

# **Investigating the Constructivist Dilemmas of Saudi Teachers Working with Students with Learning Difficulties**

By

**Fahad Alanazi**

**Supervisor: Professor. Shane Pill**

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## **ABSTRACT**

This research project examined dilemmas Saudi teachers encounter while applying constructivist aligned teaching approaches to support students with learning difficulties. Despite the highlighting of Saudi Arabia's educational reforms on inclusive practices and student-centred learning, teachers face dilemmas in effectively applying constructivist aligned approaches in diverse learners' classrooms. This project is focused on the philosophical, pedagogical, cultural, and political dilemmas Saudi educators encounter when establishing a constructivist aligned learning environment. It is based on Windschitl's (2002) work on constructivist dilemmas. The lived experiences of Saudi educators and contextual elements influencing their instructional decision-making are examined in this qualitative study. The findings have shown that Saudi teachers face a variety of interconnected dilemmas: conceptual dilemmas in fully understanding and enacting student-centred principles, pedagogical dilemmas in designing engaging, differentiated curricula and managing constructivist aligned classrooms. Cultural dilemmas around negotiating societal norms and religious values, and political dilemmas emanating from institutional constraints, resource limitations, and resistance to educational change. Thus, the research contributes to the limited research on inclusive practices aligned with constructivist theory in Saudi Arabia and informs teacher professional development, programs, and policy reforms supporting students with learning difficulties. This exploration of teachers' dilemmas may support the design of contextualised strategies that enhance teaching quality to improve student learning outcomes consistent with inclusive practices and student-centred learning.

## DECLARATION

I certify that this thesis: "Investigating the Constructivist Dilemmas of Saudi Teachers Working with Students with Learning Difficulties"

1. does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university
2. and the research within will not be submitted for any other future degree or diploma without the permission of Flinders University; and
3. to the best of my knowledge and belief, does not contain any material previously published or written by another person except where due reference is made in the text.

Signed.....Fahad Inad H Alanazi ..... Date.....09 / 12 / 2024 .....

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## **GLOSSARY**

### **Definition of Key Terms**

The definitions of terminology are determined by the study's topic focus. These definitions ensure that essential ideas are understood and prepare the way for the analysis of the research outcomes. The following is a list of some important phrases that are closely related to this research and have specific meanings.

### **Dilemmas**

The researcher employs the dilemmas as that is produce from four aspect of it: Windschitl (2002):

“Conceptual dilemmas are rooted in teachers’ attempts to understand the philosophical, psychological, and epistemological underpinnings of constructivism. Pedagogical dilemmas for teachers arise from the more complex approaches to designing curriculum and fashioning learning experiences that constructivism demands. Cultural dilemmas emerge between teachers and students during the radical reorientation of classroom roles and expectations necessary to accommodate the constructivist ethos. Political dilemmas are associated with resistance from various stakeholders in school communities when institutional norms are questioned, and routines of privilege and authority are disturbed”.

### **Constructivist Aligned Approaches**

It is a teaching philosophy derived from the constructivist learning theory, which allows students to take part in creating curriculum and learning experiences, teaches for deep understanding, and utilises methods that inspire inquiry and discovery (Alazzaz, 2019; Jumaah, 2024; Lascsakova, 2024).

### **Learning difficulties**

The researcher utilised the concept of learning difficulties in Saudi Arabia as outlined by (Alnaim, 2015) that it refers to issues that affect students' abilities to understand and employ spoken and written language effectively. It is a Pertains to disorders in fundamental psychological procedures connected to language comprehension and the ability to use it. These disorders result in difficulties with listening, thinking, speaking, reading, writing,



spelling, and arithmetic. Importantly, these dilemmas are distinct from issues associated with mental disabilities, visual or hearing impairments, or social and familial effects.

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# CHAPTER 1: Background

## Introduction

This study relates to Saudi Arabia's educational system, which currently focuses on constructivist aligned approaches and inclusive education practices (Abed & Shackelford, 2023). To improve learning outcomes, a critical area of concern is the difficulties students with learning difficulties face (Alahmadi & El Keshky, 2019). To gain insights into an inclusive environment for students with learning difficulties, this study explored the lived experiences of Saudi educators trying to deal with the problems associated with implementing constructivist aligned approaches while meeting the needs of their diverse students (Al-Zoubi, 2016).

Improved inclusive practices and individualised instructional approaches can enhance all learners, highlighting the importance of recognising and addressing each student's unique capabilities and challenges (Dare et al., 2017; Grier-Reed & Williams-Wengerd, 2018). By considering learning contexts and implementing interactive instructional models, educators can establish inclusive environments that foster positive learning experiences and relationships, in order to facilitate educational and social inclusion for students with learning difficulties (García-Carrión et al., 2018). To this end, the Saudi Ministry of Education outlined the criteria for admitting students into the Saudi Learning Difficulties Program (SLDP). To enter the programme, there should be a clear discrepancy between the student's ability levels and academic achievement in verbal expression, comprehension, reading, or math, or they may have disorders in psychological processes such as memory and attention (Education, 2024).

Student acceptance into the SLDP should not be due to intellectual or behavioural disabilities or sensory issues. Instead, it is vital to establish that traditional education programmes are unable to address the student's requirements adequately and therefore that the student needs specialised instructional programmes. In the Saudi context, a traditional education programme is usually based on a set curriculum, taught by teachers, and evaluated by summative tests. Furthermore, for entry into the SLDP the student must be recognised by a specialised committee responsible for accepting and classifying children with learning difficulties. The committee includes teachers and counsellors, and the student's guardian, must obtain approval from the Ministry of Education (Education, 2024). The SLDP was initiated in 1996 for primary school students. It was aimed to delineate how the teachers

perceive identification strategies to be adequate in bringing proper diagnosis and support for the students with learning difficulties (Alnaim, 2015).

Despite the ongoing reforms in the Saudi education system emphasising contemporary teaching approaches and a shift towards more inclusive practices, extensive educational research (Alharbi, 2015; Fadlillah et al., 2024), suggests that teaching students with learning difficulties presents unique dilemmas to teachers. These dilemmas are rooted in the constructivist dilemmas (Windschitl, 2002) faced by Saudi teachers when they try to apply constructivist aligned teaching approaches with the realities of their teaching situations (Windschitl, 2002). The dilemmas point out unique challenges that teachers encounter while trying to apply student-centred and inclusive teaching approaches effectively. To gain a clearer perspective on these dilemmas, according to Windschitl (2002) constructivist dilemmas can be divided into four main dimensions. I will now explain what each of these dilemmas:

Firstly, handling the conceptual dilemmas in education is essential for teachers who deal with students with learning difficulties (Fadlillah et al., 2024; Windschitl, 2002). Contextual dilemmas impact teaching and learning. For example, the lack of concurrence in merely identifying and developing culture-specific understanding can hinder relevant educational changes that cater to the needs of the students and their communities (Lestari et al., 2022). As a result, teachers may face contextual dilemmas when their values and beliefs conflict with educational contexts and recommendations meant to influence their teaching methods (Ruys et al., 2014).

Secondly, cultural dilemmas in Saudi Arabia are associated with Islamic paradigms and add to the dilemmas facing teachers in the region as they redefine their position to construct more student-centred learning environments consistent with the Saudi education system's emphasis towards more contemporary teaching approaches a shift towards more inclusive practices (Felimban et al., 2016). Cultural concerns can occur in teacher-student associations, impacting the adoption of appropriate methods (Alanazi et al., 2023; Hamdan Alghamdi, 2014). Sociocultural factors pose known barriers to implementing a student-centred approach (Serrano Corkin et al., 2019).

Thirdly, political dilemmas can arise due to resistance from within the school educational system towards existing policies (Alshenaifi, 2018) that may not align with constructivist understandings of teaching for the effective learning emphasised in contemporary education ideas, which often derive from Western education ideas. (Jarvis et

al., 2014). Saudi teachers may face dilemmas in utilising contemporary perspectives in their instructional strategies, especially when dealing with students with learning difficulties (Alanazi et al., 2023). Political dilemmas, such as an absence of teacher academic autonomy and inadequate guidance from school governing bodies, often impede the adoption of programmes (Serrano Corkin et al., 2019). Further, regular academic development chances and ongoing support are vital to understanding contemporary approaches to education, but they are often lacking, making it challenging for Saudi educators to sustain programmes like the SLDP (Almulla, 2023).

Fourthly, pedagogical dilemmas can manifest in tasks related to designing and delivering a curriculum (Hamdan Alghamdi, 2014), and are encountered when teachers balancing educational goals, instructional methods, and student needs (Harvey et al., 2015). They contain instructional issues and content, socio-moral and emotional dilemmas, and informative content (Ibe, 2017; Sarita, 2017). Teachers must navigate conflicts, manage knowledge gaps, and create a democratic classroom environment (Wansink et al., 2021). Undemocratic practices, such as teacher-centred knowledge transfer and lack of student participation, can lead to learning inequalities and student alienation. Pedagogical reasoning evolves through professional development, requiring reflective practices and ongoing professional development to improve strategies and respond to these dilemmas (Watkins et al., 2021)

Although these dilemmas will be examined in further detail in Chapter 2, this summary offers a preliminary understanding of the dilemmas framework.

## **Problem Statement**

Inclusive education aims to provide all students with equal learning opportunities. However, its implementation varies significantly across different regions (Dare et al., 2017). In Saudi Arabia, the Ministry of Education ensures free education and manages the quality of private education. Special education initiatives exist to support students with diverse needs, such as reducing class sizes and promoting collaborative training (Almalky & Alwahbi, 2023).

Despite these efforts, Saudi teachers encounter substantial dilemmas when using constructivist aligned approaches in classrooms with students with various learning difficulties (Al-Zoubi, 2016). It can be problematic to apply these approaches, which

emphasises active engagement and student-centred learning, when students are confronting cognitive, behavioural, or academic obstacles (Salamah, 2023).

Saudi Arabia began its journey to provide an inclusive education for students learning difficulties in the 1990s. However, questions remain about the effectiveness of these policies and practices (Abed & Shackelford, 2021). Dilemmas contain teachers' beliefs and perspectives toward inclusive education, which significantly impact their ability to adapt constructivist aligned approaches to meet the needs of students with learning difficulties (Abed & Shackelford, 2023; Alahmadi & El Keshky, 2019).

The research project highlights the need to address several dilemmas. It focuses on understanding teachers' perspectives and developing strategies to help the successful integration of inclusive practices. This understanding is crucial for improving educational consequences for students with learning difficulties and ensuring that inclusive education initiatives are effective.

## **Significance of the Study**

The significance of the problem examined in this research project lies in several key elements.

### **Importance of inclusive teaching for learners with learning difficulties**

Combining inclusive practices and tailored instructional strategies is important to improve the learning experiences of all learners, specifically those with special requirements, and to foster their educational and social integration (Dignath et al., 2022; Grier-Reed & Williams-Wengerd, 2018).

### **Obstacles confronting Saudi teachers in adhering to inclusive practices:**

Despite Saudi Arabia's educational reforms, teachers still grapple with complex dilemmas, inhibiting the successful performance of inclusive teaching strategies and learning environments for students with learning difficulties (Almalky & Alwahbi, 2023; Dare et al., 2017).

### ***Need for a deeper insight into the dilemmas:***

Understanding Saudi teachers' dilemmas is crucial for developing effective training programmes and endowing inclusive education, as it enables them to navigate the sophistication of supporting students with learning difficulties (Alshenaifi, 2018).

### ***Contribute to the understanding base:***

This research project explores the dilemmas Saudi teachers face when working with students with learning difficulties employing Windschitl's constructivist dilemma framework. It seeks to improve teaching methodologies and student outcomes by recognising key dilemmas, developing tailored strategies, and improving teaching quality (Alazzaz, 2019; Albalwi, 2023).

## Objectives

The objectives of the research project are to determine and then examine the following.

- **Conceptual Dilemmas** experienced by Saudi teachers when assessing and applying the principles of constructivist aligned approaches and learning in their classrooms with students who have learning difficulties.
- **Pedagogical Dilemmas** encountered by Saudi teachers in developing inclusive curricula and lesson plans, facilitating student-led learning, managing classroom interaction, and valuing student learning in concordance with constructivist aligned approaches.
- **Cultural Dilemmas** that Saudi teachers face when implementing constructivist practices, including navigating cultural norms, fitting diverse student experiences, and transforming the classroom culture.
- **Political Dilemmas** that Saudi teachers face, such as focusing on issues of accountability and self-responsibility, delivery of support and resources from administrators and parents, and dealing with institutional constraints.

These objectives are calculated to support with established learning from the literature review (Chapter 2), emphasising the importance of creating inclusive and effective learning environments for students with learning difficulties.

## Methods

To investigate the dilemmas that are faced by Saudi teachers, the study adopts a qualitative approach that concentrates on their actual experiences using the scope of Windschitl (2002) theoretical framework to make meaning of the teachers' experiences. The study highlights how social, cultural, and historical circumstances shape the knowledge development (Boon et al., 2022), of Saudi teachers. Details of the methodology and study design are provided in **Chapter 3**.

## Research Question

The central research question in this present research is:

What dilemmas do Saudi teachers face when dealing with students with learning difficulties?

The sub-questions of the research project are as follows:

1. What conceptual dilemmas do Saudi teachers face in the handling of students with learning difficulties?
2. What are pedagogical dilemmas Saudi teachers face in dealing with students with learning difficulties?
3. What are cultural dilemmas Saudi teachers face in dealing with students with learning difficulties?
4. What are political dilemmas Saudi teachers confronting while dealing with the students' learning difficulties?

Breaking down a broad research question into focused sub-questions aligned with Windschitl's dilemmas framework allows for a deeper investigation of the research phenomenon, culminating in a richer and more descriptive understanding of the implications for Saudi teachers working with students with learning difficulties.

## **Summary**

This study examines the unique dilemmas Saudi Arabian teachers face when implementing constructivist aligned approaches with students exhibiting learning difficulties. Despite Saudi Arabia's stated commitment to inclusive education reforms and constructivist principles (Abed & Shackelford, 2023), the study hypothesised that teachers face dilemmas rooted in interconnected dilemmas. This section outlines key dilemmas that will be further explored in the discussion chapter. In this study seeks to gain a deeper understanding of these multifaceted dilemmas, using the Windschitl (2002) framework for analysis and exploring the lived experiences of Saudi teachers working within these constraints.

Chapter 2 will review a comprehensive theoretical background for the study, consider a review of constructivism, constructivist aligned approaches, relevant research on constructivist aligned approaches in Saudi Arabia, a discussion of Windschitl's framework, and a review of existing literature on the topic



## **CHAPTER 2: LITERATURE REVIEW.**

The literature review emphasises Constructivism Theory and its resulting implications for teaching, focusing on recent research related to constructivist aligned approaches, especially in Saudi Arabia. Noted in Chapter 1, It discusses the dilemmas teachers face when applying constructivist aligned approaches, specifically with students who have learning difficulties. Key areas of discussion include the alignment between teacher beliefs and instructional strategies, the dilemmas of addressing learning difficulties, and the influence of contextual factors on teaching practices. In addition, a gap is identified in the literature regarding Saudi teacher experiences with students with learning difficulties, which this study aims to address according to the dilemma's framework proposed by (Windschitl, 2002).

### **Constructivism theory**

Constructivism integrates insights from philosophy, psychology, sociology, and education (Bada & Olusegun, 2015). Roots in the work of Dewey (1929), Bruner (1961), Vygotsky (1962), and Piaget (1980). Bednar, Cunningham, Duffy, and Perry (1992) and von Glasersfeld (1995) developed a constructivist learning theory, building on cognitive learning principles (Bada & Olusegun, 2015; Zhang & Lin, 2018). This evolution underscores the importance of understanding how knowledge is constructed through social interaction and personal experience. Advocates of constructivist aligned approaches argue that it fosters critical thinking, problem-solving, and active engagement, encouraging students to build knowledge through experiences rather than passive listening. A constructivist aligned teaching approach, grounded in real world applications, empowers students and promotes long-term understanding to take ownership of their learning process (Dzaiy & Abdullah, 2024). Furthermore, the theory of constructivism recognises students' have diverse learning styles, enabling them to explore content at their own pace and from a variety of perspectives, which is a particularly useful perspective for inclusion classrooms (Le & Nguyen, 2024).

