TEACHERS' PERCEPTIONS AND CONCERNS WHILE IMPLEMENTING STUDENT-CENTRED TEACHING STRATEGIES IN THE CLASSROOM IN SAUDI ARABIA

by

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Abstract

In Saudi education, the teacher-centred approach has been the norm for many decades. Recently, public-school teachers were asked to implement student-centred strategies in their classrooms. This study was conducted to examine the perceptions and concerns of seven public-school teachers about the implementation of student-centred strategies and whether school level or subject affects the use of this approach. Data was collected through semi-structured individual interviews, background questionnaires, and the open-ended statement of concerns. Teachers were asked about the beliefs, understandings, concerns and challenges they face when implementing SC strategies and about current Saudi curricular design in relation to these strategies. The Stages of Concern Model was used to assess teachers’ concerns regarding a student-centred approach (Hall & Hord, 1987; George, Hall, & Stiegelbauer, 2006). A content analysis and an inductive analysis approach were used to analyze the study data. Findings from the Statement of Concern data indicated that participants showed the most concerns in the Management Stage (task concerns), while the Unconcerned and Refocusing stages were absent among all participants. Findings from the interview data revealed two main themes: (1) modifications to textbooks, curriculum design, evaluation method, and preparation; and (2) opportunities that the student-centred approach provides within Saudi education. The school level and subject being taught also affected the teacher’s capacity to utilize student-centred strategies in Saudi schools.
Lay Summary

This thesis is an examination of public-school teachers’ perceptions, opinions, and concerns about the implementation of student-centred strategies in Saudi Arabian schools. The study also aims to examine if school level and subject affect the implementation of these strategies in Saudi schools. After investigating seven teachers’ viewpoints about the student-centred approach in depth, the findings suggest that these Saudi teachers have positive attitudes toward the student-centred approach and the majority of them believe that teaching and learning should be student-centred. However, modifications need to be done to the Saudi textbooks, curriculum design and evaluation methods in order to effectively implement this new approach. Moreover, school level and subject affect the implementation of the student-centred approach within Saudi schools. This study provides the opinions of seven Saudi Arabian teachers about student-centred approaches and provides an opportunity for sharing their classroom experiences so that stakeholders and education members can meet their needs.
Preface

This thesis is original, unpublished and an independent work of the author, Wojdan Aladawi. The data reported in Chapters Four and Five was covered by UBC Ethic Certificate number H19-03140. The project was titled “Teachers’ Perceptions and Concerns While Implementing Student-Centred Teaching Strategies in Classroom in Saudi Arabia.”
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CBAM  Concerns Based Adoption Model
SC    Student-Centred
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Chapter 1: Introduction

1.1 Background

One of the main aims of any learning system is to provide individuals with quality basic education that achieves its goals. Over the past few decades, educational policy makers in Saudi Arabia have been trying to improve the quality of Saudi education (Roy, 1992). In 2007 the Saudi Ministry of Education undertook educational reforms that included: school curricula and teaching practices (Alturki, 2016). In recent years, the Ministry of Education was trying to apply student-centred strategies (SC) since it emphasizes the educational philosophy that considers the students at the heart of the educational process.

In order to fully integrate SC strategies in schools, the Ministry of Education in Saudi Arabia has been requiring public-school teachers to implement SC strategies as a replacement for teacher-centred approaches. To achieve this, teachers are expected to use certain teaching strategies that encourage students to be active in the learning process and responsible of their learning instead of being passive learners.

In Saudi Arabia a student-centred approach is considered to be a modern trend and is seen as a Western learning approach. Adopting this approach within Saudi education is not a straight path, since traditional teaching approaches have been the norm for decades (Alawadh, 2017). The SC approach could be appropriate for Western culture since the curricula and other factors might help the approach to be applicable. However, in other countries, such as Saudi Arabia, the SC approach might not be successful due to particular factors that could hinder the approach. Studies related to the SC method in non-Western countries discuss different problems that teachers face when applying the approach. Schweisfurth (2011) investigated 72 articles related to the SC approach in developing countries and concluded that some barriers affect the
implementation of SC learning in those countries. One of the main barriers is the limitations of teachers’ capacities and their limited experience in SC learning (Schweisfurth, 2011). As for the Saudi context, the switch from traditional approaches to the SC approach in Saudi Arabia has been abrupt and the validity and practicality of implementing SC strategies have not been examined thoroughly in previous studies. The existing studies that examined the teachers’ perceptions about the implementation of SC learning in Saudi Arabia have focused on the university level or on the subject of English teaching (Idris, 2016; Tawalbeh & AlAsmari, 2015).

1.2 Purpose of study

Although many international studies have investigated the perceptions of teachers regarding the SC approach, few have been done in the Saudi Arabian context, especially for public school teachers. To shed light on the topic from the public education point of view, this study seeks to examine the perceptions and concerns of Saudi teachers about their experience of implementing SC strategies. Moreover, this study examines if the school level and the school subject affect the implementation of SC strategies and if the current Saudi curriculum design fits with the SC approach. Also, it aims to provide the stakeholders with an understanding of the feelings, attitudes, and concerns that the participant public-school teachers have regarding the implementation of these new strategies in classrooms.

To achieve this goal, a qualitative research method is utilized in this study to examine teachers’ perceptions about SC strategies. The questions that guided the study are:

a. What does it mean to be a teacher?

b. What are the public-school teachers’ perceptions and concerns about student-centred teaching strategies?
c. What opportunities does a student-centred learning approach provide for the teaching practices of the teacher?
d. How does the current Saudi curriculum fit within the student-centred approach?

1.3 Role of the researcher

I am a Saudi who has been learning and teaching in Saudi Arabia for my entire life, before I started my graduate program in Canada. This topic of study attracted me because of my learning experience in Saudi public schools, where the traditional teaching approach was common. In other words, I was a student exposed to teacher-centred strategies that depended mostly on teachers. This approach was used for the majority of my learning experience, except for some teachers who had attempted to apply constructivist learning approaches on some occasions. At that time, I did not realize the differences between different teaching approaches until later when I became a teacher. As a teacher in Saudi Arabia, I taught my students using the same approach that I was exposed to as a student. However, after reading about other teaching approaches from different resources, and discussing with my colleagues how our students were passive during classes, I began to question how I was teaching for student learning when Saudi students only memorize the curriculum content to pass exams. I felt that the traditional teaching method was not the best way to teach our students; however, teachers have little to no experience with other approaches and were not capable of applying other approaches.

Several years before starting my graduate program in Canada, the Saudi Arabian Ministry of Education requested that teachers apply teaching and learning strategies that focus on students. I welcomed the idea, as many of my colleagues did, as we found through reading that students could benefit from these approaches, while I knew it was not going to be a straight-forward path.
Challenges and barriers were present when we tried to apply these new strategies. For example, lacking knowledge about the new strategies and having limited agency over the curriculum were two of the main concerns we had as teachers. Then, after taking one of the required courses in my MA, I learned more about teaching and learning approaches, which enabled me to learn more about the benefits and advantages of each of these teaching approaches. This led me to pay more attention to the difficulties and challenges that Saudi teachers face when applying approaches that focus on students as active learners.

As a Saudi teacher, moving toward a teaching method that focuses on students seems to be a promising reform for Saudi education; however, many questions came to my mind such as: have teachers’ opinions been sought regarding this shift? Is our education system suitable to adopt this approach? Are our schools ready for the change? etc. Therefore, the aim for me, as a researcher, was to identify concerns that teachers have when implementing student-centred strategies in order to enhance the quality of the Saudi Arabian education system.

1.4 Overview of Saudi Education

Formal education in the pre-Saudi era, established in 1925, was limited to the education of boys within the Hijaz region. For a decade or so the number of schools was slowly increasing until the establishment of the Kingdom of Saudi Arabia and the discovery of oil between 1932-1938. Within the following thirty years, public education was expanding at a rapid rate to cover the entire kingdom for both boys and girls (Ministry of Education, 2019). Saudi education has a gender segregation system where boys and girls are taught in separate schools with same sex school staff, but both genders are expected to follow the same curriculum. Preschool education is an exception to this as both genders are in mixed classes and only taught by female teachers.
Education is administered by the Saudi Ministry of Education which funds all public schools and is responsible for designing the curricula and textbooks. As a result, teachers are required to follow the same curriculum in every school, leaving them with limited agency regarding the curriculum. Saudi general public education is divided into three levels: elementary level where students study for six years from age 6 to 11, intermediate level for three years from age 12 to 14, and secondary level for three years from age 15 to 17.

