. Each school includes a teacher who specializes in LD and a private support room called the “resources room.”

In these rooms, a teacher periodically diagnoses students predicted to have LD and lists the names of those who qualify for the program (Ministry of Education 2020). Students with LD are supported in many ways education-wise (i.e., regarding assessment and evaluation). The eighth part of the seventh law protects the rights of students with LD during evaluation. Students can read questions out loud rather than in silence. They are also allowed to answer orally. In addition, they are provided rest breaks during evaluations, the division of assessments into smaller parts, and other measures related to their condition during the evaluation process (Ministry of Education 2022).

1.2 Evolution of the dyslexia-friendly school policy

DFS were created to address problems associated with assessment and support procedures for dyslexic students throughout the UK. The goal of DFS is to bridge the gap between politics and practice in regard to the inclusion of dyslexic students. DFS started in the city of Swansea in the UK in the late 1990s. Parents were not satisfied with the way their dyslexic children fared in school (Reddick 2006). This led the Swansea Education Authority to revise its current support system for dyslexics and organize a conference about dyslexia in cooperation with the BDA. As a result, a forum on DFS was established, which worked from 1997 to 2000 on developing a policy that enhanced the inclusion of children with dyslexia. The policy led to DFS (Reddick 2006).

The British Association for Dyslexia issued a resource pack for DFS in 2005. It includes guidelines, instructions, and practices for the development of DFS. It aims to model effective support for dyslexia in schools. The results of this initiative were positive (BDA 2005).

Reddick (2006) says that the BDA encourages DFS because it benefits a wide range of dyslexic students and others whose skills in reading, writing, and/or math are not equivalent to their ages. The BDA emphasizes that a friendly approach to dyslexia should be a part of schools keen on quality and development. Studies that explored the impact of dyslexia-friendly practices on EAL dyslexic learners in the UK showed that friendly practices had positive effects on dyslexic students and were positively rated by teachers (Fernando 2012). Norwich et al. (2005) confirms the appearance of various schools in England that carry out interesting, promising, and committed practices that match DFS' standards. DFS became one of the mainstays in the development of inclusive education for dyslexic students in the UK (Reid 2005). The friendly approach to dyslexia is relatively common in the UK (Fernando 2012). In addition, DFS have spread outside the UK. For example, there are 125 DFS in Norway, which marks a sharp increase since 2016 (Nakai 2020).

1.3 Principles of Dyslexia-Friendly Schools

DFS offer special support for students with dyslexia (Nakai 2020). According to the guidelines, dyslexic students must be supported so that they can overcome their difficulties and achieve their full potential. This can happen through providing a set of targeted interventions, environmental amendments, and appropriate tools for dyslexia. Furthermore, DFS seek to enhance parents' participation and teachers' training as well as employ teachers specialized in dyslexia (Reddick 2006). For schools to become dyslexia friendly, a comprehensive approach is needed in which students with dyslexia are identified, evaluated, and monitored to ensure the provision of appropriate educational policies and practices (Mckay 2004). Reddick (2006) indicates that the BDA stressed the importance of four main elements in the policy: leadership and management, teaching and learning, the semester environment, and the partnership between parents and children within the broader context of inclusion. These elements include twenty-seven standards. In addition, dyslexia must be considered an issue of high importance in the school and its development plan.

The division of tasks and the use of games and multi-sense activities can benefit both students with and without dyslexia; appropriate practices for dyslexia are, in general, good educational methods for all students (Turner & Pughe 2003).

Pavey (2007) indicates that DFS combine the elements of confidence, flexibility, and school ethics into a full support structure. This structure begins with the local authorities and administrative centers of schools. It includes specialists, teachers, and students themselves. It encourages a supportive educational environment that aims to achieve positive results for all learners. This is a comprehensive, intertwined approach that goes beyond standard programs, projects, and other services designed to help children with dyslexia.