Constructivist theory posits that learners actively build knowledge through their experiences, integrating new information with their existing mental frameworks (Charmaz, 2017; Dennick, 2016). It also suggests that teachers ideally foster student agency and active learning (Lestari et al., 2022). This process of active knowledge construction contrasts with passive reception of information and emphasises the learner's role in making meaning. Constructivism challenges the premise of some 'traditional' teaching methods, often

associated with behavioural theory (Bada & Olusegun, 2015). Where 'traditional' teaching methods are sometimes considered 'teacher-centred', constructivist theory encourages teachers to adopt a more student-centred approach, one promoting active participation, problem-solving, critical thinking, creativity, and collaboration among students (Jing, 2017; Misra, 2020; Nurhuda et al., 2023).

Education has been notably impacted by constructivism. More learner-centred teaching strategies, such as inquiry-based learning and problem-based learning, have emerged with emphasis as a result. These teaching strategies are assumed to motivate students to take charge of their own education and to actively participate in it (Almulla, 2023; Bada & Olusegun, 2015). Constructivist aligned approaches are seldom implemented in Saudi Arabia due to a lack of training and, most importantly, support, especially for teachers in inclusive classrooms.

A direction to constructivist aligned approaches is the present framework in Saudi for comprehending how people learn and interpret their surroundings (Alazzaz, 2019). However, dilemmas persist, particularly in effectively supporting students with learning difficulties. To address these dilemmas, comprehensive professional development in constructivist aligned approaches is essential for teachers. Such training equips educators with the skills and strategies necessary to implement constructivist aligned approaches effectively, ensuring they meet the diverse needs of their students in line with educational expectations (Qhaliza & Kharisma, 2024).

Although constructivist aligned approaches are said to have ability to improve academic performance and decision-making abilities (Misra, 2020), factors such as teacher experience, gender, and particular contextual restrictions, affect how well constructivist aligned approaches are implemented (Fadlillah et al., 2024; Nguyen & Le, 2024; Triantafyllou, 2022). Moreover, teachers' prior experience also plays a role, as the management of student-centred learning most challenges novice educators (Triantafyllou, 2022). Additionally, constructivist aligned approaches relies on engaging students through stages like apperception, exploration, and formative assessment, linking new knowledge to prior understanding (Nurhuda et al., 2023). However, student resistance to active learning methods, stemming from familiarity with traditional educational exercises, can complicate the transition to constructivist aligned approaches. Also, teachers still face dilemmas with integrating assessments that foster in-depth comprehension and striking a balance between curriculum requirements and student-centred learning (Suurtamm & Koch, 2014; Windschitl,

2002). These dilemmas underscore educators' complications and the necessity for ongoing research and support in this field (Fadlillah et al., 2024).

Despite the potential advantages of constructivist aligned approaches suggested in the literature, which include enhancing academic performance and decision making, teachers still have problems integrating assessments that foster in-depth comprehension and striking a balance between curriculum requirements and student-centred learning (Suurtamm & Koch, 2014; Windschitl, 2002). Moreover, central issue revolves around the practical application of constructivist theory as teaching approaches (Porath, 2016). While constructivist theory suggests that teachers ideally foster student agency and active learning (Lestari et al., 2022), critics argue that constructivist aligned approaches may not suit all students or subjects, particularly those needing structured foundational knowledge, as in mathematics and science (Zhu & Atompag, 2023). Further, the dilemmas arise in harmonising this with the constraints of standardised curricula and globally imposed assessments (Windschitl, 2002). The dilemmas highlight an ambiguity within constructivism, emphasising on individual understanding that constructivist theory suggests with the demands of standardised testing and prescribed curriculum frameworks (Charmaz, 2017; Dennick, 2016).

Furthermore, the readiness of students, particularly those with learning difficulties to engage in constructivist aligned approaches such as collaborative learning, pose challenges. For example, teachers have reported that it is difficult to organise effective group work, which can lead to uneven learning outcomes, especially if foundational skills are lacking (Abed & Shackelford, 2023). Finally, teachers' beliefs and attitudes impact their use of constructivist aligned approaches to teaching. Although many Saudi teachers support the government direction, they often feel inadequately trained to meet the needs of students with learning difficulties, emphasising the need for ongoing professional development to implement inclusive practices effectively (Algahtani, 2021; Alghamdi, 2020). Despite supportive attitudes, curriculum design and administrative dilemmas frequently impede successful inclusion of constructivist aligned approaches in classrooms (Abed & Shackelford, 2023).

## **Recent Research on Constructivist aligned approaches**

The results of recent research have demonstrated the transformative effects of constructivist aligned approaches, which promote critical thinking and active student participation. The integration of constructivist aligned approaches into school curricula in

England, Germany, and Lithuania, highlights the necessity of well-defined learning goals, effective, suitable assessment strategies, and pedagogical approaches, which emphasises the importance of certain elements when incorporating constructivist aligned approaches into school curricula in England, Germany, and Lithuania (Naujokaitiene & Passey, 2019). Applying constructivist aligned approaches has been found to require more than a change in teaching style; it necessitates a transformation in institutional culture and support. Without institutional backing extensive and ongoing professional development, teachers have been found to struggle with adapting their teaching methods to constructivist aligned approaches (Nguyen & Le, 2024).

In their study (Nash et al., 2021), investigated the experiences of teachers in introducing health literacy in primary schools in Tasmania, Australia. It concluded that key dilemmas contained developing a whole of school approach, student engagement, and professional development. The findings suggest that there exist inadequate health literacy programs for primary schools worldwide, and it is critical to conduct further research on constructivist aligned approaches for health education to ensure their successful use, scalability, and sustainability. The absence of accountability in constructivist aligned approaches, coupled with the preference of both teachers and students for traditional approaches often explained through behaviourist learning theory, may exacerbate the situation dilemmas associated with implementing constructivist aligned approaches within educational contexts (Tsehay et al., 2024). In regions with limited resources. Critics argue that constructivist aligned approaches is often challenging to implement due to practical constraints like limited resources, insufficient training, and classroom management difficulties. In regions like rural China (Tan, 2017), constructivist aligned approaches are hindered by infrastructural limitations, making it difficult to provide the support necessary for effective implementation. Critics also point out that constructivism demands a significant shift in teaching philosophy, which is challenging for educators accustomed to traditional, lecture based approaches which are often aligned with a behaviourist theory of learning (Suurtamm & Koch, 2014). The importance of consistent assessment messages and the role of ongoing collaboration in fostering professional judgment and transforming assessment practices was emphasised.

## **Constructivism: Perspectives from Primary Education**

Constructivist aligned approaches in primary education have been revealed to enhance student engagement and academic performance by empowering teachers to adapt

instruction based on student responses, which is crucial for addressing learning dilemmas. (Abulnour, 2016; Acat et al., 2010). Similarly, Ceroni et al. (2016) found that teachers with high expectations delivered more effective and personalised instruction. However, implementing constructivist aligned approaches in inclusive classrooms presents dilemmas. Comparative studies have confirmed the efficacy of constructivist aligned approaches over “traditional” ones, with higher student achievement in elementary science classrooms utilising constructivist aligned approaches that emphasise inquiry-based learning, hands-on activities, and collaboration (Hằng et al., 2015). In Vietnam, teachers in primary school’s support student-centred philosophies but encounter practical dilemmas in classroom management and lesson delivery when implementing constructivist aligned approaches. This underscores the importance of adapting constructivist aligned approaches to local contexts and ensuring adequate resources are available (Hằng et al., 2015). In conclusion, while constructivist aligned teaching approaches hold many benefits for elementary school education, the successful implementation of the teaching approaches requires addressing several dilemmas through teacher preparation and efficient resource allocation.

## **Teaching Students with Learning Difficulties**

Proponents argue that constructivist aligned approaches, which emphasise active, student-centred learning, are particularly helpful for students with learning difficulties. These approaches encourage learners to build their understanding through experiences, adopting deeper retention and comprehension. For instance, contextual teaching and learning strategies connect lessons to real-life contexts, developing engagement and relevance for these students. Differentiated instruction, tailored to individual learning styles and needs, has also been shown to improve academic consequences for students with learning difficulties (Polo-Blanco & González López, 2021).

On the other hand, critics challenge that constructivist aligned approaches may not be universally effective for students with learning difficulties. They point out that such approaches often require resources and teacher expertise, which may not be readily available. Additionally, some studies suggest that traditional, more structured teaching methods can sometimes outperform constructivist aligned approaches in specific areas for these students (Mogonea & Popescu, 2014). The lack of adequate preparedness and teacher training to implement constructivist aligned approaches effectively is also an important concern (Suurtamm & Koch, 2014).

A balanced perspective recognises that while constructivist aligned approaches offer valuable frameworks, and Saudi teachers are expected to conform with constructivist aligned approaches with students with learning difficulties, their success depends on several factors. Comprehensive teacher training, positive attitudes adaptable instructional strategies, and effective communication, are essential to create inclusive, supportive learning environments (Assuah et al., 2016). Adopting these elements can help maximise the potential benefits of constructivist aligned approaches for students with learning difficulties.

## **Research on constructivist aligned approaches in Saudi Arabia**

Saudi Arabia's pledge to approve a constructivist orientation to teaching aligns with recent educational reforms aimed at modernising its education system and promoting inclusive practices. This new approach reflects a global shift toward student-centered learning, emphasising active engagement, critical thinking, and problem-solving skills (Abed & Shackelford, 2023; Alazzaz, 2019). In Saudi Arabia, the move toward constructivist-aligned approaches is part of the Kingdom's Vision 2030 initiative, which prioritises educational innovation and the development of 21st-century skills to prepare students for a constantly changing world (Alazzaz, 2019). Additionally, the adoption of constructivism as the overarching philosophy of teaching seeks to address challenges such as rigid curricula, passive learning methods, and limited support for students with diverse needs, particularly those with learning difficulties (Aldousari & Dunn, 2022). By adopting constructivist guidelines, Saudi educators are directed to aim to create more dynamic, inclusive, and sustainable learning environments that enable all students to succeed.

Research on the implementation of constructivist aligned approaches in Saudi Arabia highlights several dilemmas influenced by cultural and systemic factors. While primary school teachers often express openness to constructivist principles, practical application remains difficult due to limited exposure to a reliance on traditional, and teacher-led instruction (Alazzaz, 2019; Alghamdi, 2020).

### **Challenges in Implementation:**

#### ***Teacher Preparation and Professional Development***

Constructivist aligned approaches, which emphasises interaction and active student engagement with the learning environment has been a focal point of educational reforms in Saudi Arabia. However, its implementation faces essential dilemmas, particularly in inclusive classrooms. These dilemmas derive from insufficient teacher preparation, cultural

resistance, institutional constraints, and limited resources. The transition from traditional, teacher-centred instruction to student-centred, inquiry-based approaches also exposes deeper systemic dilemmas, such as balancing student autonomy with the demands of standardised assessments (Fadlillah et al., 2024). A major dilemma is the lack of professional development and comprehensive teacher training. Many mainstream primary schools struggle with inclusive practices due to inadequate teacher preparation and limited understanding of learning difficulties (Alhammad, 2017; Alsamiri et al., 2023).

### ***Cultural Expectations and Constructivist Pedagogy***

Cultural expectations challenge constructivist aligned approaches in Saudi Arabia. A conflict exists between traditional hierarchical, teacher-centred models and constructivist principles that emphasise collaboration, inquiry, and student autonomy. Saudi students expect a more structured, authoritative teaching style, which can be difficult for teachers to reconcile with their constructivist aligned approaches. This cultural resistance generates tension between modern educational reforms and deeply rooted classroom practices (Albalwi, 2023; Alotaibi, 2023; Hamdan Alghamdi, 2014).

Furthermore, the culturally relevant pedagogy is essential in Saudi Arabian education, especially when instructors and students come from diverse cultural backgrounds. Teachers use examples and materials relevant to their experiences, bridging cultural gaps and fostering closer relationships. This approach is seen to boost academic performance, promotes cultural understanding, and fosters empathy. Implementing a culturally relevant pedagogy in Saudi Arabian education enhances engagement, achievement, and cultural awareness among students (Hamdan Alghamdi, 2014).

Teachers in Saudi Arabia appear willing to involve students with learning difficulties in inclusive classes, but they often lack the knowledge and skills for differential instruction. Identifying, understanding, and teaching students with learning difficulties will require teachers with professional development in this area to improve educational outcomes (Alsamiri et al., 2023).

### ***Standardised Testing Pressures***

Despite Saudi Arabia's embrace of inclusive education, its full achievement remains a challenge (Alshenaifi, 2018). A knowledge gap exists among teachers concerning learning difficulties, hindering the shift to constructivist aligned approaches. Many Saudi teachers lack the necessary training to accurately identify and support students with learning difficulties, leading to misinterpretations of student needs and ineffective interventions

(Alahmadi & El Keshky, 2019). The reliance on traditional assessment methods, particularly standardised testing, further undermines the adoption of constructivist aligned approaches. The pressure to ensure students perform well on these exams leads to a focus on content coverage over deep, inquiry-based learning (Alnaim, 2015). Several issues hinder the implementation of inclusive education, including insufficient teacher training, a lack of resources, and the complexity of providing help for students with severe impairments (Alshenaifi, 2018).

### ***The Role of Teacher Attitudes and Support Needs***

Teachers in Saudi Arabia generally demonstrate positive attitudes towards inclusion; however, their knowledge was sparse regarding evidence-based practices and specific instructional strategies for students with learning difficulties (Alawthah, 2024; Alrubaian, 2014). Their perspectives significantly influence the success of constructivist aligned approaches. While many educators are committed to supporting students with learning difficulties, they often feel constrained by a lack of resources and academic support. Positive attitudes towards inclusion, although essential for fostering an inclusive environment, are insufficient on their own (Dignath et al., 2022).

Without practical support and ongoing professional development, even the most well-intentioned teachers may struggle to translate inclusive ideals into effective classroom practices (Alshenaifi, 2018). To further improve the educational outcomes of such students, some key recommendations involve comprehensive teacher training on the support required by these students, reducing class sizes, and making support services available. These factors can help Saudi Arabia make its schools more inclusive and equitable for all students, consistent with the national curriculum reform to use constructivist aligned approaches methods (Alawthah, 2024).

### **Constructivist Dilemmas**

Implementing constructivist aligned approaches in Saudi Arabia presents educators with several dilemmas, as outlined by Windschitl's (2002) framework, which identifies four primary dilemmas: conceptual, pedagogical, cultural, and political. Windschitl's (2002.p.132) confirmed that:

“The literature on constructivism in classrooms indicates that the four dimensions of this model reasonably circumscribe the range of dilemmas faced by teachers. Furthermore,



several case studies of reform efforts in schools suggest that failure to attend to any one of these dimensions can compromise or doom teachers' attempts to implement progressive pedagogies in their classroom".

#### *Conceptual Dilemma:*

Constructivist aligned approaches challenges traditional notions of knowledge and learning, raising issues such as designing authentic experiences and assessing learners' understanding effectively (Caspari-Gnann & Sevan, 2022). This dilemma involves educators' understanding of constructivist principles. In Saudi Arabia, teacher preparation programs have traditionally emphasised content delivery over inquiry-based learning, leading to difficulties in adopting roles as facilitators rather than knowledge transmitters (Aldousari & Dunn, 2022). The lack of professional development programs further exacerbates this issue, hindering teachers' ability to internalise and apply constructivist concepts effectively. Addressing these dilemmas is essential to fostering an educational environment where constructivist principles can be successfully implemented (Abed & Shackelford, 2023; Alanazi et al., 2023).