Until recently the teaching approach used in Saudi schools was limited to teacher-centred methods where teachers were the only source of knowledge and students were the receivers who needed to memorize the given knowledge in order to pass exams. By 2007 the Ministry of Education initiated a project called the King Abdullah Public Education Development Project which aims to make huge reforms to develop and improve the quality of the educational system in general (Elyas & Al-Gamdi, 2018). The objectives of the project included many aspects such as curricula reforms that focused on students and an expectation for the development of new teaching approaches. Saudi curricula attempted to adopt constructivist strategies and teachers were encouraged to move from traditional teaching methods. Of particular note is the implementation of problem-solving skills and the use of critical thinking in classrooms. Unfortunately, there have not been satisfactory changes from the beginning of the project and constructivist pedagogical practices were minimally evident in Saudi textbooks (Almannie, 2015; Al-Abdulkareem & Hentschke, 2014). In 2014-2015 Saudi teachers were required to implement teaching strategies that focused more on students to enable the learning process to be more active and engaging, in particular, strategies such as engaging in dialogue and critical thinking that enable students to be active in the classroom when learning.
1.5 *Thesis outline*

This thesis is organized into six chapters. Chapter One provides an introduction to the study where I present needed background information of the study, including the goals and the research questions and the role of the researcher. Chapter Two presents the theoretical framework of the study and a review of related literature regarding student-centred learning and educational change, teachers’ beliefs, and curriculum. Chapter Three describes the research design and methodology. In Chapter Four, I present the findings and the discussion of the statement of concerns. In Chapter Five, I present the findings and the discussion of the interview data. Finally, in the last chapter, a summary of the main findings is given, in addition to the significance and limitations of the study and recommendations for future research.
Chapter 2: Literature Review

This chapter discusses the theoretical framework of the study and relevant literature. The chapter is divided into five sections. In section 2.1, I briefly address the theoretical framework underpinning this study. Then, in section 2.2 I present the definition of terms I use in this thesis, and in section 2.3 I present literature related to SC pedagogy which includes its characteristics and challenges. In section 2.4, I review change literature with emphasis on the Concern-Based Adoption Model (BCAM). This is followed by a discussion of teachers’ beliefs and how they influence change in section 2.5. Finally, in section 2.6 I suggest a curriculum model as an alternative to the current Saudi curriculum design based on Doll’s approach (Doll, 1993).

2.1 Theoretical framework

The theoretical framework guiding this study is based on three theories. The first one is constructivist learning theory, which is related to the SC approach. Constructivist characteristics can be found in the work of different prominent theorists, among them Dewey, Piaget, and Vygotsky (Gordon, 2009). All of these theorists share the idea that the meaning of experience in a constructivist approach is formed by individuals, and therefore individuals make their realities regarding the phenomena in which they engage (Lauckner, Paterson, & Krupa, 2012). The second theory is based on the Concerns-Based Adoption Model (CBAM). This model provides a framework for researchers and facilitators to measure and facilitate implementation and change in school. It has three dimensions: the Level of Use (LoU), the Innovation Configurations (IC), and the Stages of Concern (SoC). For the purpose of this study the SoC will be utilized to examine the concerns that Saudi teachers face when implementing SC strategies in their classrooms. Postmodern curriculum theory, particularly Doll’s theoretical model (1993), is the
third theory that underpins my thesis. Although these theories are not necessarily aligned, each
has a role in this study that will be discussed in the following sections.

In the next section I discuss a student- centred learning approach in terms of its
characteristics and challenges. In addition, I will introduce the widely used teacher- centred
approach in Saudi Arabia, as it is relevant to this study.

2.2 Definition of terms

**Student- centred learning:** A teaching or an instructional approach that implements
constructivist learning theory where students are engaging in the learning process and working
together to construct their knowledge. In this approach students are responsible of their learning,
while the role of a teacher is to facilitate the teaching process (Schweisfurth, 2013).

**Student- centred strategies:** A set of teaching and learning strategies designed to help and
encourage students to be active in the classroom such as; collaborating with the teacher and other
peers and applying critical thinking and problem-solving skills in classroom (Jacobs, Renandya,
& Power 2016).

**Teacher- centred learning:** This teaching method is considered to be a traditional teaching
approach where a teacher is the center of the knowledge and guides the learning process, while
students are in a passive mode (Schweisfurth, 2013).

**Social constructivist learning theory:** Social constructivist theory is one of the constructivist
learning approaches that believes learning occurs in social and cultural manners when people
interact and engage with each other. In other words, individuals learn from each other (Gredler,
2001).
Concerns Based Adoption Model (CBAM): This model is “a conceptual framework that describes, explains, and predicts probable behaviors throughout the change process, and it can help educational leaders, coaches, and staff developers facilitate the process” (George, Hall, & Stiegelbauer, 2006, p. 5). The model has three dimensions, the Stages of Concern, the Level of Use, and the Innovation Configurations, to describe how people develop when they go through the change process.

Stages of concern: Stages of concern consist of seven stages: unconcerned, informational, personal, management, consequence, collaboration, and refocusing, that describe people’s feelings, thoughts or attitudes about an innovation or a new practice (George, Hall, & Stiegelbauer, 2006).

2.3 Student-centred approach

The concept of student-centred (SC) is not new. It has a very long history starting with the work of Socrates (470-399 BC). Socrates believed that individuals could learn effectively through dialogue by which they could ask and answer questions to get engaged in critical thinking. Defining student-centred learning remains problematic since the term is still evolving. It is also associated with various thoughts, theories, and terms including progressivism, social constructivism, constructivism, child-centred learning, and problem-based learning. Each term has slightly different connotations (Schweisfurth, 2013). However, the SC approach can be defined as a learning approach that focuses and promotes students’ interest and voice and provides them with opportunities to shape their own learning experience. As Jacobs, Renandya, & Power (2016) suggest, in a SC classroom “students become more active, not just in doing learning activities, but also in thinking about and in shaping their own learning” (p. xiii).
Moreover, in a SC classroom, teachers plan lessons based on students’ needs and interests instead of following pre-planned lessons that are designed outside the classroom. Moreover, students are not passive or mere receivers of knowledge, but they are given the opportunity to engage in class and express their thoughts (Weimer, 2002; Weimer, 2013 & Jacobs et al., 2016).

Theoretically, Weimer (2013) indicates that learner-centred education can be tied to five existing theories including attribution theory and self-efficacy, critical pedagogy, feminist theory, constructivism, and transformative theory. However, within the Saudi context the adoption of student-centred learning seems to depend mainly on the constructivist theory (Idris, 2016). Therefore, this study only focuses on the theory of constructivism as the theoretical framework that underpins SC strategies in Saudi education.

Constructivism is grounded in the works of three thinkers of the twentieth century: the American philosopher John Dewey, the Swiss psychologist Jean Piaget, and the Russian psychologist Lev Vygotsky. Each of these influential scholars contributed to SC pedagogy in a different way (Chisholm & Leyendecker, 2008; Henson, 2003; Lattimer, 2015). Even though each of these scholars has their own perspective on constructivism, all of them share the idea that knowledge is constructed and is based on the experience of the individual.

For Dewey (1998), the philosophy of learning is based on experiential learning and progressive education which responds to the traditional methods of teaching. He believes that the capacity of students’ learning is influenced by their past and present experience. Based on his philosophy, children learn through experience, play and collaboration, when they are being active learners. He also emphasizes the idea that students learn by doing, when learning opportunities allow students to engage in the learning process by creating classrooms that provide a democratic learning environment instead of being authorized only by teachers.
Therefore, Dewey’s perspective on education has influenced the idea of student- centred learning and active learning by emphasizing learning through play and experience (Pardjono, 2016). Moreover, Dewey’s view of constructivism suits the role of teachers and students in the SC classroom where students design their learning experiences and the teacher acts as a facilitator (Hyslop-Margison & Strobel, 2007).