1.4 Inclusion and DFS

Conditioned interventions and tools are provided for dyslexic students in inclusive education; these two elements allow successful learning despite difficulties (Shaywitz et al. 2008). Norwich et al. (2005) say that the concept of DFS should be included within an expanded concept that covers special education and inclusive schools.

It should also be noted that there is another approach that seeks to remove barriers and obstacles in educational environments: the universal design for learning (UDL) in the US. Pavey (2015) compared the UDL to DFS and found similarities and differences between them. For example, learners' accessibility to information in the UDL depends on flexibility in lesson design, which can accommodate a wide range of individual capabilities. However, learners in DFS can use alternative methods to record information. This is based on teachers' knowledge of individual learning methods favored by learners. In addition, education design in UDL avoids complexity, regardless of students' experience, knowledge, or skills. However, DFS focuses on clarity, frequency of explanation, and dividing information into small pieces.

The UDL tends to reduce any essential information that requires physical effort to learn in order to ensure maximum interest on learners' parts. However, whether it is essential or not, information in DFS is explained according to the way students prefer to learn. Learning environments in the UDL are designed with special standards that help students to access to the curriculum instead of the modifying that according to each student. However, DFS focus on making sure that students with dyslexia can see and hear their teacher clearly.

2. Literature Review

Nakai (2020) focuses on teachers' efficiency in supporting dyslexic students in both DFS and regular schools. The study also touched on the effect of training programs provided to teachers about dyslexia. The sample included eleven teachers who teach students with dyslexia; five teachers were in DFS and six in public schools. The results indicated that all teachers in DFS were familiar with using information and communications technology (ICT), whereas public school teachers were not. The teachers in DFS preferred to use ICT with their dyslexic students and employed iPad devices as part of this. They stated that students can manage important tasks themselves if they use ICT appropriately. In addition, Nakai emphasized the importance of cooperation between society, school, teachers, and parents in supporting students with dyslexia.

There are no studies that deal with DFS in Saudi Arabia. There are, however, studies that deal with inclusive education in that context. Based on the aforementioned relationship between the methodologies of DFS and inclusive education, it is worth mentioning two studies. Qahtani and Raba (2019), using the descriptive (survey) approach, reveal the extent of preparation on the part of primary school teachers regarding inclusive education. A number of variables reveal that teachers expected difficulties to arise in the application of inclusive education with 531 teachers completing the questionnaire in the eastern region. The results show concerns such as the unsuitability of the environment and school facilities. In addition, the authors highlight the need to develop teachers and increase their efficiency in classroom management and inclusive education planning. Qahtani and Raba recommend that teachers be developed and prepared before teaching special education and that an assistant teacher be employed in regular classes.

The second study, Othman and Al-Sadiiri (2018) focus on the preparation and attitudes of general education teachers regarding the inclusive education system. The results show a common set of measures advanced by teachers in inclusive environments, such as university preparation, cooperative work, and training. In addition, teachers display varying attitudes about the application of inclusive education. The authors recommend teacher preparation programs in inclusive classes and the expansion of inclusion in Saudi schools.

Studies discuss DFS outside Saudi Arabia and others reveal the foundations of preparation for

inclusion in Saudi Arabia. However, there is a lack research on any aspect of DFS in Saudi Arabia. Therefore, this study aims to reveal the opinions of teachers about the application of DFS in Saudi Arabia. It discusses its implementation and how to overcome possible challenges.

3. Materials and Methods

This study investigates the application of a new model for Saudi schools. This required in-depth discussions with specialists and a profound understanding of their perceptions; many of which are similar to DFS policy. Therefore, I used the qualitative approach, exploring aspects of this phenomenon through relevant individuals. I also used semi-structured interviews to allow for clarification and discussion of various related aspects (Creswell 2018).

The sample consisted of eleven teachers who taught students with LD. They were only selected if they had ten-plus years of experience because this was more likely to result in rich and varied accounts. Each teacher was affiliated with a different school. Schools varied in terms of their modernity and distance from the city .