#### *Pedagogical Dilemma:*

This pertains to the dilemmas of implementing constructivist aligned approaches in the classroom. Saudi teachers often face dilemmas such as large class sizes and a lack of resources, making it difficult to design and manage student-centred learning environments (Alrwais, 2016). The transition from structured, teacher-led lessons to flexible, inquiry-based activities requires significant adjustments in teaching practices, which can be challenging without adequate support and training.

Differentiated instruction refers to an adaptable, fair, and thoughtful approach to education. It emphasises that using one teaching method is unsuitable for all students, particularly when it doesn't meet their needs (Suprayogi, et al., 2017). This approach is a flexible teaching method that adapts the material, the way of teaching, the outcomes, or the learning atmosphere to cater to the varied needs of every student. This approach focuses on customising lessons to consider differences in readiness, interests, and individual learning styles while still holding high standards for every learner (Westwood, 2016).

#### *Cultural Dilemma:*

Cultural expectations in Saudi Arabia traditionally position teachers as authoritative figures, with students accustomed to passive learning roles. Encouraging active student

participation and critical thinking, as advocated by constructivist pedagogy, can disrupt these established dynamics (Alzighaibi, 2024; Hamdan Alghamdi, 2014). Teachers may find it particularly challenging to reconcile their constructivist aligned approaches with local cultural norms that favor structured, authoritative instruction (Davies & Heyward, 2019). Such cultural tensions necessitate careful navigation to encourage active learning while respecting traditional values.

#### *Political Dilemma:*

This involves systemic and policy-related dilemmas that affect the adoption of constructivist aligned approaches. Educational policies in Saudi Arabia often emphasise standardised assessments and content coverage, which can conflict with the flexible, student-centred approaches of constructivist aligned approaches. These pressures often force teachers to prioritise content coverage over student-centered approaches, limiting innovation. Teachers must navigate these constraints through active sense-making and adaptation, often relying on school leaders for guidance and support (Bateman & McDonald, 2023). Policies promoting inquiry-based cultures and professional development are critical to overcoming these systemic dilemmas (Corkin et al., 2017)

These dilemmas are not unique to Saudi Arabia. For example, educators faced similar dilemmas when shifting from traditional teacher-centred models to constructivist aligned approaches, particularly regarding balancing content mastery with the flexibility required for student-centred learning in China (Tan, 2017).

Additionally, these examples highlight the global nature of the dilemmas associated with implementing constructivist aligned approaches across diverse educational contexts. Comprehensive approaches that emphasise professional development, cultural sensitivity, and supportive policy frameworks are necessary to successfully integrate constructivist aligned approaches in Saudi Arabia and comparable educational environments (Alzighaibi, 2024; Bunaiyan, 2019; Hamdan Alghamdi, 2014).

## **Conclusion**

Implementing constructivist aligned approaches in Saudi Arabia presents multifaceted issues affected by cultural norms and resource limitations. Because of limited exposure and training in constructivist principles, teachers often grapple with transitioning from traditional, teacher-centred approaches to student-centred, inquiry-based learning (Alawthah, 2024). Cultural expectations that position teachers as authoritative public figures

further complicate this shift, as students are accustomed to passive learning roles (Alzighaibi, 2024; Hamdan Alghamdi, 2014). Additionally, systemic factors such as standardised assessments and prescriptive curricula constrain teachers' ability to adopt adaptable, student-centred strategies (Alzhrani, 2022). To successfully combine constructivist aligned approaches in Saudi educational settings, these dilemmas must be addressed through supportive policy frameworks, extensive and professional development, and cultural sensitivity.

## **CHAPTER 3: Research Methods**

### **Introduction**

This research focuses on the dilemmas Saudi teachers face in working with students with learning difficulties, and, in particular, on the dilemmas that arise subsequently. Specifically, it addresses four key sub-questions devised by breaking down the overarching research question into these focused inquiries aligned with Windschitl's dilemmas framework. The dilemmas comprise the conceptual dilemmas teachers encounter in managing these students, the pedagogical dilemmas they face in their instructional approaches, the cultural dilemmas that influence their practice and the political dilemmas that affect their ability to support these learners. The study aims to provide a comprehensive, nuanced understanding of the implications for Saudi educators as they navigate the complications of teaching students with learning difficulties.

### **Constructivist ontology**

Constructivist ontology posits that individuals actively construct knowledge and understanding on the basis of their existing knowledge, relationships and experiences (Dennick, 2016; MacLeod et al., 2022). This perspective emphasises the crucial role of context and highlights the complex interplay between learners, teachers and the learning environment in the knowledge creation process (MacLeod et al., 2022). From a constructivist standpoint, knowledge creation is not the outcome of an external reality, but rather, a personal construction shaped by unique histories and perspectives (MacLeod et al., 2022). Reality itself is not fixed and objective but is socially constructed through human interactions and perceptions (Cetin-Dindar, 2015). This constructivist view aligns with the principles of symbolic interactionism, which posits that individuals interpret and give meaning to the world through social interactions (Ibe, 2017).

Influenced by this constructivist ontology, constructivist grounded theory acknowledges the existence of individual realities and supports the co-construction of knowledge between teachers and students (Charmaz, 2017). Constructivist theory allows a nuanced exploration of complex concepts, such as compassion, which are shaped by both personal and collective experiences (Straughair, 2019). Meaning is not predetermined but is negotiated and constructed through experience and interaction with the world and others, as individuals create their own frameworks for understanding (Fadlillah et al., 2024; Porath, 2016). Furthermore, using constructivism could empower students to be in charge of their

own education and participate actively in the learning process (MacLeod et al., 2022; Mann & MacLeod, 2015)

### Interpretivist Epistemology

This study adopts an interpretivist approach that aligns with a constructivist epistemology to comprehend the subjective experiences and perspectives of Saudi teachers in supporting students with learning difficulties (Cetin-Dindar, 2015). This approach enables the exploration of beliefs, meanings and actions and thus provides insights that may not be fully captured through quantitative methods. By employing an interpretivist lens, this study will examine and understand Saudi teachers working with students with learning difficulties as a social context by focusing on their subjective attitudes, meanings and perspectives (Babones, 2016; Pervin & Mokhtar, 2022).

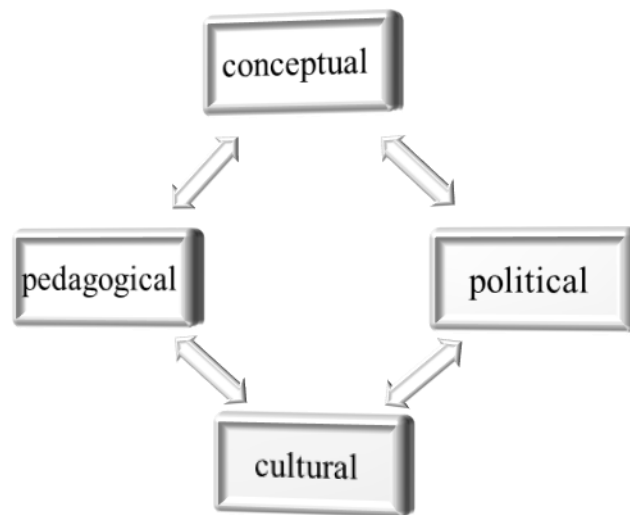
Interpretivist epistemology emphasises the subjective nature of understanding, shaped by individual experiences and social contexts. It employs qualitative research methods to delve into how individuals make sense of their world, acknowledging the multiplicity of interpretations and the significance of context in research (Pervin & Mokhtar, 2022).

This study is rooted in constructivist epistemology, which asserts that knowledge is constructed through interaction with the environment and is shaped by social, cultural and historical contexts (Boon et al., 2022). This study emphasises the interactive nature of the knowledge construction of teachers working with students with learning difficulties, which involves context, collaboration and subjectivity (Mutodi et al., 2023). The research approach will involve critical reflection, exploration and the creativity of multiple viewpoints (Uslu, 2018). According to Pervin and Mokhtar (2022), the interpretive research method is based on the premise that social reality is shaped through human experience and the social background. Hence, this method is suitable for investigating interrelated human behaviours in a sociocultural context.

### Constructivist dilemma's theoretical framework

**Figure 1:** the theoretical framework for this research project is grounded in the Windschitl (2002) framework *Figure 1 Constructivist Dilemma Framework Adapted from (Windschitl, 2002)*. This framework centers on the dilemmas that teachers encounter in their practice and highlights the complex decision-making process involved.

Underlying Windschitl's framework is a constructivist epistemology. Constructivism, a philosophical perspective, suggests that individuals actively construct knowledge through their interactions with the world. It emphasises the role of social and cultural contexts in shaping individual understanding (Straughair, 2019). From a constructivist perspective, knowledge is not passively received but is actively created through personal interpretation and meaning making.



**Figure 1** *Constructivist Dilemma Framework Adapted from (Windschitl, 2002).*

To facilitate a deeper understanding of the dilemmas educators face when implementing constructivist-aligned approaches Windschitl (2002) proposed a framework that identifies the following four key dilemmas.

- **Conceptual Dilemmas**, which arise from teachers' attempts to grasp constructivism's philosophical, psychological, and epistemological foundations.
- **Pedagogical Dilemmas**, which involve the challenges of designing the curriculum and structuring learning experiences that align with constructivist principles
- **Cultural Dilemmas**, which emerge when teachers and students reorient classroom norms and expectations to accommodate constructivist-aligned approaches.
- **Political Dilemmas**, which are associated with resistance from various stakeholders in school communities as institutional norms and power dynamics are challenged.

This framework is a valuable tool for examining teachers' beliefs and practices critically. By addressing these four dilemmas, educators can overcome dilemmas and implement progressive pedagogical approaches successfully (Windschitl, 2002).

## **Qualitative approach**

The current research used a qualitative research design, focusing on the lived experiences of Saudi teachers and acknowledging the specific pressures they face. It highlights their dilemmas by using a clear theoretical framework (Windschitl, 2002), critical inquiry, and rigor (Bogna et al., 2020; Charmaz, 2017). Through its findings, this study suggests more useful approaches to supporting teachers who are supporting students with learning difficulties in Saudi Arabian schools.

A qualitative research methodology was adopted to investigate the dilemmas faced by Saudi teachers working with students with learning difficulties. The research followed an interpretivist paradigm, emphasising the importance of understanding the lived experiences of participants within their specific social and cultural contexts. This approach is considered appropriate for exploring the nuances and complexities of teachers' experiences, particularly when they deal with the dilemmas associated with implementing constructivist-aligned approaches in inclusive education settings (Alotaibi, 2023; Bogna et al., 2020; Halevi Hochwald et al., 2023).

## **Methods**

### **Participants**

The participants in this study were Saudi primary school teachers with at least five years of experience working with students identified as having learning difficulties. To ensure a diverse sample, purposive sampling was employed to select participants who could provide valuable insights towards addressing the research questions (Sim et al., 2018). Participants were selected according to the following criteria:

- ❖ **Experience:** They have at least five years of teaching experience in Saudi primary schools.
- ❖ **Inclusive Education Experience:** They have direct experience with inclusive education practices and of teaching students with learning difficulties.

- ❖ **Willingness to Participate:** They had to be willing to engage in in-depth interviews and share their experiences openly.

A combination of referral and snowball sampling techniques was used to identify potential participants. In addition, snowball sampling was employed to expand the participant pool by requesting initial participants to recommend other potential participants who met the study criteria (Olmos-Vega et al., 2023; Turner et al., 2017).

### **Semi structured interviews**

Data were collected through semi-structured interviews with the five teachers selected for this study. The interviews were designed to explore the dilemmas they encounter in implementing constructivist-aligned approaches in teaching students with learning difficulties. The questions were focused on the conceptual, pedagogical, cultural and political dilemmas in constructivist-aligned approaches, emphasising teachers' perceptions, the dilemmas of inclusive curricula, the influence of cultural norms, and systemic dilemmas. The process of drafting the questions presented in Table 1 involved:

1. reviewing the existing literature to understand common dilemmas and perspectives in teaching students with learning difficulties, and
2. developing an open-ended question that address each theme, ensuring they are clear and relevant to the discussion.

Before interviewing the five selected participants a pilot interview was conducted to test the validity, usefulness, clarity, and relevance of the questions, which were adjusted based on the interview feedback (Kallio et al., 2016; Shoozan & Mohamad, 2024).

Semi-structured interviews were selected as the interview method for three reasons:

- **Flexibility:** This method allows the exploration of topics that emerge spontaneously during the discussion and thus provides richer data.
- **Depth of Understanding:** This method promotes a deeper understanding than fully structured interviews do of participant thoughts and experiences (Bryman, 2016; Shoozan & Mohamad, 2024).
- **Participant Comfort:** The conversational nature of semi-structured interviews can help the interviewees feel more at ease, which results in more honest, reflective viewpoints (Brinkmann & Kvale, 2015).



Suitable interview questions were formulated for the four types of constructivist dilemmas (conceptual, pedagogical, cultural, and political), as shown in Table 1.

**Table 1** *The interview questions for each type of constructivist dilemma*

<b>CONSTRUCTIVIST DILEMMAS</b>	<b>SUGGESTED INTERVIEW QUESTIONS</b>
<b>CONCEPTUAL</b>	How do you comprehend the principles of constructivist teaching and the learning process? What obstacles have you faced in facilitating meaningful learning knowledge for students with learning difficulties?
<b>PEDAGOGICAL</b>	What approaches do you use to create curriculum and lesson plans that adapt to the various needs of students with learning difficulties? Can you share your experiences in managing classroom dynamics and addressing the varying learning styles and paces of your students?
<b>CULTURAL</b>	How do you navigate the cultural expectations and norms within the Saudi educational system when implementing constructivist practices? What strategies do you use to accommodate the diverse backgrounds and learning needs of your students?
<b>POLITICAL</b>	How do you handle cases of accountability and self-responsibility in your teaching practice? Can you describe any institutional policies that have restrained your ability to adopt constructivist teaching methods?

Each interview took between 45 to 60 minutes and was conducted in Arabic. All interviews were digitally recorded (Brinkmann & Kvale, 2015), transcribed, and translated into English where necessary in order to ensure consistency and accuracy in data analysis.

The online interview procedure was central to data collection and allowed the researcher to gather rich, qualitative insights from the interviewees. Each participant took part in a preliminary interview (Interview 1), which lasted 45–60 minutes. This period was adequate for participants to discuss their thoughts while remaining manageable for the researcher (Halevi Hochwald et al., 2023; Jamshed, 2014). Depending on the depth of the

answers and emerging themes, a follow-up interview (Interview 2) may need to be conducted to explore specific areas in greater detail (Kallio et al., 2016; Shoozan & Mohamad, 2024).

These semi-structured interviews featured a variety of predetermined questions but provided the flexibility to explore relevant topics that arose during the discussion (Halevi Hochwald et al., 2023). This format allowed the researcher to guide the discussion while also adapting the interview according to each participant's unique viewpoint. Probing questions were asked to elicit more in-depth responses, which encouraged participants to elaborate on their thoughts and experiences.

## **Deductive analysis**

### **Stage one.**

In Stage 1 of the data analysis, the interview transcripts were analysed using the thematic analysis method, which is suitable for identifying, reporting and analysing patterns (themes) in qualitative data (Alotaibi, 2023; Azungah, 2018). The process involved five steps.

1. **Data familiarisation:** The transcripts were read and re-read to gain an in-depth understanding of the content.
2. **Initial code generation:** The data were systematically coded by identifying key phrases, ideas and patterns relevant to the four types of dilemmas.
3. **Search for themes:** The codes were grouped into broader themes that reflect the dilemmas teachers face.
4. **Review of themes:** The initial themes were refined to ensure they accurately represent the data and address the research questions.
5. **Definition and naming of themes:** The themes were finalised and clearly defined.