Piaget’s theory of cognitive development is constructed around the idea that our present knowledge has evolved over time. In other words, he supports the idea that children cognitively construct their knowledge by combining new knowledge with prior knowledge. Piaget spent a long time observing children learning and he came up with the idea that individuals do not grasp new ideas at once, but they learn slowly by attaching new knowledge to previous knowledge (Almy & Genishi, 1979). Piaget suggests that children form and gain knowledge based upon their own experiences through a concept called equilibration. According to Piaget (1977), equilibration happens when children go through cognitive development where they balance new information with old knowledge. Cognitive equilibration encompasses two fundamental processes: assimilation and accommodation. Assimilation is the incorporation of new knowledge to prior knowledge or existing cognitive structures. The second process is accommodation, which is the result of considering the particularities characteristic of the new knowledge that is to be assimilated. According to D’Mello, Lehman, Pekrun, and Graesser (2014), “cognitive equilibrium is normally restored after thought, reflection, problem solving, and other effortful cognitive activities.” These outcomes that cognitive equilibrium offer are compatible with the notion of a SC approach as it encourages students to engage within the learning process instead of memorizing facts without understanding the knowledge.
Vygotsky’s sociocultural theory also contributed to the constructivist learning theory. Sociocultural theory emphasizes social interaction between learners and teachers. For Vygotsky, social experience shapes how individuals think and interpret the world. According to Vygotsky (1978), a person acquires knowledge through communicative interaction with others, where community, language, and culture play fundamental roles in cognitive development. For Vygotsky, the teacher and the peers play fundamental roles reinforcing and improving students’ learning development skills. In this respect, his Zone of Proximal Development concept requires teachers to provide students with knowledge or skills that are beyond the students’ current development level. In order for the student to understand such knowledge, guidance from the teacher or more competent peers should be provided. Vygotsky contributed to the SC approach by emphasizing the need for interaction between classroom members such as in collaborative learning and group work and the importance of the peers in enhance students’ learning which are important features in SC environment.

There are five different assumptions that are derived from the work of these three scholars: (a) learning from a constructivist perspective is understood to be complex and nonlinear in nature; (b) reality cannot be discovered; it is constructed through human activity and social interaction; (c) knowledge is a human product where culture and social interaction play crucial roles in creating the knowledge; (d) meaningful learning occurs through social activities of individuals; and (e) the main goal of constructivist instruction is cognitive development and deep understanding (Fosnot & Perry, 1996; Kim, 2001).

Within education, constructivism is a learning theory that emphasizes the importance of cognitive development and deep understanding and posits that learners construct their knowledge and meaning individually and socially (Fosnot, 1996). That indicates that the students’ role is not
passive in this view, as Glasersfeld (1995) observes that in the constructivist perspective “learning is not a stimulus-response phenomenon. It requires self-regulation and the building of conceptual structures through reflection and abstraction” (p. 14).

Constructivist theory underpins SC pedagogy in several different ways; for example, in the constructivist approach, there is no single reality that individuals can observe or discover. Instead, individuals construct their knowledge by making meaning of things. In this sense, students should engage in class to be able to understand class material. Both the SC approach and the constructivist approach uphold the idea of the importance of interaction as a key element in the process of learning. These factors are what make constructivism a suitable theory that underpins the SC approach, in which students do not seem to be merely receivers of knowledge, but they make meaning of knowledge by interacting with their teachers and peers.

2.3.1 Teacher-centred instruction and student-centred instruction

A traditional learning pedagogy, a teacher-centred approach to the learning process tends to be controlled by the teacher and the lecture-oriented method seems to be the main teaching strategy. In this approach, teachers are considered to be the transformers of knowledge and students are the receivers who are not given any control over their own learning. One of the suitable descriptions of this approach is what Freire (2000) called the “banking concept” (p. 73). In this pedagogy, teachers claim ownership of the learning process and the main task for them is to “fill” the mind of students who are considered to be as empty and blank “containers” (p. 72). In this approach, the students’ creative power is minimized or annulled and there is a minimal interaction between teachers and students and peers themselves (Freire, 2000). Class material and school curricula tend to be scripted, giving teachers limited agency or no agency over what is taught and often how it is taught. Consequently, the evaluation system relies heavily on high-
stakes testing where students are considered successful if they are able to memorize the class material to pass exams. This traditional approach is supported by the theory of Skinner (1953) who advanced behaviorism, in which operant conditioning plays a huge role in changing students’ behaviours.

Regarding the student-centred approach, the roles of teachers and students are dramatically different compared to the traditional approach. Students are afforded opportunities to construct their own knowledge and to present their voice in classrooms. Unlike students in traditional classrooms, students in a SC classroom are more active when they are engaged both physically and mentally. Students are encouraged to take responsibility for their own learning by being involved in the learning process and developing independent learning skills (Attard, Di Iorio, Geven, & Santa, 2010; Seng, 2014; Weimer, 2002). It seems from these studies that the role that students are given in the SC classroom aims to empower students and provide them with more opportunities to manage their own learning instead of depending on their teachers. As a consequence, this role will eventually provide students with meaningful learning experiences and may impact their future life.

Even though it seems that students have more control of their learning in this approach, teachers still have crucial roles to play. Planning lessons is a major step for teachers because they can plan suitable activities and skills for developing collaborative learning, critical thinking skills, and problem-solving strategies. Acting as a facilitator or an organizer are now new roles for the teacher, who gives and offers advice as needed (Weimer, 2002). In this approach, the assessment methods are not only relying on tests. There are several ways to evaluate students, including engaging them in peer-assessment and self-assessment (Weimer, 2002).
Shifting to SC approaches requires comprehensive change to the learning environment: it is not limited to teachers and students (Weimer, 2002, 2013). In the book *Learner-Centered Teaching: Five Key Changes to Practice*, Weimer (2002, 2013) proposes five key changes to instructional practice that need to occur when creating a learner-centred classroom. As she suggests, the power differential between teachers and students should be more balanced and classrooms should have a democratic and egalitarian atmosphere that aims to empower and motivate students. Teachers are not seen as the only expert in the classroom or as an authoritarian classroom manager, but rather as instructors who guide and facilitate learning and often let students take the lead. Students must accept the responsibility for their learning in order to be autonomous learners and independent learners. Also, students are given opportunities to develop self- and peer assessment skills. Finally, moving to a learner-centred approach involves dual function: establishing a knowledge base and prompting learning.

In the same manner, Jacobs et al., (2016) identify ten elements student-centred classrooms should have, including:

- **Co-learning**: teachers and students are seen as co-learners, thus teachers need to acknowledge that they do not know everything, and they learn alongside with students.
- **Interaction**: in order for cognitive development to occur, students need to work together as interaction between peers is an essential element in SC learning.
- **Diversity**: class activities need to be diverse to meet with the different needs of students.
- **Learning climate**: teachers need to create a healthy learning climate where all class members are fully present and engaged.

Applying these strategies and changes to a traditional classroom does not come without challenges. A review of these challenges is presented in the following section.
2.3.2 Challenges of the student-centred learning approach

Changing from one pedagogical learning approach to another requires effort from teachers, students, schools, administrations, and school districts. With every change comes challenges that people face during this period, which might be related to teachers, students, or the classroom environment. Previous studies show that teachers face many challenges when implementing a constructivist learning and teaching method such as SC learning and active learning. Discussing the challenges that teachers face is important as in the changing process teachers play crucial roles. Regardless of their efforts to implement changes and their positive attitudes, challenges and difficulties can hinder their intention.

Teachers’ knowledge about an innovation seems to be an important factor to an efficient implementation of it. In this regard, Park (2012) indicates that teachers’ knowledge and background about new pedagogical approaches affects their implementation process (Park, 2012). This specific challenge is labelled as “conceptual dilemmas” by Windschitl (2002), meaning that teachers lack understanding of the underpinning principles of constructivism philosophically, epistemologically and psychologically (p. 132). In the SC classroom, when a teacher lacks understanding of the principles of the SC approach, it becomes challenging for them to plan classroom activities and that could eventually result in a lack of implementation of SC strategies in classroom. Lack of knowledge about the SC approach might be due to lack of training programs or to the limited experience that teachers are exposed to as students and in their teaching experiences. Schweisfurth, 2011; Al Ahmadi, 2010; Tawalbeh & AlAsmari, 2015, and Alturki found that teachers who face difficulties when applying SC strategies tend to be exposed to teacher-centred pedagogy before and after becoming teachers.
As for students, their mindsets and motivation can act as a fuel for teachers to implement changes or restrict them. AL Ahmadi (2010); Aslan & Reigeluth (2015); Corkin et, al., (2019) and Sherimon, (2019) show that resistance and lack of interest from students kept teachers from applying new instructional approaches, especially those approaches that required participation from students. This student resistance was often due to a lack of motivation among students as they were used to depend on teachers as the main source of knowledge and applied little effort in the classroom.