3.1 Data Collection and Analysis Procedures

The interview included two parts, the first of which was the explanation of the concept of DFS and the four basic standards mentioned in the BDA (leadership and management, teaching and learning, the semester environment, and partnership with parents) as well as the answering of any participant questions. The second part witnessed the participant's discussion of his beliefs about this framework and the possibility of its application in Saudi schools. After getting the permission of the participants, the interviews were registered, written, and analyzed through the objective analysis of thematic analysis. This analysis occurred in six stages following the theory of Braun & Clarke (2006): Familiarize yourself with the data, generate initial codes, search for themes, review potential themes, define and name themes and produce the report.

Therefore, the data were identified and read several times. This was followed by the coding process in which many codes were deduced and fourteen topics emerged. After the topics' review, they were rearranged into eight defined and detailed topics. Last, the report was written with quotations and the names of the participants were replaced by two letters: FQ, RK, YP, AJ, ND, MH, TU, GH, ST, DS, AR. The discussion and comparison were added to the report later.

4. Results

Teachers' attitudes about the idea of DFS were generally positive. They supported their use if the necessary conditions and capabilities were available. However, there were various opinions about these conditions' possibilities. There were those who saw such availability as very unlikely across the board and some who believed such availability was likely in high-quality schools. Some stated that such availability across the board was possible with more effort. All of the data above were dealt with in objective referral. Seven topics emerged.

4.1 Advantages of DFS in Saudi schools

The results showed that adding the DFS model to schools will help address problems for the LD student and teachers of such students.

A. Prevention of categorization and labeling

The LD program in Saudi schools operates through withdrawing students from their classrooms and sending them to the resources room to receive special support. This exit of students from the classroom has consequences.

Participant AJ indicated:

The student who goes to the resources room has negative effects, especially in the age where the students began to distinguish between what is ordinary and what not, so you can see that this student has a weak level so that he will go to the room and miss other skills and knowledge from the classes he leaves.

RQ mentions this negativity and added:

But the DFS model is beautiful so that it does not have a distinction, the students that he is with them and takes everything with them, they will not feel that there is something different, and the student himself feels parallel to his peers.

FQ talked about the labeling problem that appears in LD programs:

I am a supporter of it because it seeks to integrate and remove people with dyslexia from labeling, especially since some parents are afraid to allow their children to attend special education centers and even the LD program due to labeling and the view of the society's view and the students' view of each other.

The participants indicated that DFS, however, would help students receive adequate support in regular classes and keep pace with his peers in a non-discriminative way.

B. The inclusion of a greater number of students

Participants indicated that the DFS model would solve the problem of limited numbers; only a small number of students with LD (approximately twelve to sixteen) receive all services in the LD program.

Participant GH explained that his school has a high percentage of students with LD (about 900); however, because of the LD program's limitations, not all of them will be serviced., He believed the DFS model will solve this problem. YP indicated that a teacher who sticks with dyslexic students for a long time and knows their capabilities is best for servicing them: "The regular class teacher is close to all students who appreciates the appropriate strategies to all students, no matter how different level."

4.2 Support policies (allowances, school budget)

Participants saw a relationship between the success of the application of DFS and the extent of available support. The types of support mentioned can be divided into three sections:

A. Allowance

Some participants believed that the school principal is mainly responsible for the success of the DFS model. They acts as the catalyst and follows up on plans and resources. It was expected that they will be keener on programs that include special support for them. AR indicated:

Some programs have a substitute instead of the manager, such as the intellectual disability program, while LD programs, for example, without an allowance, if it was spent for the manager instead of him if this model is applied, it will be keener.