The analysis was guided by Windschitl's (2002) framework of constructivist dilemmas, which provided a theoretical lens for interpreting the teachers' experiences and dilemmas.

Further, thematic analysis is a suitable approach for analysing interview data to construct an initial meaning of the dilemmas teachers face when working with students who have learning difficulties (Mohammed, 2022). By initially generating codes and then grouping these into categories, themes were created to gain a deeper understanding of the dilemmas, tensions and factors influencing teacher experiences when working with students with learning difficulties (Alhammad, 2017; Alshenaifi, 2018).

## **Stage two.**

After determining themes from the data through the inductive thematic analysis method, next, a deductive approach was used in Stage 2 to categorise these themes within the dilemmas framework (Windschitl, 2002). That is, the themes were gradually mapped onto the framework's four dimensions: conceptual, pedagogical, cultural and political. This procedure helps clarify how each dilemma conforms with the framework and provides a structured view of the dilemmas faced by Saudi teachers.

## **Ethical approval:**

Ethical approval for this research was obtained from Human Research Ethics Committee (HRES) at Flinders University. Prior to their participation, all participants were provided with detailed information about the study's aims, procedures, potential risks and benefits. Informed consent was obtained in writing from them to ensure their voluntary and informed participation (Brinkmann & Kvale, 2015). To protect their privacy and confidentiality, all identifying information was anonymised. Unique codes were assigned to each participant to ensure anonymity throughout the data collection and analysis process (Lang et al., 2022; Okorie et al., 2024). All interview recordings, transcripts and other study documents were stored securely in password-protected, encrypted files. Moreover, the researcher ensured the wellbeing of participants by creating a supportive, non-judgemental environment and encouraged them to share their practices without feeling pressured.

## **Reliability and Validity**

To improve the reliability and validity of the research, various strategies were employed as follows:

- **Triangulation:** Data from multiple participants was cross-referenced to ensure credibility of findings and consistency of findings (Turner et al., 2017).
- **Member Checking:** Participants were provided with transcripts of their interviews to confirm the accuracy of the researcher's interpretations (McKim, 2023).
- **Reflexivity:** The researcher maintained a reflective diary to document assumptions and personal biases, thus mitigating their influence on data interpretation (Olmos-Vega et al., 2023).

By combining these methods, the study generated rich, nuanced perceptions about the complexities of inclusive education in the Saudi context. The participants' responses, discussed in the chapter, will provide a deeper understanding of the dilemmas Saudi teachers face in their daily practice when working with students with learning difficulties.

## **Limitations**

This research on Saudi teachers' experiences when working with students with learning difficulties is a sensitive area of investigation, especially considering the educational context in Saudi Arabia. Several limitations have been identified in the study, which are discussed next.

### **Sample Size and Area of Study Limitation**

The small sample size makes it difficult to generalise the results to a broader class of Saudi teachers. The Saudi Arabian educational system is diverse and different regions may offer varied experiences, help and levels of assets for teachers. These distinctions may not be fully expressed in this research because of its limited geographical scope, and the findings reveal only a partial picture of the difficulties and triumphs experienced by Saudi teachers (Olmos-Vega et al., 2023; Sim et al., 2018).

### **Methodological Restrictions**

The research scope was also affected by time limitations and methodological restrictions. Studies conducted over brief periods may not capture the full range of experiences teachers face in the academic year. In addition, the research methods selected, whether quantitative or qualitative, can shape the depth of knowledge revealed. For instance, quantitative studies may omit the nuanced, personal backgrounds of teachers, whereas purely qualitative studies might lack the statistical power to support broad claims (Halevi Hochwald et al., 2023). This factor demonstrates that the present research has limitations, and thus, future studies need to use representative samples, have a wider geographical coverage and use a mixed methods approach for understanding the complexities of teaching students with learning difficulties in Saudi Arabia.

## CHAPTER 4: RESULTS

### Introduction

This research used Windschitl's (2002) theoretical framework to investigate the dilemmas Saudi teachers face in dealing with students with learning difficulties. It focused on conceptual, pedagogical, cultural and political dilemmas. The aim of this research was to provide a deeper understanding of the implications for teachers working with students with learning difficulties, and based on the four dilemmas, to highlight the influence of social, cultural and historical circumstances on the knowledge development of teachers.

### Demographic Characteristics of the Teachers

**Table 2** provides a summary of the demographic details of the teachers participating in this study: specifically, their teaching experience, their highest educational qualification and the grade they teach.

**Table 2:** *Demographic Characteristics of Participants*

TEACHER	EXPERIENCE	EDUCATION	Grade taught
Teacher 1	15 years	Bachelor's in Education	Primary
Teacher 2	15 years	Bachelor's in Education	Primary
Teacher 3	15 years	Master's in Education degree	Primary
Teacher 4	7 years	Bachelor's in Education	Primary
Teacher 5	8 years	Bachelor's in Education	Primary

The demographic characteristics of the teachers provide valuable insights into the range of experiences and educational backgrounds in this study.

#### Experience:

Most of the teachers had sufficient experience—Teachers 1, 2 and 3 had taught for 15 years each. Consequently, this study benefitted from their insights gained from extensive professional practice. However, Teachers 4 and 5, with 7 and 8 years of experience, still

brought valuable perspectives, especially regarding the transitions and dilemmas in the early- and mid-career stages.

### **Education:**

Data on the teachers' qualifications revealed a mix of bachelor's and one master's degrees. Teacher 3's master's degree suggests they may have a deeper understanding and potentially engage in more practical implementation of these methods than do the teachers with only bachelor's degrees.

### **Diversity and Representation:**

Although the sample was diverse, containing a good range of well-experienced educators, it could be complemented by professionals with less than 5 years of experience for considering the perspectives and issues of newer educators. Moreover, gaining insights from a wider range of demographic groups would provide a more detailed view of the country's situation in terms of education.

### **Analysis of Individual Interviews:**

The data from the participant interviews were analysed individually to present the initial results before conducting a synthesised analysis of the overall data. Describing each participant's experience assists in avoiding the premature imposition of overarching themes (Brinkmann & Kvale, 2015; Jamshed, 2014).

#### **Analysis of the Interview with Teacher 1**

##### ***Primary Question: What dilemmas do Saudi teachers face when dealing with students with learning difficulties?***

Teacher 1 identifies multiple dilemmas that span conceptual, pedagogical, cultural, and political dimensions as can be seen in Appendix **Table 4**. His experiences underscore the dilemmas of balancing constructivist-aligned approaches with systemic and cultural constraints, adapting teaching methods to diverse student needs, and navigating limited resources and rigid policies. These dilemmas highlight the complex landscape in which Saudi teachers operate while striving to support students with learning difficulties.

#### **Conceptual Dilemmas**

##### ***What conceptual dilemmas do Saudi teachers face in the handling of students with learning difficulties?***

Teacher 1 emphasised the conflict between traditional teaching methods and constructivist principles, which prioritise student-centred learning and discovery. He stated, 'Instead of directly teaching addition, I create an environment where students discover the concept by interacting with tangible objects like apples.' However, he also expressed concern about balancing this approach with curriculum demands, noting, 'It's challenging to ensure comprehension and meet curriculum objectives within the given timeframe.'

This example represents a conceptual dilemma, as teachers grapple with integrating discovery-based learning while addressing the structured expectations of the Saudi curriculum. They have to reconcile their belief in constructivist-aligned approaches with the need to deliver concrete results and to complete curriculum goals.

### ***Pedagogical Dilemmas***

#### ***What are pedagogical dilemmas Saudi teachers face in dealing with students with learning difficulties?***

Teacher 1 frequently discusses the need for differentiated instruction and adapting lessons to individual student needs. For instance, he explained, 'I group students based on abilities, allowing high-achieving students to mentor their peers.' He also described tailoring tasks to accommodate learning difficulties, such as modifying seating arrangements for students with hearing challenges.

Despite these efforts, Teacher 1 faced significant dilemmas because of resource constraints and large class sizes. He stated, 'Time is limited, and it's difficult to design individual activities for every student.' This example highlights a pedagogical dilemma, as teachers are required to create inclusive, adaptive learning experiences within the constraints of overcrowded classrooms and inadequate resources.

### ***Cultural Dilemmas***

#### ***What are cultural dilemmas Saudi teachers face in dealing with students with learning difficulties?***

Teacher 1 identified cultural norms as a barrier to implementing constructivist teaching methods. He noted, 'Students often hesitate to ask questions out of respect for their teachers, which hinders their learning.' In addition, he discussed how societal expectations can discourage active participation, explaining, 'In our culture, the teacher is viewed as an authority figure, and students expect to be told what to do.'

This example reflects a cultural dilemma, owing to which teachers must navigate deeply ingrained traditions that conflict with the interactive, exploratory nature of constructivist-aligned approaches. Encouraging student participation requires balancing respect for cultural norms with the need to foster inquiry and critical thinking.

### **Political Dilemmas**

#### ***What are political dilemmas Saudi teachers confronting while dealing with students' learning difficulties?***

Teacher1 highlighted systemic dilemmas that hinder the application of constructivist-aligned approaches. He explained, 'Large class sizes and limited resources make it difficult to create interactive, hands-on activities.' He also mentioned the pressure to cover extensive curricula, noting, 'With limited time, it's hard to balance covering the syllabus and ensuring students fully understand the material.'

His experience points to a political dilemma, as teachers face structural issues, such as overcrowded classrooms, insufficient funding and rigid curriculum requirements. These barriers prevent them from implementing constructivist approaches fully and providing individualised attention to students with learning difficulties.

#### ***Summary of Dilemmas for Teacher 1***

Teacher 1's insights reveal that this teacher faced many complex dilemmas when working with students who have learning disabilities. Among these are conceptual dilemmas, such as balancing constructivist methods with curriculum demands; pedagogical dilemmas, such as developing adaptive teaching strategies within the constraints of time and resources; cultural dilemmas, such as reconciling cultural expectations with interactive, inquiry-based learning approaches; and political dilemmas, such as addressing systemic dilemmas, including overcrowding, limited resources and rigid policies. Thus, to empower teachers to implement constructivist approaches effectively and improve outcomes for students with learning difficulties, systemic changes and professional support are essential.

### **Analysis of the Interview with Teacher 2:**

#### ***Primary Question: What dilemmas do Saudi teachers face when dealing with students with learning difficulties?***

Teacher 2 discussed the complexity of supporting students with diverse needs and emphasised the need for differentiated teaching strategies, cultural sensitivity and systemic support as can be seen in Appendix **Table 5**. His experience underscores the interplay between educational practices, cultural norms, and institutional constraints.



## ***Conceptual Dilemmas***

### ***What conceptual dilemmas do Saudi teachers face in the handling of students with learning difficulties?***

Teacher 2 emphasised the importance of active, student-centred learning in constructivist teaching but highlighted conflicts with traditional educational expectations. He stated, 'Constructivist teaching encourages students to discover knowledge independently rather than receiving it directly from the teacher.' However, he noted that students accustomed to traditional methods often struggle to adapt: 'Many students expect the teacher to deliver all the information, which hinders their ability to engage actively.' This example represents a conceptual dilemma, as teachers face resistance, both from students and the broader educational system, when attempting to shift towards constructivist-aligned approaches. Balancing these expectations with fostering critical thinking remains a challenge.

## ***Pedagogical Dilemmas***

### ***What pedagogical dilemmas do Saudi teachers face in dealing with students with learning difficulties?***

Teacher 2 frequently adapted lessons to accommodate diverse student needs, using strategies such as group work and tailored activities. He explained, 'I group students based on their abilities, ensuring that advanced students support those who need more help.' He also used visual aids and interactive activities to engage students with learning difficulties. Despite these efforts, time and resource constraints remained significant dilemmas. He said, 'The variation in students' abilities makes it hard to apply a single plan that suits everyone.' This example highlights a pedagogical dilemma, as teachers strive to implement individualised approaches within the constraints of large class sizes and limited resources.

## ***Cultural Dilemmas***

### ***What cultural dilemmas do Saudi teachers face in dealing with students with learning difficulties?***

Teacher 2 identified cultural norms that influence classroom dynamics, such as students' hesitation to participate owing to respect for authority. He observed, 'In our culture, students often hesitate to ask questions or express their opinions, which limits their ability to engage actively in constructivist learning.' He also mentioned the role of parents in

shaping students' attitudes toward education, noting, 'Some parents expect traditional teaching methods and question the value of collaborative activities.'

This example reflects a cultural dilemma—teachers must navigate cultural expectations that prioritise passive learning, while encouraging active student engagement and collaboration.

### ***Political Dilemmas***

#### ***What political dilemmas do Saudi teachers confront while dealing with student learning difficulties?***

Teacher 2 highlighted systemic issues such as overcrowded classrooms and insufficient teaching materials. He explained, 'Large class sizes make it difficult to provide individualised attention, especially for students with learning difficulties.' Moreover, he discussed the pressure to meet curriculum requirements, stating, 'There's always a struggle between covering the syllabus and ensuring that students truly understand the material.' These experiences point to a political dilemma, as teachers face structural barriers that hinder the implementation of constructivist-aligned approaches and limit their ability to meet the needs of all students.

### ***Summary of Dilemmas for Teacher 2***

Teacher 2's experiences highlight several critical dilemmas they encountered in applying constructivist-aligned teaching methods. Conceptual dilemmas involve the challenge of balancing discovery-based learning with traditional expectations from both students and parents. Pedagogical dilemmas revolve around adapting lessons to meet the diverse needs of students while working within the constraints of limited time and resources. Cultural dilemmas highlight the importance of encouraging active participation, all while respecting societal norms and addressing parental expectations. Political dilemmas reflect systemic challenges, such as overcrowded classrooms, insufficient resources and rigid curricula. These dilemmas highlight the complexity of effectively implementing constructivist practices in the Saudi education context.

### ***Analysis of the Interview with Teacher 3.***

#### ***Primary Question: What dilemmas do Saudi teachers face when dealing with students with learning difficulties?***

### ***Conceptual Dilemmas***

### ***What conceptual dilemmas do Saudi teachers face in the handling of students with learning difficulties?***

Teacher 3 strongly advocated for constructivist aligned approaches, emphasised discovery-based learning, as shown in Appendix **Table 6**. He explained, 'The teacher is a guide for the students, directing them to think, explore and investigate information, rather than delivering the lesson or directly providing them with the information.' However, he noted that students often lack the readiness to engage in this type of learning: 'Some students find it difficult to understand without direct instruction, which conflicts with constructivist principles.'

This example reveals a conceptual dilemma, as teachers must reconcile constructivist-aligned approaches with the traditional expectations of students and their families.

### ***Pedagogical Dilemmas***

#### ***What pedagogical dilemmas do Saudi teachers face in dealing with students with learning difficulties?***

Teacher 3 demonstrated a commitment to adapting lessons to students' needs by using peer support and differentiated instruction. He said, 'I group students based on their abilities to ensure collaborative learning, allowing advanced students to support those who need more help.' He also described using visual aids and step-by-step guidance to accommodate students with varying levels of readiness.

However, he highlighted the challenge of managing diverse needs within the constraints of limited resources and time, saying, 'The time required to prepare individualised activities for students with learning difficulties is significant, especially in a large classroom.'

This example highlights a pedagogical dilemma, as teachers strive to provide personalised support while contending with resource shortages and large class sizes.

### ***Cultural Dilemmas***

#### ***What are cultural dilemmas Saudi teachers face in dealing with students with learning difficulties?***

Teacher 3 observed that cultural norms often discourage students from actively participating in class discussions. He explained, 'In our culture, students respect their teachers to the point of hesitating to ask questions, which limits their engagement in constructivist activities'. He also noted resistance from parents, stating, 'Parents sometimes view collaborative or interactive activities as a waste of time, preferring traditional teaching methods.' This example represents a cultural dilemma, as teachers must balance societal expectations with the need to foster active, inquiry-based learning environments.