Classroom climate, including class size and instructional resources, are important factors when it comes to implementing teaching and learning changes. Educators consider large classrooms as one of the obstacles that they face when implementing active learning pedagogy since the pedagogy requires teachers to learn about every student’s learning styles and interests, something that is more difficult to apply in crowded classes (Salleh & Yusoff, 2017; Sherimon, 2019). In addition to that, several studies have found that the paucity of instructional resources is one of the obstacles teachers face when implementing SC learning (De la Sablonnière, Taylor & Sadykova, 2009; Schweisfurth, 2011; Dole, Bloom, & Kowalske, 2016; Sherimon, 2019; Corkin et al., 2019). From these studies, it seems that large classes affect the implementation of SC strategies. When teachers plan to adopt the SC approach, they need to learn about their students’ needs and interests, but this is hard to achieve in a large classroom.

Time and the nature of the curriculum are two obstacles that teachers face when implementing SC pedagogy. Teachers have little curriculum flexibility and face conflicting visions between SC learning and what teachers are required to teach, as they are given scripted curriculum and pacing guides to follow (Pedersen & Liu, 2003). As for time, as indicated by Seng (2014) and Bloom, Kowalske & Dole (2016), teachers expressed that applying activities
within the SC approach hinders them form covering the entire class material since student-centred activities are considered to be more time consuming than teacher-directed ones.

Finally, one of the major factors that affects the implementation of active learning and SC learning is the method of assessment. High-stakes testing and standardized tests disempower teachers and limit their capacity to applying SC activities, as these tests examine students’ factual skills instead of problem-solving skills (Pedersen & Liu, 2003; Nieto, 2003; Bloom et al. 2016; Corkin et al., 2019). Some of the activities that teachers discontinue in favor of test preparation are critical thinking activities, collaborating learning, and creative activities. In a study done by Barksdale-Ladd & Thomas (2000), about 75% of teachers found themselves needing to change their instructional practices due to testing requirements.

In a Saudi context, the majority of available studies regarding the SC approach were conducted in undergraduate and higher education levels, while little has been done in k-12 education. Idris (2016) conducted a study investigating English language instructors’ perspectives regarding the effectiveness of student-centred learning compared to the traditional teaching approach at the Saudi Petroleum Services Polytechnic. The results showed the positive impact of SC learning compared to teacher-centred learning and was deemed to be the best methodology to be applied in meeting the needs of the current curriculum design. In addition, teachers were largely motivated to encompass SC learning in their classrooms and noticed an improvement in students’ communication skills.

In a similar study, Tawalbeh & AlAsmari (2015) examined university instructors’ perceptions regarding a learner-centred instruction approach and its possible challenges and barriers. The researchers found that participants had a positive attitude towards a learner-centred approach since the approach is an effective method to enhance students’ learning. While
instructors had enough knowledge of learner-centred instruction, they also wanted to learn more. When applying the approach, instructors faced some barriers and challenges, such as students’ conflicting attitudes toward the approach. Since they had previously been taught a teacher-centred approach with crowded classes and a lack of technology resources, they also had limited opportunities to learn a new approach. Students in this study seem to face confliction in the learning approach as they have been learning through a teacher-centred approach for at least 12 years of their school experiences, in which they were depending mainly on their teachers.

Approaches using constructivism were examined in Saudi Arabia in two studies. First, Alsharif (2013) investigated how primary mathematics teachers interpret constructivism as a teaching approach. The survey showed that teachers’ capacity to implement the constructivist learning approach was limited as teachers, for example, provided students with limited opportunities to negotiate and reflect their own ideas. The findings also indicated that several factors hindered the implementation of constructivist approaches such as: difficulty in classroom management and lack of communication between teachers and students. Furthermore, teachers failed to use everyday experiences as a meaningful context to develop students’ mathematical knowledge. The researcher seems to point out that the relationship between teachers and students affects the implementation of constructivist approaches in the classroom. When there is limited interaction between teachers and students, that could result in a lack of meeting the needs and interests of students. These difficulties are not the only factor that affected the implementation of constructivist practices in Saudi schools. In a study by Al-Abdulkareem & Hentschke (2014), the researchers found that Saudi textbooks support the practice of constructivist approaches in only minimal ways. From these two studies it seems that although Saudi education aimed for change
and attempted to implement constructivist teaching and learning approaches in the classroom, teachers and textbooks were not prepared for this change.

Al Ahmadi (2010) examined SC learning at a school level. She conducted a quantitative study that investigated intermediate school female teachers who teach Family Studies about their use of SC strategies in classrooms. Al Ahmadi (2010) found that teachers were knowledgeable regarding the effectiveness of using the SC approach. However, the implementation of the approach faced challenges including class size, lack of participation from students, lack of learning and teaching resources, insufficient time, and lack of training programs for teachers. In addition, they stated that implementing SC strategies resulted in some class management problems. From the Al Ahmadi (2010) study and other Saudi studies mentioned previously, Saudi teachers seem to be welcoming the changes in the learning and teaching approaches that focus on students as active learners instead of being receivers of knowledge. However, teachers struggled to find a suitable environment for these new approaches, in other words, teachers seemed to be required to apply a new approach without going through preparation stages or having a suitable classroom environment.

The shift from one teaching approach to another requires teachers to go through a process of change. In the following section I discuss the literature relevant to the process of change.

2.4 Change literature

Change literature is a large segment of the education field due to the many factors that are involved in the change process (Waugh and Punch, 1987; Richardson, 1994). Fullan (2001) indicates that change occurs when teachers change their way of thinking or acting within their teaching processes. Teacher change is also described as growth, development, improvement, or implementation of something that is new to them (Richardson, 1994). In the literature of change,
three philosophies of planned change have been posited. They are empirical-rational, normative-re-educative, and power-coercive (Chin and Benne, 1969, as cited in Richardson, 2001).

Each of these types has its own characteristics. An empirical-rational approach assumes that men and women are rational beings able to make rational decisions. Changes are adopted only if two factors are found: first, if changes can be justified rationally, and second, if changes align with one’s interest. As Richardson (1994) indicates, when applying this approach to educational change, change is made outside the classroom, then teachers are informed about the idea of the change and they are required to implement the suggested change. Teachers who do not implement the change are often seen as being resistant to the change. The normative-re-educative approach assumes that individuals have their own socio-cultural norms. Therefore, for change to occur, individuals need to alter their socio-cultural norms in order to change their attitudes, values, and skills regarding the old norms. According to Richardson (1994), the major difference between the above two approaches is the direction of change. In the empirical-rational approach, change comes from outside the classroom such as from policymakers or school board members, while in the normative-re-educative approach, change comes from within the individuals involved in the change effort.

The third approach is the power-coercive approach. The assumption that underlines this approach is that people with less power will comply with changes that will be presented by authorities who have more power. This last approach seems to exactly represent the case in this study, where teachers must implement change that supervisors, school board members, or principals ask them to implement in their classrooms or otherwise teachers might lose credit.

In the education field, teachers are exposed to change as a way to improve their teaching methods and therefore improve the outcome of their students. Educational change can be a new
curriculum, an innovation, or a teaching or learning method and the motivation of it can come either from inside or outside the classroom. Despite the fact that many teachers are eager to implement change in their classroom, they still have concerns regarding the change process. These concerns, difficulties, and challenges of change that teachers face when implementing new ideas can be examined with the use of the Concerns Based Adoption Model (CBAM). The model focuses on individuals and their attitudes and behaviors regarding the implementation of the new change (Hall & Hord, 1987). In the following section I review CBAM.

2.4.1 Concerns Based Adoption Model (CBAM)

The Concerns Based Adoption Model was developed through extensive work at the Research and Development Center for Teacher Education at the University of Texas (Hord, Rutherford, Huling, & Hall, 2006). The researchers engaged in a collaborative enterprise to learn about change in schools, specifically about school improvement (Hord, 1987). CBAM focuses on individuals and their attitudes, behaviors, and concerns regarding the implementation of the new change they are going through (Hall & Hord, 1987). Concern can be defined as “An aroused state of personal feelings and thought about a demand” and these concerns are affected by the person’s past experiences regarding the subject of the arousal (Newlove & Hall, 1976, p. 9).

CBAM is based on a number of assumptions regarding change (Hall & Hord, 1987):

1. Change is a process not an event. It requires time and it cannot occur on a particular date.
2. The change process is a personal experience as each individual reacts differently to change. Therefore, considering the needs of individuals can enhance and improve the changing process.
3. In a change process, individuals should be considered as the focus of the attention since change is accomplished through them.
(4) Educational change involves a change of individuals’ feelings as well as their skills shifting with respect to the innovation.

(5) Change is best understood in operational terms, which means that individuals involved in change will naturally relate to the effects and needs of change.

(6) Individuals, innovation, and the context should be the focus of facilitation as change relies on them.