B. School budget

Participants emphasized that the application of this model requires financial support. A budget for the development of the environment and the provision of the necessary tools is necessary. In schools that already have an advanced educational environment, the financial adjustments and adaptations can be partial. TU stated that:

The school administration needs support to implement this model from the Ministry of Education with a budget and systems. Currently, typical schools may have the ability to implement such a model, while the rest of the schools are impossible to do it properly without a budget, because if it is circulated without support, it will only be applied to paper, but in reality, it will not have existed.

4.3 Teachers' professional development

The results showed how participants regarded the professional development of teachers of dyslexic students. Their views can be summarized as follows.

A. Teachers' qualification

Participants emphasized the need to develop teachers professionally and cognitively as well as enhance their knowledge of educational technologies. University preparation is not enough in this regard. FQ explained:

We need a special and intense rehabilitation in preparing teachers for this stage, especially in the reading and writing stage, especially since university education has been a great deficiency in the preparation, as well as their development in the use of technologies. Some teachers do not improve the use of projector, software and audio.

B. Teachers' resistance to change

Part of teachers' qualification is their willingness to accept change. Those who have lengthy teaching experience and are confident in their practices in a way that makes them resistant to any new developments in education are less qualified. AR explained this issue as follows:

I expect the reaction of the grades of the classes to be like what we hope...some of them can say that this method of education is based on twenty-five years of experience, I will not change it at the end of my years without it and I only have five or six years left for me, but younger teachers can accept the greater idea.

4.4 Previous school preparation

The results revealed that the success of the applied model relates to the school's readiness and already-existent integration of educational elements.

According to the participants, the more high-quality materials and personnel available in the school, the higher are the chances of success of the model's implementation. This is summarized as follows.

A. Well-prepared schools and equipment availability

Participants indicated that the application of the DFS model would likely fail in less fortunate (disadvantaged) schools and even in many middle schools. TU said:

The problem is that our classes are equipped with the devices that suit the students and their stage? Sure, no, we only have a model school in each region; model schools are the ones that provide these matters.

Some participants suggested that it could first be applied gradually in the best schools. This way, when it comes time to the rest of the schools to apply it, they can take advantage of solutions to arisen difficulties the former already created. AR stated:

It can be applied to certain schools and then if you have a great benefit, it can be applied partially in other schools. The important thing is that you depend on applying the model at the beginning in schools that are prepared comprehensively from the building, teachers, and administration, meaning if the school is equipped, it is taken as a mini guide for the model.

B. The importance of educational technologies

Participants see the provision of educational technologies as necessary to the DFS model's success. This helps meet the different needs of students. RK expressed this by saying:

We need technology such as computers, screens, digital tools, and other things. This is meant to help

reading properly and special programs, there are programs to teach reading, that would be provided to us while providing the devices that we can depend on.

The participants expected benefit from these technologies in all relevant aspects, such as communicating with the parents of those with LD. NH explained:

I see that it is one of the most important suggestions to communicate with the family, through some technical applications, so that the guardian can enter directly to the student notes easily. The required directives will make it clear for the parents to deal with their children.

4.5 Teamwork and Cooperation

Participants expressed the importance of teamwork, and it is striking that their work in the LD program was mainly based on their own efforts, and they have more positive experiences when they benefit from greater cooperation from those around them. This pushed them to see that teamwork and cooperation are more important in DFS; this way, dyslexic students can learn without any obstacles. The results in this context included the following:

A. Include everyone in the plan

Participants expressed their opinion on the comprehensiveness of the model implementation plan. They emphasized the importance of involving teachers and administrators in planning for success. ST expressed this by saying:

It must be from the administration, and then the teachers and even the administrators have a role, they must have a complete plan for the educational march, and they have a specific goal and a plan, so they succeed in it. They must have a plan for each one who has duties that he settles so that the plan succeeds in this; therefore, I support this adoption of this model if it has the cooperation of everyone.