### ***Political Dilemmas***

#### ***What political dilemmas do Saudi teachers confronting while dealing with student' learning difficulties?***

Teacher 3 identified systemic dilemmas, such as overcrowded classrooms and insufficient teaching resources. He said that large class sizes make it difficult to provide individualised attention to students with learning difficulties. He also mentioned rigid curriculum requirements, saying, 'The focus on covering the curriculum leaves little room for creative or interactive teaching methods.' These experiences highlight a political dilemma, as teachers navigate institutional barriers that hinder the effective implementation of constructivist-aligned approaches.

### ***Summary of Dilemmas for Teacher 3***

Teacher 3's insights shed light on several key dilemmas faced in the practical implementation of constructivist-aligned teaching methods in Saudi classrooms. Conceptual dilemmas centre on the challenge of balancing discovery-based learning with traditional expectations from students and parents. Pedagogical dilemmas highlight the difficulty of adapting lessons to meet diverse learning needs within the constraints of time and limited resources. Cultural dilemmas involve the delicate task of encouraging active student participation while respecting cultural norms and addressing parental expectations. Political dilemmas stem from systemic issues, such as overcrowded classrooms, insufficient resources and rigid curricula. Taken together, Teacher 3's experiences underscore the critical need to balance educational innovation with cultural and institutional realities to apply constructivist approaches effectively in Saudi classrooms.

### ***Analysis of the Interview with Teacher 4***

#### ***Primary Question: What dilemmas do Saudi teachers face when dealing with students with learning difficulties?***

### ***Conceptual Dilemmas***

### ***What conceptual dilemmas do Saudi teachers face in the handling of students with learning difficulties?***

Teacher 4 underscored the challenge of shifting from traditional teaching methods to a constructivist approach, as shown in Appendix **Table 7**. He said that constructivist-aligned approaches place the student at the centre, but many students are accustomed to relying on the teacher for answers. This reliance often conflicts with the goal of fostering independent, inquiry-based learning. Moreover, he highlighted the need to balance discovery-based learning with ensuring students grasp foundational concepts and said that some students require direct instruction to understand basic principles before they can engage in discovery activities. This example represents a conceptual dilemma, whereby the teacher must navigate between facilitating independent learning and providing direct support.

### ***Pedagogical Dilemmas***

#### ***What pedagogical dilemmas do Saudi teachers face in dealing with students with learning difficulties?***

Teacher 4 described his use of differentiated instruction to address diverse learning needs, saying, 'I simplify information and use visual aids to help students with learning difficulties understand concepts more effectively.' He also emphasised the importance of peer support and noted, 'Pairing students with higher-performing peers helps create a supportive learning environment.' However, he identified significant dilemmas in managing these strategies within the limited time and resources available, explaining, 'Preparing individualised activities for each student requires time and effort, which is hard to manage in a large classroom.' This example represents a pedagogical dilemma, as teachers strive to implement adaptive teaching methods while contending with resource and time constraints.

### ***Cultural Dilemmas***

#### ***What are cultural dilemmas Saudi teachers face in dealing with students with learning difficulties?***

Teacher 4 noted the influence of cultural norms on classroom dynamics, particularly the emphasis on respecting authority. He explained, 'Students hesitate to ask questions because they view the teacher as an authority figure whose knowledge shouldn't be questioned.' This reluctance limits the opportunities for student-led inquiry and active

participation. Furthermore, he described resistance from parents, saying, 'Parents sometimes see interactive or collaborative activities as unnecessary and prefer traditional methods.' This example reflects a cultural dilemma, whereby teachers must balance respect for cultural values with the need to encourage inquiry-based learning.

### ***Political Dilemmas***

#### ***What are political dilemmas Saudi teachers face while working with students' learning difficulties?***

Teacher 4 identified structural barriers, including overcrowded classrooms and limited resources. He stated, 'Large class sizes make it challenging to provide individual attention to students with learning difficulties.' He also discussed the rigidity of the curriculum, noting, 'The pressure to cover the entire syllabus leaves little room for interactive or creative teaching methods.' These dilemmas exemplify a political dilemma, owing to which systemic constraints hinder the implementation of constructivist practices.

#### ***Summary of Dilemmas for Teacher 4***

The experiences of Teacher 4 illustrated the complex dilemmas that Saudi educators face when implementing constructivist-aligned approaches. These include balancing discovery-based learning with the need for direct instruction in order to ensure foundational understanding, adjusting lessons to meet the needs of diverse students within the constraints of limited time and resources, fostering active student participation while respecting societal norms and addressing parental resistance, and overcoming systemic dilemmas, such as overcrowded classrooms and rigid curricula, that restrict teaching flexibility.

### ***Analysis of the Interview with Teacher 5***

#### ***Primary Question: What dilemmas do Saudi teachers face when dealing with students with learning difficulties?***

Teacher 5 emphasised the nuanced dilemmas he encounters while striving to balance constructivist-aligned approaches with the realities of the educational environment, as shown in Appendix **Table 8**. His experiences underline the persistent need for systemic support and cultural adaptation in teaching practices.

### ***Conceptual Dilemmas***

#### ***What conceptual dilemmas do Saudi teachers face in handling students with learning difficulties?***

Teacher 5 described his understanding of constructivist-aligned approaches as 'building knowledge incrementally through activities and experiences that engage students mentally and physically'. However, he noted a significant barrier: Students often expect direct answers rather than engaging in exploratory learning.

For example, he explained, 'Students are accustomed to being given answers and struggle with the idea of discovering knowledge independently.' This example reflects a conceptual dilemma, whereby the teacher must foster student independence while providing the necessary guidance.

### ***Pedagogical Dilemmas***

#### ***What pedagogical dilemmas do Saudi teachers face in dealing with students with learning difficulties?***

Teacher 5 highlighted his reliance on differentiated and scaffolded tasks to meet diverse learning needs. He said, 'I break tasks into smaller, manageable steps for students with learning difficulties, such as providing individual letters or structured activities.' However, he acknowledged the challenge of creating customised materials within the constraints of time and resources, saying, 'Adapting resources and activities to individual needs takes significant time and effort, which is hard to manage in a busy classroom.' This example represents a pedagogical dilemma, whereby teachers strive to deliver tailored instruction in a resource-limited setting.

### ***Cultural Dilemmas***

#### ***What are cultural dilemmas Saudi teachers face in dealing with students with learning difficulties?***

Teacher 5 highlighted the tension between constructivist methods and traditional cultural norms. He noted, 'In our culture, students often hesitate to ask questions out of respect for authority, which limits their engagement in constructivist activities.' Further, he discussed dilemmas with parental perceptions, explaining, 'Some parents misunderstand the need for a slower pace in constructivist learning, equating it with inefficiency.' This example reflects a cultural dilemma, where teachers must navigate societal expectations while promoting inquiry-based learning.

### ***Political Dilemmas***

#### ***What political dilemmas do Saudi teachers confront while dealing with students' learning difficulties?***

Teacher 5 identified systemic dilemmas, such as large class sizes and rigid administrative expectations, that limit the feasibility of constructivist-aligned approaches. He stated, 'Administrators often equate silence and lack of movement in the classroom with effective teaching, which discourages interactive activities.' Moreover, he pointed to the lack of resources, noting, 'The physical setup of classrooms is often not equipped to accommodate students with learning difficulties.' This example reflects a political dilemma, whereby structural constraints impede the implementation of student-centred practices.

### ***Summary of Dilemmas for Teacher 5:***

Teacher 5's reflections illustrated the complex interplay of conceptual, pedagogical, cultural and political dilemmas in applying constructivist-aligned teaching principles for students with learning difficulties. Managing conceptual dilemmas involves balancing the need to encourage student independence with the expectation of direct instruction. Pedagogical dilemmas persist as teachers, despite their use of differentiated and scaffolded tasks, face significant time and resource constraints. Cultural dilemmas arise as traditional norms and parental perceptions often clash with the principles of inquiry-based learning, necessitating careful communication and adaptation. Political dilemmas stem from systemic issues, such as overcrowded classrooms and inadequate resources, which hinder the effective implementation of constructivist-aligned approaches.

### **Amalgamated Data analysis:**

The integrated or amalgamated analysis provides a deeper understanding (Liao et al. (2013), of the dilemmas teachers face when implementing constructivism in working with students with learning difficulties, as it combines diverse perspectives.

### ***Primary Research Question:***

***What dilemmas do Saudi teachers face when dealing with students with learning difficulties?***

The responses from the five teachers revealed unique dilemmas and insights. These are discussed next in relation to the study's sub-questions.

### **Sub-Question 1:**

***What conceptual dilemmas do Saudi teachers face in handling students with learning difficulties?***

Saudi teachers face significant dilemmas in transitioning from traditional, teacher-centred approaches to student-centred, constructivist-aligned approaches. The tension



between conventional methods and constructivist principles often leaves teachers struggling to foster independent inquiry while meeting curriculum objectives.

### **Findings:**

- Teachers acknowledge the importance of student-centred learning but report that students expect direct answers, which creates resistance to guided discovery.
- Rigid curricula prioritise rote memorisation, limiting opportunities for inquiry-based learning.

### **Quotes:**

- ‘Students expect direct answers and struggle with the idea of discovering knowledge independently.’ (Teacher 5)
- ‘I use tangible objects like apples to teach addition, but I must still ensure they achieve the curriculum objectives.’ (Teacher 1)

### **Conclusion:**

These insights about conceptual dilemmas highlight the need for training programs that equip teachers with strategies to balance guided discovery with achieving curriculum goals. Such training should also address students’ dependence on direct instruction.

### **Sub-Question 2:**

#### ***What pedagogical dilemmas do Saudi teachers face in dealing with students with learning difficulties?***

Saudi teachers demonstrate creative strategies to meet the diverse needs of students with learning difficulties, such as differentiated instruction and peer-supported learning. However, systemic constraints, including time limitations and large class sizes, significantly hinder these efforts.

### **Findings:**

- Teachers use mixed-ability groupings and tailored tasks to support diverse learning needs.
- Overcrowded classrooms and limited instructional time reduce opportunities for individualised attention.

### **Quotes:**

- 'I pair students with different abilities so they can learn from each other, which also reduces the load on me.' (Teacher 2)
- 'I create tasks tailored to each student's needs, such as breaking activities into smaller steps.' (Teacher 5)

### **Conclusion:**

These insights on pedagogical dilemmas underscore the importance of ensuring smaller class sizes and providing adequate instructional time and resources, which would enable teachers to implement differentiated and inclusive teaching methods effectively.

### **Sub-Question 3:**

#### ***What cultural dilemmas do Saudi teachers face in dealing with students with learning difficulties?***

Cultural norms and societal expectations often conflict with constructivist teaching approaches. Teachers must navigate these dilemmas while fostering an environment that encourages active participation and inquiry.

### **Findings:**

- Students are hesitant to ask questions or engage in discussions owing to cultural deference to authority.
- Parents often expect traditional teaching methods and resist constructivist approaches.

### **Quotes:**

- 'In our culture, students hesitate to ask questions out of respect for authority.' (Teacher 5)
- 'Parents question why I send tasks home, expecting everything to be taught in school.' (Teacher 3)

### **Conclusion:**

These insights about cultural dilemmas highlight the need for community engagement and awareness programs that educate parents and students on the benefits

of constructivist teaching. Teachers should integrate cultural elements into lessons to align with societal values while promoting inquiry-based learning.

The interviews clearly highlighted the cultural dilemmas, but educators shared particular methods they used to deal with these challenges to enhance student participation. For example, Teacher 3 focused on creating a friendly environment where students felt at ease to engage, whereas Teacher 4 utilised peer interactions to motivate learners, stating 'When classmates get involved, it encourages others to participate'. Teacher 2 combined traditional teaching with constructivist-aligned methods to satisfy both student and parental requirements. Teachers also included cultural traditions in their lessons; as Teacher 5 noted, 'I integrate cultural elements into activities, letting students express and take pride in their heritages.' These strategies collectively showcase the resilience and flexibility of educators in handling cultural challenges while aiming to effectively implement constructivist-aligned methods.

#### **Sub-Question 4:**

#### ***What political dilemmas do Saudi teachers confront while dealing with students' learning difficulties?***

Systemic issues, such as overcrowded classrooms, rigid curricula, and lack of resources, significantly constrain the implementation of constructivist-aligned approaches. Teachers must often innovate within these limitations to support students with learning difficulties.

#### **Findings:**

- Overcrowded classrooms prevent individualised instruction and reduce interaction time for students with learning difficulties.
- Lack of educational tools, such as technology and manipulatives, hampers teachers' ability to create engaging lessons.

#### **Quotes:**

- "Large class sizes make it difficult to provide individualised attention." (Teacher 5)
- "Classrooms lack the tools needed to support students with learning difficulties." (Teacher 4)

**Conclusion:**

These insights about political dilemmas emphasise the need for systemic reforms, such as reducing class sizes, providing adequate resources and creating flexible curricula. Policy adjustments should focus on empowering teachers to implement constructivist methods effectively.

**Table 3:**Inductive and Deductive Analysis of Dilemmas:

The Theme	The Coding classification	Quotes and Examples	Inductive Analysis (Teachers' Experiences)	Deductive Analysis (Windschitl Framework)
<b>Student-Centered Learning</b>	<b>Teachers' Role</b>	Teacher 1: "The teacher's role is to create the right environment for the student so they can develop their intellectual and individual skills."	Teachers view their role as facilitators rather than knowledge transmitters, prioritising student exploration.	Aligns with " Conceptualisation of Teaching" under Windschitl's framework, focusing on student-driven inquiry.
	<b>Strongly Guided Discovery</b>	Teacher 3: "Collaborative work allows them to think together. I give them a problem to solve"	Emphasis on structured yet flexible guidance to balance independence.	Reflects the "Design of Learning Tasks" dimension, that encourages students to complete tasks
	<b>Motivation</b>	Teacher 4: "Encouragement and reinforcement are key when students participate."	Motivation strategies aim to create an inclusive environment, focusing on building students.	Related to "Sociocultural Contexts," as motivational practices help students navigate cultural and social expectations.
<b>Adaptations to Student Needs</b>	<b>Diverse Student Readiness to Learn</b>	Teacher 3: "I tailor their tasks by making them smaller."	Differentiation is central to teachers' strategies, reflecting their commitment.	Falls under "Pedagogical Strategies," focusing on adapting instruction to meet diverse student needs.
	<b>Preference for Mixed Ability Groupings</b>	Teacher 2: "Grouping students with varying abilities helps support weaker students.'	Peer learning is prioritised as an effective method to integrate.	Aligns with "Sociocultural Contexts," where collaboration enhances learning.
<b>Diversity Issues</b>	<b>Relationship with Students</b>	Teacher 2: "Building strong connections with students ensures they respect each other."	Teachers emphasise relationship-building as key to managing classroom	Related to "Classroom Culture," where strong teacher-student relationships.
	<b>Social</b>	Teacher 3: "In our culture,	Cultural sensitivity is required	Reflects "Sociocultural Contexts,"

	<b>Expectations on Role of Student</b>	students respect their teachers so much,”	to balance constructivist ideals.	emphasise the importance of navigating cultural norms.
	<b>Social Expectations on Role of Teacher</b>	Teacher 3: “Some administrators equate silence and lack of movement with effective teaching,”	Teachers face systemic and cultural pressures to conform to traditional roles, creating dilemmas.	Aligns with "Role of the Teacher," which examines the tension between traditional authority and facilitative teaching.
<b>Constraints of Time &amp; Resources</b>	<b>Student Numbers</b>	Teacher: 3“Having too many students in a classroom.”	Overcrowded classrooms hinder individual attention to implement constructivist.	Teachers identify class size as a major constraint, limiting their ability to engage each student effectively. Aligns with political contexts.
	<b>Curriculum</b>	Teacher 2: “Balancing curriculum coverage with constructivist activities is challenging.”	Rigid curricular frameworks limit teachers' ability to design flexible, student-centred activities.	Teachers modify existing curricular goals to include constructivist activities where possible. Aligns with political contexts.
	<b>Learning Environment</b>	Inadequate technological and physical resources limit the ability to engage students through interactive.	Teacher 5: “Classrooms often lack basic tools like projectors or smart boards,”	Resource limitations are seen as a significant obstacle to adopting constructivist.
<b>Professional Development</b>	<b>Teacher Education</b>	Teacher 1:“University programmes should include more practical training with students.”	Practical training during university programmes is essential for equipping challenges.	Teachers call for training that balances theory with practice to better prepare them for diverse classrooms.
	<b>Mentoring</b>	Teacher 2: “Pairing new teachers with experienced ones through workshops or collaborations .”	Mentorship is viewed as a critical support mechanism for navigating challenges.	Related to "Professional Learning Communities," which emphasise collaboration expertise among educators.