The Concerns Based Adoption Model was designed to help change facilitators identify the needs of individuals involved in the change process and to help researchers measure the extent of implementation (Hall, Dirksen & George 2006). The model has three different dimensions: the Level of Use (LoU), the Innovation Configurations (IC), and the Stages of Concern (SoC). The third dimension, the Stages of Concern, focuses on assessing individuals’ concerns, attitudes, perceptions, and feelings regarding implementing an innovation. This last dimension seems to be the most relevant to this study as it focuses on the concerns that individuals have when implementing change. According to Hall et al. (2006), “SoC addresses the affective aspects of change, such as people’s reactions, feelings, perceptions, and attitudes” (p. 1). This dimension is discussed further in the following section.

2.4.2 The Stages of Concern dimension

The Stages of Concern dimension enables researchers, administrators, and others who are interested in change in schools to assess teachers’ concerns regarding the change. According to Hall & Hord (1987), there are seven stages of concern regarding an innovation. These stages progress from no concerns about the innovation to several stages to reach concerns about the innovation. Teachers might not have only one stage of concern, but a combination of concerns reflected in one or more stages. These stages can be divided into four different categories:
unrelated concern, self-concern, task concern, and impact concern. Table 1 illustrates the seven stages of concern that users go through when implementing an innovation.

Table 1.

The Stages of Concern about an innovation

<table>
<thead>
<tr>
<th>IMPACT</th>
<th>TASK</th>
<th>SELF</th>
<th>Stages of Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>Refocusing</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>Collaboration</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>Consequence</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>Management</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>Personal</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>Informational</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td></td>
<td>Unconcerned</td>
</tr>
</tbody>
</table>

The individual focuses on exploring ways to reap more universal benefits from the innovation, including the possibility of making major changes to it or replacing it with a more powerful alternative.

The individual focuses on coordinating and cooperating with others regarding use of the innovation.

The individual focuses on the innovation's impact on students in his or her immediate sphere of influence. Considerations include the relevance of the innovation for students; the evaluation of student outcomes, including performance and competencies; and the changes needed to improve student outcomes.

The individual focuses on the processes and tasks of using the innovation and the best use of information and resources. Issues related to efficiency, organizing, managing, and scheduling dominate.

The individual is uncertain about the demands of the innovation, his or her adequacy to meet those demands, and/or his or her role with the innovation. The individual is analyzing his or her relationship to the reward structure of the organization, determining his or her part in decision making, and considering potential conflicts with existing structures or personal commitment. Concerns also might involve the financial or status implications of the program for the individual and his or her colleagues.

The individual indicates a general awareness of the innovation and interest in learning more details about it. The individual does not seem to be worried about himself or herself in relation to the innovation. Any interest is in impersonal, substantive aspects of the innovation, such as its general characteristics, effects, and requirements for use.

The individual indicates little concern about or involvement with the innovation.

Source: Adopted from George, Hall, & Stiegelbauer (2006). Measuring implementation in schools: The Stages of Concern Questionnaire, Figure 2.1, The Stages of Concern about an innovation (p.8), with permission from the American Institute for Research

According to George, Hall, & Stiegelbauer (2006), there is a developmental movement through these stages, which means that implementors move from no concern to advanced concerns based on their experience and interaction with the innovation. However, there is no guarantee that the emergence of higher-stage concerns will result in reduction of lower-stage concerns. Moreover,
Hall & Hord (2006) indicate that if the innovation is appropriate and the change process is carefully facilitated, then implementors will move from self-concern to task concern during their first years of use and eventually to impact concern between the third and fifth year of use. Further, the authors mention that implementors’ concerns might get intense in the Management Stage or return to self-concern if the innovation is not appropriate or the process of change is not facilitated carefully.

2.4.3 Tools for Assessing the Stages of Concern

When utilizing the Stages of Concern there are three approaches to assess individuals’ concerns. First, there is the Stages of Concern Questionnaire, which is the most frequently used tool to assess individuals’ concerns. The questionnaire has 35-items that provide a scoring measure of the seven stages of an innovation. Hord et al. (2006) indicate that the strengths of the Stages of Concern Questionnaire emerge from its accuracy of assessment, as the tool was developed through extensive work to assure its reliability and validity. A large number of educational researchers have utilized the Stages of Concern Questionnaire in their studies to examine concerns of teachers in various stages of implementation such as: curriculum reform (Marsh, 1987; Gokcek & Baki, 2013; Leung, 2008), professional development (Asghary, Shahvarani, & Medghalchi, 2013; Bullard, Rutledge, & Kohler-Evans, 2017) and integration of technology in classroom (Liu & Huang, 2005; Stewart, 2015).

The second procedure is face-to-face conversation. In this procedure the facilitator or the researcher asks questions that stimulate teachers to express their concerns. When using this tool there are three requirements facilitators should pay attention to including asking appropriate questions in an informal manner, being good listeners, and when analyzing the content, considering the entire response. The advantage of this tool is its convenience, as it can be done
face to face or by telephone and in an informal way (Hall & Hord, 2006). This tool has been used in two qualitative studies: Nitti (2000) utilized it to examine the concerns and perceptions of seven elementary school teachers regarding the implementation of literacy folders in Florida, and Wang (2013), who researched the stages of concerns expressed by three teachers in a secondary school in China regarding the implementation of a new English language curriculum.

The third tool is the open-ended statement of concern. This tool provides facilitators and researchers with teachers’ responses in written form. This instrument contains only one question, in which the researcher asks the teachers about their concerns regarding the innovation. The responses of the question should be in a written form so that the responses can be content analyzed. This instrument has two advantages: first, it provides the facilitator with responses that are written by the respondent’s own words, which can provide the facilitator with information about the specific topics of concern; second, the instrument can be used at any time (Hall & Hord, 2006). In this study, I use the open-ended statement as one of the research tools to assess Saudi teachers about the implementation of SC strategies.

Studies that have incorporated the open-ended statement of concern include Anderson, Rolheiser, and Bennett (1995), who utilized these statements with the Stages of Concern Questionnaire to examine teacher concerns about the challenges of implementing cooperative learning. The findings of their study indicated nine common areas of concern about cooperative learning, which included concerns for the impact on teaching strategies, curriculum integration, time for implementation, student participation, individualization, student assessment and evaluation, students’ outcomes, collaboration with other teachers, and quality of implementation. In another study, Park (2012) examined the concerns of 10 primary school teachers in Bangladesh regarding the implementation of active learning in their classrooms. Results from the
Park study indicated that personal concerns were highest among teachers who have less than two years of teaching experience and management concerns were evident among all teachers. The Consequence stage of concern was found among teachers, while none of the teachers expressed concerns regarding stage 5 & 6 (Collaboration & Refocusing). Seven common areas of concern about active learning included pedagogical concerns, use of supplementary materials, curricular concerns, class environment concerns, time for implementation, differentiated support, and student outcomes. Furthermore, Park suggested that although teaching experience is an important factor for the developmental nature of the teaching concern, the encouragement from school supervisors and teacher trainers and teacher freedom regarding the resource guides are crucial too.

Within a Saudi Arabian context, there are a number of studies that utilized CBAM; however, to the best of my knowledge, none of these studies is within the scope of my study. In their studies, Kamal (2013), Omar (2016), and Alaa (2019) all used the Stages of Concern Questionnaire as a measurement tool to investigate the concerns of university faculty members regarding the adoption of online teaching. Allehaibi (2001) examined Saudi faculty members’ concerns about using the internet in their teaching. Al Masarweh (2018) evaluated mobile learning in Saudi Universities. Asiri (2019) examined the concerns and professional development needs of Saudi elementary teachers regarding the adoption of inclusive education. Alenezi (2012) explored the concerns of Saudi secondary school teachers about the integration of computer technology in schools. The researcher utilized a semi-structured interview as the main research tool. However, none of these studies is within the scope of my study which examine Saudi teachers’ concerns regarding SC strategies.
The following section discusses teachers’ beliefs, which are important elements in understanding change and how it affects teachers.

2.5 Teachers’ beliefs

In order to understand Saudi teachers’ perceptions about SC strategies, it is necessary to look at the role of teachers’ beliefs as they play a huge role in one’s behaviour. The definition of teachers’ beliefs is a complex one, due to the different explanations of the term in the literature and the confusion between the concept of beliefs and other terms. Pajares (1992) indicates that teachers’ beliefs in the literature are found to “disguise” the term belief, including: attitudes, values, ideology, opinions, conceptions, etc. (p. 309). Furthermore, Pajares asserts that the distinction between belief and knowledge is the most confusing one. Calderhead (1996) writes that “although beliefs generally refer to suppositions, commitments, and ideologies, knowledge is taken to refer to factual propositions and the understandings” (p. 715). This differentiation between such terms indicates that these beliefs seem to be rooted within an individual cognitive system. Nespor (1987) suggests that when comparing knowledge to belief, “belief systems are less malleable or dynamic than knowledge systems” … “Beliefs are relatively static” (p. 321).