B. Integration with parents

The results indicated that DFS could enhance dyslexic students' learning experience if cooperation with parents and integration between the school and home exists. The teacher sees a great impact on the student when there is integration of the family into the program. For example, GH referred to his experience teaching students with LD during the COVID-19 pandemic. He encouraged family cooperation, and this had a positive effect on students' achievement and skill development. GH explained:

At a time when our teaching was (online), it became a participation between me and the guardian while I was teaching the student, I felt during this period that the student learned much faster than before, so I realized that this is because the guardian became seeing me while I was teaching his son, so if we concluded parents during the lesson and ended they are going to follow with him after the lesson.

But some teachers are afraid that some families will not cooperate due to various reasons, including their economic and cultural status. TU said:

The problem that can face us is the cooperation of families, because most of the low-income people are not responsive to the teacher . . . because they have no time to attend and no time to follow the son.

4.6 Challenges

Successful implementation of DFS standards requires significant effort and time. Schools may face many varying obstacles, and some may be unable to overcome such challenges and thus stop seeking to be a DFS. These challenges are listed below.

A. Need for time

Participants indicated that the preparation and application of DFS standards requires a great

deal of time. Many schools and teachers of students with LD complain about lacking time. AR indicated:

Its application needs time and needs an effort from the school administration and teachers, meaning; in addition to working as a teacher of students with, in general the idea is excellent, but you need time for the application from the preparation by the teacher, planning by the school administration, equipping the appropriate tools, and understanding parents.

The balance of time may change after completing the criteria and moving from preparation to practice. The issue of time emerges, and the teachers have led to the completion of the curriculum on time, and conflicts appear among teachers, as the standards of DFS focuses on developing easy access to the curricula (Improve Access to the Curriculum) which requires development on all curricula. While there is a belief among some teachers that the most important part of teaching is completion of the curriculum, some believe curriculum delivery methodology is more important. AR said, "I expect the teachers' reaction to what we want, they can say that I have a curriculum that I want to complete." He added:

Unfortunately, the teacher in the class focuses on the curriculum and not on the student as he is obligated to finish the parts of the curriculum with certain dates, and perhaps the focus on time occupies the teacher from doing things that facilitate student access to the curriculum, or activate them as required.

B. Students' educational level and class size

The DFS model is based on providing high quality education for all students, but some teachers believe this is impossible. It is challenging to provide this level of education for all. Many schools see incoming students with little academic prowess. Such low achievement is related to their family's economic and cultural status and level of pre-school education. GH said:

Some students enter the first year and cannot read or adopt a word, and it is assumed that spelling learning is at least in kindergarten. In the school, the teacher directly teaches the reading of words, through the teaching of letters in the first. Imagine that most of the students who are referred to diagnosing the difficulties we discover that they did not learn to read the letters, so how can he read words.

Four participants stated that there is another challenge in addition to students' weak academic achievement: large class sizes. A large number of students in the classroom constitutes a burden on the teacher. It makes it difficult for him to teach and manage. MH said:

We face the difficulty of crowding in the classes, for example, classes in which you see thirty or forty students, the teacher is strained for education and providing the necessary support for students.

AR believed that providing adequate resources could facilitate management of a large number of students:

If I have thirty-four students, it is difficult to give them a good attention, but when there are helping tools and electronic applications, this can help him explain in a manner that suits everyone.

4.7 Enthusiastic Attitude

The success of many ideas and projects heavily depends on the conviction of participants, whether they be administration personnel, teachers, families, or students themselves. For example, DS stated that preparing a learning room allowed him to see that the administration did not put this room in before, meaning its priorities changed. This example shows that administration's appreciation of a program will affect its effectiveness and success.

The participants discussed reasons that can help cultivate a positive attitude toward DFS:

A. Raising awareness and communication

The value of something increases when its importance and uniqueness are identified. This may require time and repetition. DFS require that awareness of this project expand to include those all involved. ST indicated this based on his experience in the LD program:

What increases the success of this model is for the administration to introduce it and its importance to all teachers, parents, even to the neighborhood it is in, I mean they settle repeated meetings about the dyslexia-friendly schools, so they have an idea, because I find a lack of awareness among some teachers and parents about the LD program although every year I give them illustrations.