## **Final Observation:**

The amalgamated findings from the five interviews reveal a set of interconnected dilemmas that Saudi teachers face when working with students with learning difficulties, as shown in *Table 3*. These dilemmas span conceptual, pedagogical, cultural and political dimensions, each demanding targeted solutions. Conceptual dilemmas highlight the need for training programs that equip teachers to balance guided discovery with the attainment of curriculum objectives. Pedagogical dilemmas underscore the importance of administrative support, such as through ensuring smaller class sizes and providing additional resources, to facilitate differentiated instruction. Cultural dilemmas call for community awareness initiatives aimed at aligning constructivist teaching approaches with cultural expectations. Political dilemmas point to the urgency of systemic reforms to alleviate structural constraints and provide teachers with the tools and flexibility necessary for success. Collectively, these findings offer valuable insights for developing strategies that would enhance the educational outcomes of students with learning difficulties while empowering teachers to navigate these multifaceted dilemmas effectively.

## **CHAPTER 5: DISCUSSIONS.**

### **Introduction**

This chapter examines the main topics that surfaced from the teachers' interviews and delves into the complex blends of findings offered in the analysis results. Using relevant literature to contextualise and present the results, this in-depth examination considers the implications of these recurring patterns for the application of constructivist-aligned approaches with children who struggle academically.

The current qualitative study aimed to explore the dilemmas faced by Saudi teachers when working with children who have learning difficulties. The results from interviews with five teachers offer valuable insights into the implementation of constructivist practices tailored to these students. A deductive analysis (the Windschitl framework) and inductive analysis (teachers' experiences) were both used, as detailed in Chapter 4, to analyse the interview data. This chapter focuses on the results in context of the four types of dilemmas—conceptual, pedagogical, cultural and political—while discussing the findings. In addition, an inductive analysis highlights the five key themes that emerged: Student-Centred Learning, Adaptations to Student Needs, Diversity and Cultural Sensitivity, Constraints of Time and Resources, and Professional Development.

### **Deductive Analysis (Windschill Framework):**

It is important to understand that constructivism is a learning theory that highlights how learners build knowledge actively through their experiences, social interactions and reflection (Bada & Olusegun, 2015; Dennick, 2016). Inquiry-based learning and differentiated instruction are often viewed as compatible with constructivist principles as they focus on active involvement, exploration and adapting teaching to specific student (Polo-Blanco & González López, 2021). Conversely, techniques that depend greatly on memorisation or passive learning are often positioned as less harmonised with constructivist values, since they do not encourage thorough understanding or the active involvement of learners (Suurtamm & Koch, 2014).

Teachers face the challenge of choosing and modifying strategies that reflect constructivist principles while considering practical limitations, such as large class sizes, strict curricula and societal expectations. As mentioned by Alazzaz (2019), educators in



Saudi Arabia often grapple with balancing traditional demands with the need to create student-centred learning environments.

### **Primary Research Question**

***What dilemmas do Saudi teachers face when dealing with students with learning difficulties?***

Analysis of the teachers' interviews revealed four distinct categories of dilemmas—conceptual, pedagogical, cultural and political—they encountered when implementing constructivist-aligned approaches for students with learning difficulties. The detailed analysis of these categories, presented below, illustrates the complex interplay of factors influencing inclusive education practices in Saudi Arabia and provides crucial insights for improved teacher guidance and student outcomes.

### ***Conceptual Dilemmas***

Addressing the first sub-question required the analysis of conceptual dilemmas, which highlighted the crucial role of constructivist-aligned approaches in meeting the diverse needs of students. This study finds that it is essential to emphasise scaffolding and differentiated instruction, particularly for students with learning difficulties who benefit from more individualised, flexible approaches. Further, traditional direct instruction can be particularly harmful in these cases, which underscores the need for constructivist strategies. However, teachers faced significant dilemmas when integrating discovery-based learning into the Saudi curriculum, given its structured expectations.

There is a substantial conflict between traditional, teacher-centred methods and constructivist-aligned approaches. Studies have indicated that direct instruction method, deeply ingrained in educational practices, presents a significant dilemma for teachers to overcome (Aldousari & Dunn, 2022). Addressing this dilemma requires a comprehensive strategy that connects theory with practice. The literature has suggested that experiential learning opportunities, which allow teachers to practice and reflect on constructivist-aligned approaches in authentic classroom settings, should be integral to teacher development programs (Charmaz, 2017; Dennick, 2016).

A major dilemma teachers encounter is balancing institutional demands with professional autonomy. Standardised curricula can limit their ability to adapt instruction to meet their students' varied learning needs. In addition, managing time constraints and

assessing students' readiness pose further difficulties in implementing student-centred approaches (Ruys et al., 2014). Harvey et al. (2015), investigated the problems faced by a group of English pre-service teachers enrolled in a one-year postgraduate certificate in education program. These teachers found it challenging to incorporate constructivist-aligned approaches owing to weak concepts and pedagogical skills in guided constructivist approaches. Furthermore, Dzaiy and Abdullah (2024), who explored active learning strategies in higher education by focusing on their impact on teaching effectiveness, highlighted that techniques such as collaborative exercises, problem-based learning, discussions, simulations and games are effective. Empirical studies have indicated that active learning significantly improves academic achievement, conceptual understanding, critical thinking, motivation and inclusiveness compared with traditional lecture formats. Recommendations for effective implementation include gradually integrating active learning strategies, aligning these strategies with learning objectives, scaffolding student participation and engaging in continuous assessment to ensure adaptability and effectiveness.

In conclusion, the present analysis underscores the need to shift towards constructivist-aligned approaches in teaching to address students' diverse needs effectively. It also highlights the importance of experiential learning opportunities for teachers and the benefits of active learning strategies in higher education.

### **Pedagogical Dilemmas**

Addressing the second sub-question required the analysis of pedagogical dilemmas, which revealed significant dilemmas in creating inclusive, student-centred classrooms. This study finds that although teachers attempt to use tactics such as ability grouping, peer mentoring and differentiated instruction to support students with learning difficulties, institutional constraints often hinder effective implementation.

The necessity to adapt instruction to meet diverse student needs is a fundamental principle of inclusive education. However, entrenched beliefs about teaching and learning can lead to resistance against adopting such approaches. The literature has underscored the importance of establishing a framework that supports teachers in implementing student-centred strategies. Programs that encourage staff mentoring can foster a collaborative environment wherein teachers share tools and techniques to enhance educational effectiveness. Creating a community of practice allows teachers to collaboratively tackle dilemmas and feel less isolated in their innovation efforts.

Fadlillah et al. (2024) ) explored the use of constructivist pedagogy in Indonesian education to promote moderate attitudes and internalise religious moderation values. Their systematic literature review indicated that constructivist-aligned approaches foster openness, tolerance and appreciation for diversity, thus potentially influencing the Indonesian religious education curriculum.

Further, Alazzaz (2019) examined the shift in Saudi Arabia's curriculum in 2011 from memorisation and exam-based instruction to constructivist-aligned approaches. This study, which examined the experiences of seven Saudi elementary teachers, revealed three themes: Teachers regard constructivism as a theory that supports student knowledge-building, they face dilemmas in implementing this theory in the classroom because of negative experiences and they consider that constructivism to transform thinking. However, large class sizes present a significant barrier to providing individual attention, as Teacher 3 noted, consistent with Alrwais (2016), research on the negative impact of crowded classrooms on constructivist teaching methods in Saudi Arabia.

Teachers unanimously agree that systemic changes, such as reducing class sizes, increasing funding and extending class periods, are necessary to address these pedagogical dilemmas. Effective professional development programs emphasising differentiated instruction and cooperative teaching approaches are crucial. Training programs must equip teachers with the necessary skills to serve diverse learners effectively within the constraints of their educational contexts (Alanazi et al., 2023; Hamdan Alghamdi, 2014).

Bahng et al. (2024) analysed online mentoring dialogues of nine first-year science teachers, developing a model based on metaphors in teaching dilemmas. The study found that most dialogues (64.34%) were pedagogical and were primarily related to mastering facilitation, which highlights the importance of conceptual metaphors in enhancing teacher effectiveness.

Further, Suyo-Vega et al. (2024) systematically synthesised innovative pedagogical practices in university settings to improve teaching and learning effectiveness. Using the PRISMA (Preferred Reporting Items for Systematic reviews and Meta-Analyses) methodology, they identified 25 scholarly articles categorised into three teaching strategies: student-centred approaches, educational technology integration, and evaluation and feedback methodologies. These practices are essential for continuous improvement in teacher training and fostering educational innovation.

Furthermore, Hall (2024) examined pedagogical dilemmas arising when in-class events or external factors challenge a teacher's principles or instructional practices. Addressing these dilemmas enhances conceptual understanding, both for student teachers and their supervisors. The study, which presented case studies involving pre- and in-service teachers in Japan, highlighted the need for both directive and facilitative supervisory approaches based on the context. In a study of K-12 math teachers in a high-poverty urban school district in Texas, Hall (2024) identified conceptual, pedagogical, cultural and political dilemmas in applying student-entered teaching practices. The barriers identified in that study included poverty, the lack of instructional autonomy, high-stakes testing and dilemmas in facilitating student-centred activities. Addressing these hurdles is crucial for administrators and teacher educators in urban settings to develop effective strategies.

Time constraints add another layer of difficulty to the educational environment. (Porath, 2016) reflected a common concern in the literature, namely, that balancing the demands of a comprehensive curriculum with the need for creative, student-centred activities is challenging, underscoring the inadequacy of structured educational institutions in providing individualised learning experiences.

### **Cultural Dilemmas**

Addressing the third sub-question required understanding the interaction between cultural norms, educational practices and student participation. The present study finds that this understanding is essential for developing a coherent theory of cultural awareness in education. In addition to encouraging creative teaching strategies, this framework must emphasise the importance of respecting cultural diversity. Moreover, leaders in education must realise that reform initiatives cannot be successful if these are not executed within their cultural contexts. Further, it is essential to have policies that encourage cultural inclusion and give educators the tools they need to interact with diverse populations. In addition, schools may establish conditions that empower teachers and students to thrive by cultivating an educational culture that promotes inquiry, cooperation and respect for tradition.

This study also finds that teachers find it extremely difficult to use constructivist-aligned approaches in the face of strongly ingrained cultural norms and expectations. The conflict between the customary deference to authority and the active engagement demanded by constructivist methods is a recurring subject that surfaced in the interviews. The fact that Teacher 3 noted that 'students hesitate to ask questions because they see it as disrespectful' demonstrates the challenge to promoting an inquiry-based culture in such

settings. Similarly, Teacher 1 highlighted the dilemma of encouraging inquiry-based learning in environments shaped by cultural deference to authority.

Parental expectations further aggravate these cultural limitations. Alzighaibi (2024) discovered that parents frequently view collaborative and interactive education as less effective, which is consistent with Teacher 5's observation in the present study that parental resistance undermined educators' attempts to innovate. Such parental resistance takes the form of upholding conventional educational paradigms that place a higher value on direct instruction than on student participation.

It is impossible to overstate the influence of culture on the processes of teaching and learning. The findings indicate that cultural factors, such as language hurdles, religious beliefs and cultural taboos, strongly influence how well pupils learn. For example, Arab students could have trouble balancing constructivist concepts with Islamic principles, which can make it difficult for them to utilise some teaching strategies (Alanazi et al., 2023; Hamdan Alghamdi, 2014). ). This finding highlights that it is crucial for teachers to be culturally aware as they negotiate the dilemmas of teaching in diverse classes. There are also difficulties in establishing classrooms that are inclusive of all cultures. The delicate balance that educators must maintain is exemplified by Teacher 2's attempts to integrate students' customs into courses to promote inclusiveness. Although these tactics can foster respect and understanding among people, these frequently clash with strict curriculum objectives, making it more difficult to include cultural relevance into instructional procedures. This conflict highlights a larger problem in educational reform: the necessity of integrating and respecting cultural norms while encouraging creative teaching strategies.

### ***Political Dilemmas***

Addressing the fourth sub-question required analysis of the political dilemmas in education. The emphasis on standardised testing exacerbates these challenges. Teacher 3 highlighted a broader concern about accountability policies that prioritise measurable outcomes over meaningful learning processes. This finding aligns with that of who argue that strict accountability frameworks hinder the adoption of innovative teaching methods. The pressure to produce quantifiable results often leads teachers to employ superficial teaching strategies that conflict with constructivist principles, ultimately diminishing the quality of education.

Teachers consistently call for institutional changes that de-emphasise standardised testing and prioritise instructional freedom. Building an environment that supports constructivist teaching requires enhanced administrative support, teacher autonomy and resource allocation. Rather than strictly adhering to prescribed curricula, educators advocate for policies that allow them to tailor their pedagogical decisions to the needs of their students.

One potential avenue for advancing these reforms is the establishment of a community of practice. By bringing together teachers and professionals committed to innovative teaching, schools can create a collaborative environment for discussing best practices and promoting institutional change. These communities can serve as platforms for shared professional development, which would enable teachers to align their instructional practices with contemporary educational principles and would foster a sense of collective (Ahmad, 2017; Klatt et al., 2020; Smyth et al., 2021). Understanding the interplay between institutional regulations, pedagogical practices and teacher autonomy is crucial for developing a coherent theory of political advocacy in education. This framework should emphasise the importance of promoting educational changes that prioritise flexibility, resource allocation and teacher empowerment

Policymakers and educational leaders must recognise that significant change cannot occur in isolation from the political context surrounding education. By fostering an environment that supports innovative teaching methods and helps educators overcome structural barriers, a more equitable, inclusive educational landscape can be achieved.

In this regard, Nguyen and Le (2024) explored the dilemmas faced by 120 English as a Foreign Language teachers in implementing constructivist lessons at a private university in Vietnam. They identified that these teachers face conceptual, pedagogical, cultural and political dilemmas. Their study contributes to Windschitl's framework on constructivist classroom dilemmas and discusses theoretical and practical implications for future researchers, educational stakeholders and institutional leaders.

Further, Serrano Corkin et al. (2019) identified political constraints that hinder student-centred teaching, including inflexible curricula, limited teacher autonomy and accountability pressures. They suggested culturally sensitive parent engagement, systemic reforms aimed at reducing class sizes and increasing resources, professional development centred on constructivist principles, and policy changes that enhance teacher autonomy and reduce reliance on standardised assessments as effective strategies to address these

dilemmas. By bridging the gap between constructivist theory and practice, these tactics can help make Saudi Arabia's educational system more inclusive and student centred.

The two methodical stages of the present study enabled a thorough investigation of recurring themes and their alignment with established theoretical frameworks. In Stage 1, an inductive approach was used to identify patterns in interview data and five teachers' experiences were distilled into emergent themes. This process, which adhered to accepted practices (Aini et al., 2019; Sylva, 2023), provides a deep understanding of the strategies and dilemmas of teachers in the Saudi educational system when they work with students with learning difficulties.

## **An Inductive Thematic Analysis**

An inductive thematic analysis was employed to identify themes in the interview data, which were then categorised within Windschitl's framework. The findings are presented in two phases. The thematic analysis was conducted in two systematic steps to explore the dilemmas Saudi teachers face when instructing students with learning difficulties.