Teachers’ beliefs are influenced by different factors that shape their beliefs about teaching and learning, which include events, prior knowledge, personal experiences, and experiences with school and instruction (Nespor, 1987; Hashweh, 2003; Richardson, 1996). These factors are not necessarily gained from teachers’ educational experiences, but from early life. This emphasizes the importance of teachers’ beliefs in the teaching process.

2.5.1 Teachers’ beliefs and change

Teachers play vital roles in the change process being applied to curriculum development and innovation, as they can either adapt to or reject change, based on their perceptions and
beliefs about the change. Addressing the person’s beliefs are difficult, as they might challenge the core values and beliefs that individuals hold or they may interfere with teachers’ deep understandings of an approach or a concept (Fullan, 2001). Therefore, when individuals undergo a change process, they may change their behavior, but they may still carry on with their previous beliefs, thus holding contradictory beliefs. Accomplishing reform requires “grappling with the underlying ideas and may require deep conceptual change, in which teachers rethink an entire system of interacting attitudes, beliefs, and practices” as suggested by Spillane, Reiser, & Reimer (2002, p. 417). Fullan (2001) notes that change in actual practice, beliefs, teaching approaches, and materials are essential in order for the intended outcome to be achieved.

2.5.2 Teachers’ beliefs and practice

Literature on teachers’ beliefs has shown the important influence of teachers’ beliefs on their classrooms. Teachers act as filters to determine the classrooms practices (Parajes, 1992; Fang, 1996; Richardson, 2003; Nespor, 1987; Prawat, 1992).

The relationship between teachers’ beliefs and practices can be a consistent relationship. The teacher’s decision-making and use of instructional approaches reflects their beliefs and perceptions about teaching and learning. Also, the relationship between teachers’ beliefs and practices can be an inconsistent one when there is a conflict between the teachers’ beliefs and the classroom practices (Fang, 1996). This inconsistency between beliefs and practices can be due to contextual factors, the nature of the school, and the school district’s evaluation, which may create an opportunity for teachers, or restrict the implementation of their beliefs (Fang, 1996). There have been numerous studies about teachers’ beliefs in different fields, for example, in science (Martin, Park & Hand, 2019; Blewitt, 2020), and technology in teaching (Ertmer, Ottenbreit-Leftwich, & Tondeur, 2015; Greene, 2019)
In a study about teachers’ beliefs, Kaymakamoglu (2018) examined 10 secondary school EFL teachers about their perceived practices and actual classroom practices in relation to teacher-centred and learner-centred teaching. Findings from the study indicate discrepancies between teachers’ beliefs and practices, as most of the participants believed in adopting both approaches while others only adopted learner-centred teaching. However, when examining their practices, the majority of participants applied only teacher-centred teaching, while some applied both approaches. Kaymakamoglu anticipates that the inconsistency between participants’ beliefs and practices are due to two possible reasons. First, the participants lack craft knowledge, which hinders them from applying learner-centred teaching, although they are in favour of learner-centred teaching. Second, although participants hold traditional beliefs, they might think that they ought to express constructivist beliefs as the new curriculum supports the learner-centred approach. The study also found that contextual factors and classroom realities, such as classroom management and classroom size, affect the implementation of constructivist teaching. This might indicate that in some cultures, teachers cannot express opinions that are against what they are required to apply, as Kaymakamoglu (2018) anticipated. Sometimes teachers find themselves forced to praise the given approach to keep themselves safe from any consequences.

In another study, Conley (2019) investigated teachers’ beliefs about learner-centred instruction. The data showed a mismatch between teachers’ beliefs and practices. Although teachers believed that students should be more involved in their own learning, teachers continued to use more delivery-centred approaches in class, as they believed students learn more via this approach.
2.6 An alternative curriculum design for the Saudi education system

In this section I examine the current curriculum design implemented in Saudi Arabia and how it contradicts the main features of the SC approach. I will also introduce Doll’s perspectives of curriculum which are important for later discussion.

2.6.1 Perspectives of curriculum

Curriculum is a very broad concept that has many definitions depending upon one’s perspective. Throughout the history of curriculum each researcher, scholar, and theorist has defined curriculum depending on their ideology and the circumstances of their era.

Dewey (1956) believes that the child and the curriculum are two limits that define one process. For him curriculum is “a continuous reconstruction, moving from the child’s present experience out into that presented by the organized bodies of truth that we call studies” (p.11). On the other hand, Bobbitt states that curriculum can be seen from two views: undirected development experience and directed development experience. For the former, “the curriculum is the entire range of experiences, both directed and undirected, concerned in unfolding the abilities of the individual,” and for latter, curriculum is “the series of consciously directed training experiences that the schools use for completing and perfecting the unfoldment” (Bobbitt, 1918, pp. 42-43).

Scholars have many different views on curriculum; among them are modernist perspectives on curriculum versus the postmodern view of curriculum, particularly Doll’s (1993) postmodern curriculum model. Each view has its own characteristics and guidelines, which I discuss below.
2.6.1.1 Modernist curriculum

For many decades, schools and curriculum designs in many countries were influenced by the work of Frederick Taylor and Ralph Tyler. As Doll (2008) writes, “Taylor’s ‘time and motion’ studies set the stage for Tyler’s Basic Principles of Curriculum and Instruction—those starting with set goals and concluding with measured assessment” (p. 190). This type of curriculum revolves around the paradigm of modernism, of which control over individuals, ownership of the knowledge, and viewing students as receivers of knowledge, are considered to be the main characteristics (Cullen, Harris, & Hill, 2012).

Modernist curriculum or the instructional paradigm that dominated twentieth century framing of curriculum has several underlying assumptions and characteristics as mentioned by Doll (1993), Doll & Gough (2002), and Cullen et al. (2012) such as:

- Modernist curriculum is designed as means of control.
- Curriculum design is linear which follows a sequential line from the beginning to the end, starting with predetermined objectives and goals and ending with evaluation. This curriculum design can be seen in the Ralph Tyler model and his famous work on basic principles of curriculum and instruction (Doll, 1993 and Cullen et al., 2012).
- Modernist curriculum is fixed and inflexible. Teachers and students are usually hampered by pre-planned curriculum and standardized testing so that there is not much that can be done to adjust the curriculum.
- The designing of modernist curriculum is prior and pre-set to the learning activity itself. In other words, there are external factors that require the designing of the curriculum without looking at the need of students.
In response to this, Doll suggests a postmodern curriculum design that is created by the classroom community, not by textbook authors. In other words, curriculum needs to be self-organized by students and teachers instead of being created by education policy makers (Doll, 1993). When examining modernist assumptions, it is clear that the Saudi Arabian curriculum is based on this view. Alawadh (2017) indicates that Saudi education has been applying the modernist view of curriculum for many decades. As mentioned before in this study, this view is not suitable for the SC approach or for the needs of this era. Such a curriculum applies a top-down approach in which there is little involvement of teachers and students in designing the curriculum.

If the education system in Saudi Arabia is committed to implementing SC strategies, then modifications and reform cannot be applied only to teaching instruction but also to other aspects of the education system. One of the main issues is the need for curriculum re-design. The Saudi education system needs to move toward a curriculum that, as Doll (1993) states, is based on the classroom community, instead of being created by textbook authors. To improve the curriculum design in Saudi Arabia, I suggest Doll’s postmodern curriculum design is useful for its insights as it fits within this change in Saudi education. I chose Doll’s model as a suggested curriculum model for education in Saudi Arabia for two reasons. First, in the current era, the world is changing rapidly which requires education systems to offer opportunities to cope with such change. Doll’s perspective of postmodern curriculum provides an environment that opens possibilities for future generations. Second, as mentioned before, the assumptions of Doll’s are compatible with the student-centred approach, which provide a suitable environment for the SC approach to fit in the postmodern curriculum.
2.6.1.2 Doll’s perspective on postmodern curriculum

Defining Postmodernism is not an easy task; according to Slattery (2006), “Postmodernism eludes definition,” as the term can be defined in a variety of ways depending on the perspective of its proponent. However, the author indicates a long list of words that can help in describing postmodernism. For the purpose of this study, postmodernism will be discussed in relation to the curriculum field, particularly Doll’s (1993) view of postmodern curriculum.