Since DFS are aimed to include dyslexic students and others, encouraging awareness and preparation on behalf of all students is necessary. ND said:

We are supposed to prepare the class students and make them understand all their own abilities, we are all supposed to appreciate and prepare students with LD and this motivates them to change some of their behaviors.

Other participants added that awareness is not limited to meetings. The school administration must involve relevant people such as family members in the planning and implementation process for it to succeed. YP said:

The partnership between the home and the school is necessary in this matter, the home has an important role because it represents the circle of support and motivation. If the student feels that he is following in school and has no support in the house, what the dyslexia-friendly schools aim for will not be achieved.

B. Motivating teachers

The teacher, as some participants describe them, is one of the main pillars in the success of an educational project. Therefore, the school administration must ensure that the DFS project is an acceptable or likeable path for teachers. Some participants supported the use of motivational methods and believed that they have a great impact. DS mentioned that it is one of the means he uses to alleviate work pressure.

You know that the public school teachers with their educational conditions are linked to their psyche, such as the status of his students, the status of the number of students and the number of classes, as the role of the school administration is how it helps and prepares it to interact in this model.

One practice that can be simulated is the gradual application of the model at the school level. When a teacher sees his school's seriousness about the project, they may be incentivized to participate in its success. YP indicated:

"The partial start as positive infection will be transmitted from the first-class teacher to the second and from the second to the third and so on."

RK agreed with this idea:

I think that when starting the model, the beginning is step by step, in the classroom at the beginning, then we move, for example, in the laboratory, then the library, then the school as a whole. Because the beginning can be difficult, especially in the regular class, by virtue of it is a new mechanism for the students and the teacher himself.

5. Discussion

This study aimed to identify the views of teachers of students with LD on the application of DFS in Saudi Arabia. It revealed challenges and aspects that should be taken into account regarding

application.

Participants expected many positive effects of DFS implementation. DFS' benefit will not be limited to those with dyslexia. The LD program in traditional learning is disadvantaged compared to DFS; it is limited to serving those with LD; it encourages individualism over collaboration, and it requires the withdrawal of students from the classroom. In DFS, such negatives are limited. These results are consistent with the study of Swiyah Perdana (2021), which emphasizes that students with disabilities benefit from inclusive education and collaboration between special education teachers and regular teachers. This applies to DFS, according to Reid Fawcett (2008) in terms of their ability to involve all students in learning opportunities and the possibility of promoting the learning of students with non-reading dyslexia in regular classes.

The results also stressed the need for forms of support in order to achieve success, including the support of the principal, who is in a position to promote special education programs in planning and follow up on their implementation as well as motivate school employees. A school budget for the environmental modifications and educational amendments required by this model is also necessary. This is in agreement with Peer and Reid (2001), who emphasize the importance of providing leadership and focusing on resources needed in developing DFS. This is a challenge facing local education authorities (LEAs) in the UK. Several studies that deal with the implementation of inclusion in schools have indicated the importance of support. Cohen (2015) says that the school principal is the main catalyst of change, contributing to the creation and success of the inclusion program. Ugwuanyi et al. (2020) investigate teachers' experiences providing inclusive education services for dyslexics in the Kingdom of Eswatini and find feelings of inability regarding the provision of services due to a lack of appropriate support. The results also warn that imposed educational legislation must come with support for teachers.

According to their experience, the participants indicated that professional development for schoolteachers must be taken into consideration when preparing to implement the DFS model. This includes foundational education methods and the use of appropriate technology for dyslexic students and others. The participants added that university preparation was not enough to meet these requirements. They also expressed their fear of resistance from some teachers to changes required by the DFS. Reddick (2006) stresses that training is an essential part of DFS and includes teaching all workers. Nakai (2020) says the need to develop experiences to support LD people and the importance of providing relevant training programs in DFS.