This structured framework facilitated a comprehensive examination of recurring themes and their alignment with existing theoretical constructs. In the initial phase of thematic analysis, an inductive approach was used to identify recurring patterns in the interview data. By categorising the transcripts, themes that encapsulated the teachers' experiences and practical dilemmas were developed. This process followed established methodologies (Aini et al., 2019; Sylva, 2023). To conduct a comprehensive review of the data, the perspectives of five teachers were analysed. Their insights illuminated essential themes influencing their pedagogical approaches in the Saudi educational landscape, offering a rich understanding of the strategies and dilemmas they encountered when working with students with learning difficulties. The following are the details:

### **Student-Centred Learning**

Constructivist-aligned approaches place a strong emphasis on student-centred learning, which highlights the need for personalised learning experiences and active engagement. The teachers who participated in the present study provided insightful information about the difficulties and methods of creating a student-centred atmosphere (Abulnour, 2016; Acat et al., 2010). Teacher 1 stressed that to build knowledge, students must 'be at the core of the process' by actively interacting with the course material. For example, he demonstrated a student-centred approach by teaching addition using tangible

objects. In a similar manner, Teacher 2 promoted cooperation by letting exceptional students serve as 'mini teacher' and asserted that this method not only lessens the workload for the teacher but also fosters peer learning. By encouraging active participation and elevating students in the learning process, these viewpoints are consistent with constructivist concepts. Nonetheless, teachers found it challenging to strike a balance between curriculum requirements, individualised instruction and efficient classroom management (Arik & Yilmaz, 2020; Harvey et al., 2015).

### **Adaptations to Student Needs**

The significance of modifying teaching strategies to accommodate a range of student demands was a recurrent subject among the teachers. By stating that 'Tasks must be customised to suit each student's level', Teacher 5 emphasised differentiation. By customising assignments to each student's skill level, Teacher 3 validated this view and ensured that they actively involved students with learning difficulties in classroom activities. Whereas Teacher 1 strongly emphasised the need to divide students strategically according to their abilities in order to improve collaborative learning, Teacher 2 was able to modify his teaching strategies according to students' strengths and weaknesses because of his ongoing evaluation methodology. It can be difficult to implement collaborative learning in the classroom because teachers must manage time constraints, assess student readiness, navigate contextual limitations and strike a balance between professional autonomy and institutional expectations (Charmaz, 2017; Dennick, 2016; Ruys et al., 2014). In this regards, Triantafyllou (2022) explored the dilemmas teachers face when incorporating new assessment practices in their classrooms. In that study, a two-year project with 42 mathematics teachers in Ontario, Canada, highlighted the need for coherence in assessment messages and the importance of ongoing collaboration and dialogue for supporting professional judgement development and enabling change in assessment practice.

### **Diversity and Cultural Sensitivity**

Th The cultural dynamics of Saudi Arabia present difficulties for implementing constructivist education. According to Teacher 1, cultural norms frequently prevent pupils from participating, given their reluctance to raise questions in the belief that it is impolite. He stated that he combats this reluctance by creating an atmosphere that is open and supportive of inquiry. Teacher 2 implemented the value of cultural inclusivity by encouraging students to express their customs during class, which promoted respect and understanding between the students. These revelations highlight the importance of fostering an



atmosphere that values each student's history while encouraging cooperation and inquiry. Thus, teaching and learning are significantly shaped by cultural sensitivity (Banks, 2015).

Understanding these dynamics is crucial for effective educational reform, as it requires both teachers and students to recognise the cultural elements influencing their perceptions. Religious beliefs, language barriers and cultural taboos significantly influence students' learning experiences and may hinder their understanding of concepts. Specifically, Arab students may face dilemmas in reconciling constructivist educational ideas with their beliefs and Islamic values (Alanazi et al., 2023; Hamdan Alghamdi, 2014).

### **Constraints of Time and Resources**

The significance of modifying teaching strategies to accommodate a range of student demands was a recurrent subject among the teachers. With the statement, 'Tasks must be customised to suit each student's level', Teacher 5 emphasised differentiation by customising assignments to each student's skill level. One of common themes among the teachers was that it is crucial to modify teaching strategies to accommodate a range of student demands. By emphasising differentiation, this view was validated by Teacher 3 who ensured that students with learning difficulties participate meaningfully by customising assignments to their unique skill levels. Meanwhile, Teacher 1 strongly emphasised skill-based grouping to promote collaborative learning, and Teacher 2's ongoing evaluation approach enabled him to modify his teaching strategies by considering students' strengths and limitations. Yet, it can be difficult to implement collaborative learning in the classroom because teachers must manage time constraints, assess student readiness, navigate contextual limitations and strike a balance between professional autonomy and institutional expectations (Charmaz, 2017; Dennick, 2016; Ruys et al., 2014).

### **Professional Development**

The professional development of teachers through cross-cultural immersion experiences is recognised as an effective method for preparing educators for culturally responsive teaching practices. The need for professional development emerged as a key factor in overcoming dilemmas. Teacher 1 advocated for a balance between theoretical and practical training in teacher preparation programs. Teacher 2 emphasised the importance of mentorship for novice teachers to develop practical skills. Specialised training focused on strategies for teaching students with learning difficulties was also deemed essential to bridge the gap in expertise. A community of practice and experts can gather experts with a high level of consensus systematically and can judge how well they represent an institutional

norm, implement educational values and display professional behaviour (Ahmad, 2017; Klatt et al., 2020; Smyth et al., 2021).

## **CHAPTER 6: CONCLUSIONS AND IMPLICATIONS.**

The integration of inductive themes into Windschitl's framework presents a nuanced understanding of the dilemmas Saudi teachers face in implementing constructivist approaches. It highlights the interplay of conceptual, pedagogical, cultural and political factors that shape their teaching practices. Insights from teachers themselves yield a complex landscape of constructivist teaching for students with learning difficulties, highlighting both challenges and opportunities for systemic and instructional reform.

### **Constructivism Amid Challenges**

The findings reveal that teachers are strongly committed to constructivist-aligned approaches, such as active learning and inquiry-based and student-centred instruction. Despite institutional constraints, including overcrowded classrooms, rigid curricula and limited resources, instructors displayed extraordinary endurance and innovation. They modified constructivist strategies to their specific settings, thus demonstrating resourceful reactions to hardship. This finding is consistent with those of prior research that emphasises the role of teacher adaptation in creating effective learning settings (Acat et al., 2010).

### **Managing Diverse Needs**

Teachers used diversified instruction, solo exercises, small-group work and visual aids to meet their students' diverse requirements. Although teachers used these strategies with the intention of ensuring inclusivity, these frequently generated issues about the stigmatisation of children with learning disabilities. Teachers struggled to give specialised support while maintaining equitable treatment in the classroom, underlining the importance of sensitivity in teaching approaches. This finding echoes that of Ruys et al. (2014), who discovered that handling heterogeneous learning needs in inclusive classrooms might lead to tensions between differentiation and equal treatment.

### **Cultural Influences on Teaching Practices**

In the Saudi environment, cultural norms have a substantial impact on teaching methods. The constructivist values of student autonomy and critical thinking frequently clashed with the traditional emphasis on instructor authority. However, teachers skilfully managed these cultural conflicts by encouraging cooperation and inquiry while upholding social norms. They were able to close the gap between conventional expectations and

contemporary instructional approaches by implementing culturally relevant examples and activities. This result is in line with that of Banks (2015), who asserted that cultural relevance is crucial to delivering effective instruction.

## **Systemic Limitations**

The complete implementation of constructivist methods was impeded by systemic dilemmas, including a lack of resources, rigid curricula and restricted instructional time. These limitations often forced educators to prioritise curriculum objectives over student-centred strategies. Despite these dilemmas, they showed resilience in overcoming structural constraints by developing creative ways to incorporate constructivist aspects into pre-existing frameworks. This finding about the need for flexibility resonates with the concerns expressed by Serrano Corkin et al. (2019) about the effect of strict accountability requirements on educational innovation.

## **Professional Development requirements**

Continuous professional development that is suited to constructivist education is urgently needed, according to the teachers who participated in this study. They underlined the value of hands-on, in-service training that tackles actual classroom difficulties. The absence of formalised professional development initiatives made it even more clear that systemic initiatives are required to empower educators and promote a lifelong learning culture. This finding about the need for focused training is consistent with the recommendations of Ahmad (2017) and Klatt et al. (2020), who support professional development that improves teachers' capacity to apply creative teaching practices.

## **Balancing Practical and Principles**

Using Windschitl's framework, this study identified several key dilemmas in Saudi teachers' adoption of constructivist-aligned teaching practices for students with learning difficulties:

- **Conceptual Dilemmas:** Teachers need to balance guided discovery against traditional expectations and curriculum demands.
- **Pedagogical Dilemmas:** The provision of differentiated instruction to meet diverse learning needs has to be weighed against the large size of classes and a general lack of resources.

- **Cultural Dilemmas:** Teachers have to overcome the societal expectation that students should be passive in order to encourage active thinking.
- **Political Dilemmas:** These are systemic issues, such as rigid curricula, overcrowded classes and lack of financing, which reflect the larger interplay between educational innovation and systemic constraints. The analysis revealed that teachers are adaptable and dedicated, but sufficient systemic, cultural and administrative reforms are needed to close the gap between constructivist ideals and pragmatic realities.

The teachers' resilience and creativity highlight the potential for implementing transformative educational practices in Saudi Arabia. By empowering educators and addressing systemic dilemmas, it will be possible to create inclusive, student-centred learning environments that support all students, particularly those with learning difficulties. This study's findings contribute to the broader discourse on constructivist teaching and offer actionable insights for policymakers, educators and researchers working to enhance educational outcomes globally.

## **Future research**

Future studies should investigate the usefulness of incorporating technology into constructivist-aligned approaches in various demanding educational environments. Case studies and teacher and student interviews are examples of qualitative research methods that could shed light on the meaning-making processes associated with implementing and modifying innovative constructivist methods. For instance, a case study can be conducted on a school's experience related to implementing a new blended learning program based on constructivist concepts, as well as the difficulties instructors and students faced. Furthermore, compared with traditional approaches, longitudinal quantitative studies that monitor student engagement and achievement over several years may offer a more reliable evaluation of the long-term effectiveness of these technology-integrated constructivist methods, by considering variables such as student demographics and past academic performance.

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## APPENDIX

**Table 4 Inductive and deductive analysis, types of dilemmas, general conclusions, and examples of quotes from Teacher 1:**

THEME	CODING CATEGORY	INDUCTIVE ANALYSIS (TEACHER ABDULHADI'S EXPERIENCES WITH QUOTES)	DEDUCTIVE ANALYSIS (WINDSCHITL FRAMEWORK)
STUDENT-CENTERED LEARNING	Teachers' Role	"The teacher's role is to create the right environment for the student so they can develop their intellectual and individual skills."	<b>Conceptual Dilemma:</b> Instable from teacher-centered to student-centered roles.
	Strongly Guided Discovery	"I would bring two apples and place two more apples next to them. Especially in early elementary stages, students interact more with tangible objects"	<b>Pedagogical Dilemma:</b> Handling guided discovery in student-driven learning processes.
	Motivation	"When students see their peers excelling, it motivates them to improve"	<b>Cultural Dilemma:</b> Motivating students while revering cultural norms.
ADAPTATIONS TO STUDENT NEEDS	Diverse Student Readiness to Learn	"Learning difficulties vary; I must exert more effort to involve all students in the process."	<b>Conceptual Dilemma:</b> Balancing individualized needs with standardized curricula.
	Preference for Mixed Ability Groupings	"I can use a common language, and students won't hesitate to ask questions, even if they speak differently"	<b>Pedagogical Dilemma:</b> Confirming balanced group dynamics for diverse learners.
	Reciprocal (Peer) Support for Learning	"My first goal was to make them like me because if they liked me, they would feel comfortable asking question"	<b>Pedagogical Dilemma:</b> Endorsing peer collaboration effectively in constructivist settings.
DIVERSITY ISSUES	Relationship with Students	"I create a safe environment where students feel comfortable participating despite cultural norms."	<b>Cultural Dilemma:</b> Adopting relationships that balance cultural respect with openness.
	Social Expectations on Role of Student	"Students hesitate to ask questions due to cultural respect for teachers."	<b>Cultural Dilemma:</b> Overcoming cultural barriers to encourage student participation.
	Social Expectations on Role of Teacher	"Parents expect traditional teaching, which can clash with constructivist methods."	<b>Cultural Dilemma:</b> Balancing parental expectations with innovative teaching practices.

<b>CONSTRAINTS OF TIME &amp; RESOURCES</b>	<b>Student Numbers</b>	"Large class sizes limit individual attention, especially for students with learning difficulties."	<b>Political Dilemma:</b> Adopting resource limitations while promoting inclusive practices.
	<b>Curriculum</b>	"Balancing curriculum coverage with understanding is a constant challenge."  "Instead of telling the student that 2 + 2 equals 4, or writing it on the board or saying it verbally, the easier way is to prepare an environment that helps them understand."	<b>Conceptual Dilemma:</b> Understanding standardized goals with deep learning objectives.
	<b>Learning Environment</b>	"Having access to a smart board, projector, or simulation device can greatly enhance the learning experience by making the material more tangible"	<b>Pedagogical Dilemma:</b> Improving learning with limited technological resources.
<b>PROFESSIONAL DEVELOPMENT</b>	<b>Teacher Education</b>	" There should be practical training in schools with students who have learning difficulties"	<b>Conceptual Dilemma:</b> Connecting the gap between theoretical knowledge and practical skills.
	<b>Mentoring</b>	" When a teacher enters the field and has limited experience, the administration should pair them with more experienced teachers."	<b>Pedagogical Dilemma:</b> Supporting novice teachers concluded collaborative mentorship.

**Table 5**Inductive and deductive analysis, types of dilemmas, general conclusions, and examples of quotes from Teacher 2:

<i>Theme</i>	<i>Coding Category</i>	<i>Inductive Analysis (Teacher Abdulhadi's Experiences with Quotes)</i>	<i>Deductive Analysis (Windschitl Framework)</i>
<b>Student-Centered Learning</b>	<b>Teachers' Role</b>	"The teacher's role is to create the right environment for the student so they can develop their intellectual and individual skills."	<b>Conceptual Dilemma:</b> Instable from teacher-centered to student-centered roles.
	<b>Strongly Guided Discovery</b>	"I would bring two apples and place two more apples next to them. Especially in early elementary stages, students interact more with tangible objects"	<b>Pedagogical Dilemma:</b> Handling guided discovery in student-driven learning processes.

<b>Adaptations to Student Needs</b>	<b>Motivation</b>	"When students see their peers excelling, it motivates them to improve"	<b>Cultural Dilemma:</b> Motivating students while revering cultural norms.
	<b>Diverse Student Readiness to Learn</b>	"Learning difficulties vary; I must exert more effort to involve all students in the process."	<b>Conceptual Dilemma:</b> Balancing individualized needs with standardized curricula.
	<b>Preference for Mixed Ability Groupings</b>	"I can use a common language, and students won't hesitate to ask questions, even if they speak differently"	<b>Pedagogical Dilemma:</b> Confirming balanced group dynamics for diverse learners.
	<b>Reciprocal (Peer) Support for Learning</b>	"My first goal was to make them like me because if they liked me, they would feel comfortable asking question"	<b>Pedagogical Dilemma:</b> Endorsing peer collaboration effectively in constructivist settings.
<b>Diversity Issues</b>	<b>Relationship with Students</b>	"I create a safe environment where students feel comfortable participating despite cultural norms."	<b>Cultural Dilemma:</b> Adopting relationships that balance cultural respect with openness.
	<b>Social Expectations on Role of Student</b>	"Students hesitate to ask questions due to cultural respect for teachers."	<b>Cultural Dilemma:</b> Overcoming cultural barriers to encourage student participation.
	<b>Social Expectations on Role of Teacher</b>	"Parents expect traditional teaching, which can clash with constructivist methods."	<b>Cultural Dilemma:</b> Balancing parental expectations with innovative teaching practices.
<b>Constraints of Time &amp; Resources</b>	<b>Student Numbers</b>	"Large class sizes limit individual attention, especially for students with learning difficulties."	<b>Political Dilemma:</b> Adopting resource limitations while promoting inclusive practices.
	<b>Curriculum</b>	"Balancing curriculum coverage with understanding is a constant challenge."  "Instead of telling the student that 2 + 2 equals 4, or writing it on the board or saying it verbally, the easier way is to prepare an environment that helps them understand."	<b>Conceptual Dilemma:</b> Understanding standardized goals with deep learning objectives.
	<b>Learning Environment</b>	"Having access to a smart board, projector, or simulation device can greatly enhance the learning experience by making the material more tangible"	<b>Pedagogical Dilemma:</b> Improving learning with limited technological resources.
	<b>Teacher Education</b>	" There should be practical training in schools with students who have learning difficulties"	<b>Conceptual Dilemma:</b> Connecting the gap between theoretical knowledge and practical skills.
<b>Professional Development</b>			

## Mentoring

" When a teacher enters the field and has limited experience, the administration should pair them with more experienced teachers."