Defining postmodern curriculum from William Doll’s view is not straightforward either. However, in general, postmodern curriculum can be seen as an alternative approach to the modernist curriculum design. According to Doll’s study (1993), postmodern curriculum needs to be created by the classroom community, not by textbook authors. In other words, curriculum needs to be self-organized by students and teachers instead of being created by education policy makers (Doll, 1993).

Doll’s perspective on postmodern curriculum was inspired by the works of different scholars including Piaget, Prigogine, Bruner, Dewey, and Whitehead (Doll, 1993; 2008). From Piaget’s concept of disequilibrium, which is key in the individual’s cognitive development, and from Prigogine’s theory of dissipative structure, according to which transformative change does not happen in “a system at-or-near equilibrium” (p.103), Doll (1993) adopted the concepts of indeterminacy and self-organization in his postmodern curriculum. For Doll (2008), indeterminacy means that there is no linear and certain way, but at the same time, this uncertainty does not lead to negative outcomes. Instead, it is seen as an open and positive concept that encourages us to dialogue, “participate in the generation of meaning”, and communicate with the situation in hand (Doll, 2008, p.283). This communication allows us to make meaning instead of being receivers of another person’s meaning. However, according to
Doll (2008), “Indeterminacy becomes a meaningful concept only to the degree self-organization is operable” (p. 283).

From Bruner’s idea of cognitive revolution emerged Doll’s notions of interaction and reflection in postmodern curriculum. In the classroom the interaction between teachers, students, and peers themselves helps individuals to transfer their cognitive structures to “higher and more comprehensive levels” (Doll, 1993, p.123). Bruner’s notion of “spiral curriculum” influenced Doll to emphasize the need for reflection in postmodern curriculum (Doll, 1993, p.124). When students are given the opportunity to reflect and loop back on their own learning, that helps them in their mental growth. Similar to reflection in Bruner’s view, Doll (1993) drew upon the work of Dewey about reflection on experience, which results in the transformation of individuals. However, in this regard, reflection should be done in a critical manner in order for modification to take place (Doll, 1993). From Dewey’s idea of reflecting on experience, Doll (1993) emphasizes the notion of recursion as one of the criteria in the postmodern curriculum model where reflection and dialogue are crucial. Finally, Doll (1993) drew upon Whitehead’s concept of process, where reality is seen “as an going connection of relations” (p. 149). This strong connection that forms relations can be seen in the postmodern view of curriculum as richness, occurring when curriculum focuses on quality over quantity.

2.6.1.2.1 Doll’s 4 R’s

When designing curriculum, Doll suggests four different criteria that would serve to foster a postmodern view and he calls it the four R’s as an alternative model to the Tyler Rationale (Doll, 1993).
**Richness.** What Doll means by richness is the curriculum’s depth, the multiple interpretations of the idea and the layers of the meaning that students and teachers can come up with when discussing an idea. To make the curriculum rich, the focus should be on quality, not quantity, as articulated in Whitehead’s teaching aphorism: “‘Do not teach too many subjects’; ‘What you teach, teach thoroughly’; ‘let the main ideas….be few and important’” (Whitehead, 1929/1967, as cited in Doll, 1993, p. 180). This quality of richness will provide students and teachers the opportunity to focus more on the material in hand by engaging in dialogue, listening to each other, and interpreting class material. By doing that, students will be able to question assumptions and norms of any given society and gives students and teachers the chance to transform and be transformed. Doll suggests that in order to have a transformative curriculum, the curriculum needs to have “right amount” of anomaly, chaos, indeterminacy, dissipation, inefficiency, disequilibrium, and lived experience (Doll, 1993, p 176). For Doll these characteristics are what keep the negotiation between students and teachers going and what really keeps knowledge alive.

**Recursion.** Doll posits that postmodern curriculum and transformative curriculum recursion is different from repetition in modern curriculum. For Doll, recursion is the ability that humans have to loop back on their previous thoughts in order to make meaning of a certain knowledge. In order for recursion to happen in a postmodern curriculum, two main factors need to be applied: reflection and dialogue. Reflection needs to be a positive one that allows students to visit and revisit their thoughts and to be able to distance themselves from them in order to combine and organize their thoughts to come up with new perspective. In this manner, recursion has an open frame where there is no fixed beginning or ending. As for reflection, it cannot be beneficial without dialogue, as Doll emphasizes: “Dialogue becomes the sine qua non of recursion: without
reflection engendered by dialogue, recursion becomes shallow, not transformative; it is not reflective recursion; it is only repetition” (Doll, 1993, p. 178). In contrast to recursion, repetition is an important element in the modernist view, by which students repeat knowledge automatically without engaging fully with the given material, and reflection plays a negative role.

**Relations.** This aspect of postmodern and transformative curriculum, refers to two different and important relations: pedagogical relations and cultural relations. Pedagogical relations focus on the relations within the curriculum, particularly the connections between the curriculum’s structure. These connections occur through recursion by applying the twin processes of doing and reflecting-on-doing, which allow the curriculum to be rich and meaningful. Cultural or cosmological relations refer to the relations between the curriculum and the outside world. These cultural relations occur when there is a recognition of one’s local perception and cosmic matrix and the key point is to integrate these two perspectives into complete harmony.

**Rigor.** In a postmodern curriculum rigor plays a crucial role. Rigorous curriculum can be obtained when mixing both indeterminacy and interpretation. To make that practical in a classroom, when dealing with indeterminacy, students can never be certain they “[have] it right”; they need to be exploring, looking for new combinations, patterns, and interpretations (Doll, 1993, p. 182). This means that when introducing a concept to students, it should be presented in a challenging way that enables students to think and explore. As for interpretation, when interaction with text or others, one needs to be open to a range of possibilities. To implement that in the right way, one needs to be aware that all valuations depend on assumptions. In a changing world, being continually alert to these assumptions and looking for patterns allows students to build a community that is critical and supportive at the same time (Doll, 1993).
2.6.1.2.2  Doll’s view of evaluation

As for evaluation, Doll (1993) indicates that the purpose of teachers in the modernist perspective is to transmit knowledge to students, while the purpose for students is to acquire the knowledge. As a consequence of that, the purpose of evaluation in the modernist view is to separate “winners” from “losers” (Doll, 1993, p.173). In other words, it is considered a way to measure the deficit and to evaluate whether students achieve the ideal norm or not. This evaluation approach is closed, which means that in most cases students are not given feedback or a test paper to reflect on their answers. On the other hand, evaluation from the postmodern viewpoint has no particular or set norm. Instead, it is open and provides opportunity for dialogue and negotiation between teachers, students, and even between peers themselves. The purpose of evaluation is not only to determine whether the knowledge acquired is accurate or not, but what students can do with that knowledge. Evaluation is communal and interactive, which can be done through a variety of individuals who judge the work of students within a communal setting. In this case, the teacher plays a central role but would not be the only evaluator. In a postmodern curriculum, evaluation can be used as feedback through an iterative process of “doing-critiquing-doing-critiquing.” This process helps individuals to develop intellectual and social powers (Doll, 1993, p.174).

2.6.1.2.3  Related studies

In their book, *The Learner-Centered Curriculum Design and Implementation*, Cullen et al. (2012) indicate that Doll’s characteristics of postmodern curriculum integrate well with the research on learning that supports a learner-centred agenda. For instance, both the learner-centred approach and Doll’s model support the idea of deep learning. Deep learning occurs when
students integrate new knowledge into their existing knowledge, which enables them to enrich and revise their knowledge. Both Doll’s model and the learner-centred approach focus on the individual’s process of learning to become an autonomous learner and to have the ability to learn independently.

One of the key factors in SC pedagogy is interaction, as students make meaning through engaging and interacting with teachers and peers as seen previously in Vygotsky’s concept of the Zone of Proximal Development. This factor can be found also in all of Doll’s 4 R’s, as Lau (2001) writes when analyzing them: “A common notion flows through these four elements - the concept of interaction” (p. 37). She further explained that richness is about the interactive nature of the curriculum, recursion is about the interaction between the learner and the knowledge, relationships are about interaction in two dimensions, pedagogically and culturally, and rigor is about continuous interactions with concepts that constantly entail rigorous interpretation and exploration.

Koo (2002) examined three different curriculum models, Tyler’s model, Doll’s model, and Hong Kong’s target-oriented curriculum, to present a framework for the school curriculum in the twenty-first century. The author found that the Hong Kong curriculum emphasized the concepts of critical thinking, constructivism, and encouraged learning by interaction. However, to improve the quality of the curriculum to meet the needs of the twenty-first century, curriculum should adopt a postmodern view. Curriculum should be rich, open, creative, and characterized by a classroom that offers self-organization and higher order thinking skills.