The results showed the necessity of preparing the school environment for the application of DFS, as schools vary in infrastructure, student population, teacher readiness, and availability of tools and auxiliary technologies. Therefore, the application of DFS will be easier and more expected to succeed when it takes place in model or highly prepared schools. The participants stated that this can be the starting point in Saudi Arabia; the experience of these schools can be evaluated, and, if favorable, expanded to other schools. Coffield et al. (2008) show the importance of providing the appropriate tools, as 57% of the comments of dyslexic students enrolled in schools participating in the Swansea County Project for DFS praised the tools and educational supplies provided by teachers. Coffield and O'Neill (2004) stress the importance of supporting DFS with information and communications technology (ICT), the responsibility of the local authority (LEA) in the framework of The Durham County Policy Document on Specific Learning Difficulties. The study also emphasized the importance of improving the school environment and providing the appropriate provision.

Collective action is an issue emphasized in the results, as the participants believed the planning process must include the involvement of all relevant people. The opinions of the participants were affected by their experiences in the LD program, in which they saw the positive impact cooperation had. They stressed the importance of everyone's participation in DFS, which supports students in all school facilities versus the traditional program, which supports students with LD only in the resources room. Nakai (2020) similarly concludes that cooperation and teamwork between all teachers and parents must be completed in an integrated manner during an organized planning session. This is a basic factor in the success of DFS and inclusion. Similarly, Hansen et al. (2020)

conclude that inclusive schools must take a team approach to achieve inclusion. Norwich et al. (2005) discuss partnership with parents in the DFS and emphasize activating the role of parents in DFS and the need to enhance the relationship between parents and teachers.

The results showed many expected challenges regarding implementation of the model. This includes the need for time to prepare to provide DFS-related standards, and that is related to the work needed to facilitate the connection to the curriculum. To teach according to the student's condition in the curriculum differs from following a plan based on the curriculum. But this becomes more challenging with a large number of students in the class. These results are consistent with Ugwuanyi et al. (2020), who say some challenges facing teachers supporting dyslexia in inclusive education in the Kingdom of Eswatini, including a lack of time, which affects the teaching process. To confront this challenge, Triyanto et al. (2022) suggests studying the increase in the number of trained teachers in public schools. This idea can be developed in the context of inclusive schools and DFS in Saudi Arabia by providing a qualified assistant teacher in the regular class.

An interesting result of this study is the prevalence of the idea that DFS can be achieved through raising awareness and organizing effective communication with relevant people in addition to inspiring motivation, especially for teachers. The gradual application in a practical, stimulating, and persuasive way of dyslexia-friendly classes is also important. These results are compatible Khaleel et al. (2021), who discuss teachers' opinions on inclusion in the United Arab Emirates and showed the importance of awareness and positive trends in inclusion, especially from school principals. Konza (2008) discusses how to respond to challenges in the framework of inclusion and indicated that rewarding the best teachers motivates other teachers to aim for distinguished performance and higher production.

6. Conclusion

Education in developed countries has garnered worldwide attention. Many countries seek to take similar steps, but preliminary studies must first be conducted for several reasons, including the infrastructure of education and cultural and economic issues. Therefore, this study examines a new initiative in the education of people with dyslexia launched in the UK that has spread in several other countries. We must study the possibility of its application in the Kingdom. This study focuses on inclusion, cooperation between school employees, constructive communication with children's families, professional development of teachers, and appreciation of children's capabilities.

The results of this study inspired some recommendations. First, teachers must be aware of modern global initiatives in their specialization, even if those initiatives are not applied in Saudi Arabia. Second, framework of the DFS should be applied in model schools first. The quality of the application and its impact (i.e., the installation of an assistant teacher for a large class) should be comprehensively studied in model schools to benefit others schools. Third, the provision of material support and teaching aids that enable students to learn effectively is very important. Before all of this, however, there must be enthusiasm for the project, especially from the school administration.

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