**Pedagogical Dilemma:** Supporting novice teachers concluded collaborative mentorship.

**Table 6** Inductive and deductive analysis, types of dilemmas, general conclusions, and examples of quotes from Teacher 3:

THE THEME	THE CODING CLASSIFICATION	THE INDUCTIVE ANALYSIS (TEACHER'S EXPERIENCES WITH QUOTES)	THE DEDUCTIVE ANALYSIS (WINDSCHITL FRAMEWORK)
STUDENT-CENTERED LEARNING	Teachers' Role	"The teacher is a guide for the students, directing them to think, explore, and investigate information." He underscores the constructivist approach, in which students actively participate in the learning process. This reduces the teacher's role as the sole source of knowledge.	<b>Conceptual Dilemma:</b> Attempting to balance the role of a mediator with the traditional expectations of a teacher as the immediate source of knowledge.
	Collaborative Learning	"I adapt by acknowledging these norms while encouraging students to participate more actively and interactively." The use of the group work allows students to learn and share ideas collaboratively, development self-reliance and problem-solving skills.	<b>Pedagogical Dilemma:</b> Managing collaborative knowledge in classrooms where students have different participate and abilities in class.
MOTIVATION AND CONFIDENCE	Building Confidence	" I assign a task that I'm confident they can complete, then I motivate them with rewards." This method encourages students' self-esteem and provides them with a sense of achievement and motivation, especially for those who struggle with studying.	<b>Pedagogical Dilemma:</b> Promoting student motivation in an environment constrained by the rigid curriculum and help restrictions.
	Encouraging Participation	" I always ensure that participation is well-organized so no student feels left out or embarrassed, especially those who need more time to process." By guaranteeing equal involvement, he raises a positive learning atmosphere by preventing slower from feeling left out.	<b>Cultural Dilemma:</b> addressing cultural thoughts that prevent pupils from openly participating or questioning the principals.

<b>ADAPTATIONS TO STUDENT NEEDS</b>	<b>Differentiated Instruction</b>	" I distribute students with learning difficulties among different groups. This allows them to learn from their peers while ensuring they have tasks that suit their needs." By addressing each student's exceptional learning demands and fostering fairness, differentiation makes ensuring that assignments are suitably difficult for the student.	<b>Cultural Dilemma:</b> Maintaining cultural expectations for educational homogeneity while modifying teaching methods to accommodate.
	<b>Curriculum Simplification</b>	" if I have five objectives in a unit, two of them are core objectives, and the other three are additional goals. I focus first on the two core objectives that all students,." Before moving on to more challenging goals, children with learning difficulties benefit from mastering important skills.	<b>Political Dilemma:</b> maintaining adherence to established learning evaluations and outcomes while allowing for flexibility in the way the curriculum is delivered.
<b>DIVERSITY ISSUES</b>	<b>Cultural Sensitivity</b>	" I emphasize the idea that every culture has its unique traits and that there's always a common ground where we can all connect." Encouraging students to talk about their cultural backgrounds promotes respect for one another inclusivity and, a happy environment.	<b>Cultural Dilemma:</b> promoting tolerance while honoring ethnic customs that, in some situations, forbid candid discussion.
	<b>Linguistic Inclusivity</b>	" I adapt by acknowledging these norms while encouraging students to participate more actively and interactively". Encouraging linguistic variety lessens students' fear of ridicule, helps them.	<b>Cultural Dilemma:</b> promoting student confidence and involvement while guaranteeing inclusivity for a range of linguistic backgrounds.
<b>CONSTRAINTS OF TIME &amp; RESOURCES</b>	<b>Class Size and Workload</b>	" The biggest challenge is large class sizes. Having too many students in a classroom makes it difficult to provide individualised attention." Individualised attention and innovative lesson planning are impeded by overcrowded classrooms and workloads.	<b>Political Dilemma:</b> removing structural obstacles that prevent constructivist teaching methods, such as excessive teacher workload.
	<b>Administrative Support</b>	" I use resources like learning centers or labs, which allow me to conduct diverse activities while staying within the school's guidelines." Despite structural limitations, he is able to integrate innovative teaching techniques by utilizing the resources.	<b>Political Dilemma:</b> Maintaining administrative compliance while juggling the demand for innovative instructional strategies and the resources.



<b>PROFESSIONAL DEVELOPMENT</b>	<b>Teacher Training</b>	"It's a rigid approach that limits the student's potential to learn outside of school and engage in more dynamic learning processes." highlighting the necessity of focused professional development initiatives to give educators the tools they need to successfully implement constructivist teaching methodologies.	<b>Political Dilemma:</b> filling in the gaps in professional development courses to get educators ready for constructivist methods.
	<b>Advocacy for Systemic Change</b>	"I also work to gain the support of my school's administration. When the principal is supportive, it becomes easier to implement creative ideas to level of support for their homework". Teaching methods are guaranteed to be in line with constructivist concepts when systemic changes are implemented in conjunction with the principals.	<b>Political Dilemma:</b> encouraging cooperation between administrators and educators in order to solve structural issues.

**Table 7** Inductive and deductive analysis, types of dilemmas, general conclusions, and examples of quotes from Teacher 4:

THEME	CODING CATEGORY	INDUCTIVE ANALYSIS (TEACHER 4'S EXPERIENCES WITH QUOTES)	DEDUCTIVE ANALYSIS (WINDSCHITL FRAMEWORK)
<b>STUDENT-CENTERED LEARNING</b>	<b>Teachers' Role</b>	"The student is at the core of the educational process." emphasises that the teacher acts as a facilitator guiding students to build knowledge.	Conceptual Dilemma: Balancing student-centered learning with traditional teacher-led methods.
	<b>Strongly Guided Discovery</b>	"We involve them in activities such as role-playing or writing on the board." uses interactive activities to enhance engagement.	Pedagogical Dilemma: Managing interactive methods within large classes and rigid schedules.
	<b>Motivation</b>	"I regularly bring small gifts like chocolates to reward participation and effort." Positive reinforcement encourages participation.	Pedagogical Dilemma: Sustaining motivation with limited resources and balancing extrinsic rewards.
<b>ADAPTATIONS TO STUDENT NEEDS</b>	<b>Diverse Student Readiness to Learn</b>	"I tailor lessons to meet diverse needs, providing advanced tasks for gifted students and guidance for students with learning difficulties."	Cultural Dilemma: Adapting instruction while meeting societal expectations for uniform education.
	<b>Preference for Mixed Ability Groupings</b>	"We use peer learning by pairing students with higher-performing peers to help those with learning difficulties."	Pedagogical Dilemma: Managing diverse group dynamics to support learning outcomes.
	<b>Reciprocal (Peer) Support for Learning</b>	"Watching others participate gives students the confidence to step up." uses peer modeling to build confidence.	Pedagogical Dilemma: Balancing peer interactions with curriculum time constraints.

<b>DIVERSITY ISSUES</b>	<b>Relationship with Students</b>	"When students feel respected and cared for, they are more likely to engage positively." Building strong connections fosters respect and effort.	Cultural Dilemma: Navigating cultural expectations for teacher-student relationships.
	<b>Social Expectations on Role of Student</b>	"Cultural norms create barriers, like hesitations about role-playing or singing in class."	Cultural Dilemma: Bridging traditional norms with modern constructivist practices.
<b>CONSTRAINTS OF TIME &amp; RESOURCES</b>	<b>Social Expectations on Role of Teacher</b>	"Parents resist activities they perceive as unconventional." He addresses parental misconceptions about constructivist teaching.	Cultural Dilemma: Balancing cultural resistance with progressive educational goals.
	<b>Student Numbers</b>	"Large classes make it difficult to give individual attention to students."	Political Dilemma: Overcoming resource limitations to implement student-centered teaching.
	<b>Curriculum</b>	"Rigid curricula and standardized tests limit flexibility in lesson delivery."	Political Dilemma: Balancing innovation with adherence to educational policies.
<b>PROFESSIONAL DEVELOPMENT</b>	<b>Learning Environment</b>	"The bureaucracy and regulations limit what we can do in class."	Political Dilemma: Reconciling institutional restrictions with constructivist practices.
	<b>Teacher Education</b>	"Many educators lack the training needed to implement constructivist methods effectively."	Political Dilemma: Highlighting gaps in systemic teacher preparation.
	<b>Mentoring</b>	"Collaboration with colleagues and parents is essential to support students' progress."	Political Dilemma: Building mentorship programs to sustain constructivist practices.

**Table 8** Inductive and deductive analysis, types of dilemmas, general conclusions, and examples of quotes from Teacher 5:

THEME	CODING CATEGORY	INDUCTIVE ANALYSIS OF SULTAN'S EXPERIENCES.)	DEDUCTIVE ANALYSIS USING THE WINDSCHITL FRAMEWORK.
<b>STUDENT-CENTERED LEARNING</b>	<b>Teachers' Role</b>	"Constructivist teaching involves engaging students in activities to help them construct their understanding independently." Teacher 5 highlights the importance of providing structured guidance to students with learning difficulties, tailoring tasks to their abilities, and supporting active learning.	<b>Conceptual Dilemma:</b> Merging constructivist methods with traditional reliance on teachers as the main source of knowledge.
	<b>Active Collaboration</b>	"Pairing high-achieving students with those needing more support is effective." Teacher 5 procedures peer mentoring to foster collaboration and inclusivity amongst students.	<b>Pedagogical Dilemma:</b> Making sure all students' needs are fulfilled while handling effective collaboration within diverse classrooms.

<b>MOTIVATION AND CONFIDENCE</b>	<b>Confidence Building</b>	"If a student finishes an assignment earlier than others, I might reward them by letting them take an early break, which boosts their confidence significantly." Motivating students and rebuilding self-esteem are Teacher 5 aims.	<b>Pedagogical Dilemma:</b> Continuing the motivation and confidence of students in the face of limited resources and rigid evaluation systems.
	<b>Leadership Roles</b>	"Only once their confidence is strong enough." Teacher 5 makes sure students are organised before giving them responsibilities to avoid overwhelming them.	<b>Pedagogical Dilemma:</b> Adopting leadership opportunities while maintaining preparedness and mitigating undue burden on at-risk students.
<b>ADAPTATIONS TO STUDENT NEEDS</b>	<b>Task Customization</b>	"I tailor tasks by making them smaller and more manageable, like offering individual letters or structured activities." Teacher 5 tailors learning tasks to accommodate the specific necessities of students with learning difficulties.	<b>Cultural Dilemma:</b> Ensuring that cultural expectations of uniform education are aligned with differentiated instruction.
	<b>Peer Support</b>	"High-achieving students are paired with peers who need more help, but I also assign tasks to challenge advanced students." Teacher 5 advocates for the inclusion of peer learning to benefit all students.	<b>Cultural Dilemma</b> Encouraging peer collaboration while navigating cultural norms concerning competition and teacher authority.
<b>CULTURAL INTEGRATION</b>	<b>Incorporating Traditions</b>	"I integrate cultural elements into activities, allowing students to share and express pride in their backgrounds." To foster inclusivity and pride among students, Teacher 5 incorporates cultural diversity into his lessons.	<b>Cultural Dilemma:</b> Integration of constructivist teaching with cultural traditions while promoting inclusiveness.
	<b>Challenging Cultural Norms</b>	"Some parents and administrators mistake slower constructivist learning for inefficiency." Educators benefit from Teacher 5 understanding of constructivist methods.	<b>Cultural Dilemma:</b> Investigative Misconceptions Surrounding Constructivist Pedagogy within a Wider Cultural.
<b>CLASSROOM DIVERSITY</b>	<b>Cultural Inclusivity</b>	"I focus on incorporating their cultural background into activities, even if they're from different parts of Saudi Arabia." Through the integration of cultural illustrations into lessons, he fosters student understanding and collaboration	<b>Cultural Dilemma:</b> Balancing the cultural diversity of classrooms while maintaining inclusivity and collaboration.

<b>CONSTRAINTS OF TIME AND RESOURCES</b>	<b>Institutional Restrictions</b>	"Some administrators equate silence and lack of movement in classrooms with effective teaching." Institutional constraints, concurring to Teacher 5 constrain constructivist activities.	<b>Political Dilemma:</b> e implementation of constructivist pedagogy within the restrictions of strict institutional expectations.
	<b>Assessment Methods</b>	"Constructivist teaching requires diverse evaluation methods." Teacher 5 supports various assessment tools to accommodate diverse learning styles and needs.	<b>Political Dilemma:</b> Resolving the conflict between the need for diverse assessments and rigid institutional policies that emphasize standardized evaluations.

## The approval form of the Ministry of Education Approval

نوع المنطقة: منطقة تعليمية  
رقم المنطقة: ٤١٠٠٤٨٨٧  
تاريخ الشهادة: ١٤٤٦/٠٤/١٨  
لم يفت

الوزارة العامة للتعليم  
وزارة التعليم  
مركز المنطقة التعليمية  
وزارة الشؤون والتعليم  
قسم التطوير

الموضوع: تسهيل مهمة الباحث/فهد عناد العنزي

(تعميم)  
جميع المدارس (بنين) في المنطقة

المكرم/ مدير مدرسة  
وفقه الله

السلام عليكم ورحمة الله وبركاته  
إشارة إلى إحالة سعادة المدير العام للتعليم بالمنطقة رقم ٤١٠٠٤٨٨٧/٠٤/١٨ وتاريخ ١٤٤٦/٠٤/١٨  
ومشغوعها خطاب سعادة وكيل جامعة الحدود الشمالية للدراسات العليا والبحث العلمي رقم ٤١٠٠٤٨٨٧/٠٤/١٨ وتاريخ ١٤٤٦/٠٤/١٨، المتضمن طلب تسهيل مهمة الباحث من جامعة الحدود الشمالية/ فهد عناد العنزي، والذي يقوم بإعداد دراسته بعنوان "التحقيق في المعضلات البنائية التي يواجهها المعلمون السعوديون التي يعملون مع الطلاب ذوي صعوبات التعلم".  
عليه تأمل منكم التكرم بالتوجيه باستيفاء أداة الدراسة من قبل عينة من معلمي صعوبات التعلم بالمدرسة (.

والسلام عليكم ورحمة الله وبركاته،،،

مدير إدارة التطوير والتحول  
ملحان بن مفرح العنزي  
مساعد مدير التطوير والتحول

الصفحة ١ من ١

الإدارة العامة للتعليم بمنطقة الحدود الشمالية - فرع - طريق الملك فيصل، هاتف (٠١١) ١٦٦٦١٦٦٦ - فاكس (٠١١) ١٦٦٦١٦٦٦٦ - البريد الإلكتروني: nhddad-edugm@moe.gov.sa