In the Saudi context, two studies have been undertaken at the postgraduate level regarding postmodern curriculum. In her dissertation, Alzahrani (2016) writes about Doll’s model by saying “the model is essential in encouraging Saudi female college students to explore, organize,
interpret, negotiate, create, and communicate well” (p. 129). In another study, Alawadh (2017) analyzes two curriculum models, Tyler’s rationale and Doll’s 4 R’s, and he found that Saudi education is based on the Tyler rationale even though the model is not appropriate for the current education era, as the model focuses on objectives instead of focusing on students’ needs and interests. Alawadh suggests that Saudi educators need to adopt new models that allow for and open up more possibilities such as Doll’s model. While both researchers suggested Doll’s model within the post-secondary education level, this study suggests Doll’s model for all public-school levels.

When adopting Doll’s model in Saudi Arabia, policymakers need to consider some modifications to the model to meet with the local culture. As Alawadh (2017) indicates, when adopting Doll’s model in Saudi education, attention should be paid to the philosophical issues that might arise. To explain, the model’s principles line up with the majority of Saudi school disciplines, but not with Islamic disciplines. To be more specific, Islamic principles are not totally against the principles of Doll’s view of postmodern curriculum: indeed, freedom, dialogue, critical thinking, reflection, and considering others’ perspectives are consistent with Islamic principles (Alturki, 2016). However, there are Muslims who hold the position that Islam’s belief system and the fundamental teachings cannot be questioned or doubted in any way. This contradiction does not mean that Doll’s model should not be considered for the Saudi curriculum; in fact, the model can be applied to all disciplines except some of the Islamic subjects.

Finally, although other Saudi studies examined the SC approach in post-secondary education, at the public-school level we still need to examine teachers’ perceptions and concerns and whether the implementation of SC strategies is influenced by school subjects and school
levels. Therefore, participants in this study are public-school teachers from all school levels teaching different school subjects.

2.7 Chapter summary

Literature pertaining to the SC approach and the challenges and barriers that teachers face when implementing it was presented in this chapter. In addition, CBAM, which is utilized as a framework in this study, was discussed. Specifically, the SoC aims to help in understanding and assessing the stages of concern of Saudi teachers. Also, I presented two views of curriculum to argue that modernist curriculum design has little room and, in fact, cannot fit with the needs of SC approaches. A suggested curriculum design that is suited to this present era was provided to support the implementation of SC strategies in Saudi schools.

In Chapter Three I outline the research design that is used in the study. I describe the data collection methods and procedures, participants, data analysis procedures, and finally any ethical issues.
Chapter 3: Methodology

The purpose of this study is to examine Saudi teachers’ perceptions regarding the SC approach and to shed light on the concerns that they face when implementing the approach. Moreover, this study examines whether the school level and the school subject affect the implementation of SC strategies and if the current Saudi curriculum design fits with the SC approach. To do so, I adopted a qualitative approach to investigate the phenomena in depth.

Based on the theoretical frameworks, three theories underpin this study: constructivist theory, CBAM framework, and postmodern theory of curriculum, especially Doll’s (1993) model. However, my data collection methods, data analysis, and interpretation are neither constructivist nor postmodern. To prevent the dilemma between constructivist and postmodern perspectives, I adopted a pragmatist approach to conduct this study and answer my research questions. According to Patton (2002), in qualitative inquiry, it is not necessary for the researcher to be limited by allegiance to a specific research paradigm. The survey I took allows me to collect baseline data that will help provide a foundation from which to understand the seven teachers’ perceptions regarding SC strategies within the Saudi context. This could lead to a limitation of the study that another researcher in the future could pursue.

Data were collected through three different methods: semi-structured interviews, the open-ended statement of concern about SC strategies, and a demographic survey.

The questions that guided this study are:

1. What does it mean to be a teacher?
2. What are the public-school teachers’ perceptions and concerns about student-centred strategies?
3. What opportunities does a student-centred learning approach provide for the teaching practices of the teacher?

4. How does the current Saudi curriculum fit within the student-centred approach?

3.1 Research introduction

To understand the participants’ perceptions and concerns regarding SC learning and teaching strategies, I chose a qualitative research approach. This approach gives participants the opportunity to share their experiences about the topic under study in detail. As Creswell & Poth (2018) indicate, qualitative research provides a deep understanding of the social world of individuals by learning about the sense they make of their experiences, perspectives, and histories about the phenomena. As for the role of the researcher, Denzin and Lincoln (2011) indicate that qualitative researchers attempt to “make sense of, or interpret, phenomena in terms of the meanings people bring to them” (p, 3). In this sense, I attempted to make sense of the participants’ conceptions about SC strategies based on their own responses. Rossman and Rallis (2012) identify several criteria of qualitative research: “it uses multiple methods; focuses on context; it is emergent rather tightly prefigured; and it is fundamentally interpretive” (p. 8). Therefore, I utilized three different data collection methods to collect my data which are written responses, questionnaires, and individual interviews.

3.2 Participants

Participants in this study were all Saudi teachers from Jeddah city in Saudi Arabia. I chose this area because I am familiar with the education system in it since all my learning and teaching experiences were there. The following criteria were used in selecting the participants:
• Teachers who were required to apply SC strategies.

• Public-school teachers, as private school teachers might have been introduced to the SC approach before public-school teachers.

• Teachers from the three school levels: elementary, intermediate, and high school.

• Teachers who teach different school subjects.

The snowballing selection method was used to collect participants for this study. The selection procedure started by sending invitation letters to three teachers, only two of whom agreed to participate in the study. Then, those who were willing to participate in the study recommended other teachers, so they were subsequently invited to participate. Ultimately, a total of seven public-school teachers agreed to participate in this study, five females and two males, all of whom met the main and sub-criteria. Table 2 shows the profile of each teacher.

Table 2.

Participant profiles

<table>
<thead>
<tr>
<th>Participant</th>
<th>Teaching Experience</th>
<th>Gender</th>
<th>School Level</th>
<th>Teaching Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>20 years</td>
<td>Male</td>
<td>Elementary</td>
<td>Science and first grade teacher</td>
</tr>
<tr>
<td>P2</td>
<td>10 years</td>
<td>Female</td>
<td>Elementary</td>
<td>Social Studies</td>
</tr>
<tr>
<td>P3</td>
<td>8 years</td>
<td>Female</td>
<td>Intermediate</td>
<td>Arabic Language</td>
</tr>
<tr>
<td>P4</td>
<td>8 years</td>
<td>Female</td>
<td>Intermediate</td>
<td>Computer Science</td>
</tr>
<tr>
<td>P5</td>
<td>14 years</td>
<td>Female</td>
<td>High school</td>
<td>Physics</td>
</tr>
<tr>
<td>P6</td>
<td>16 years</td>
<td>Female</td>
<td>High school</td>
<td>Computer Science</td>
</tr>
<tr>
<td>P7</td>
<td>16 years</td>
<td>Male</td>
<td>Elementary</td>
<td>Science</td>
</tr>
</tbody>
</table>
3.3 Data collection

Although I remained in Canada while conducting this study, all data were collected online as all my participants are in Saudi Arabia. Skype application was the main medium I used in this study to collect my data. Occasionally, I used WhatsApp to communicate with the participants as well. These platforms are convenient for both my participants and me. According to Hanna (2012), Skype has a variety of advantages that can help researchers communicate with their participants, such as the ease of access and low costs. In addition to that, the application offers a safe and personal location for both researchers and participants without imposing on their personal space. Hanna (2012) further added that live video helps researchers to overcome issues about physical and spatial interaction that might be seen as a disadvantage of the virtual data collection medium. I tried to make the interviews as authentic as I could by asking the participants to conduct video-audio interviews; however, due to their preferences, I limited the interviews to Skype calls only. According to a study conducted by AlKhateeb (2018), in the Saudi context, cultural factors affect the use of video call as it might breach their comfort zone and interfere with their privacy.

Data for this study were collected through three different tools: the background questionnaire, the open-ended statement of concern, and individual semi-structured interviews. First, I sent all the participants the background questionnaire that contains eight questions regarding their teaching background and their use of SC strategies (Appendix A). Then, they were asked to answer the Statement of Concern questions, which asked about their concerns regarding SC learning and teaching strategies (Appendix B). As mentioned in the previous chapter, open-ended statements of concern are used as a tool to assess the concerns that teachers
have regarding the innovation and to provide a global picture of teachers’ concerns (Newlove & Hall, 1976). I chose this tool to give my participants the chance to write as much as they could and to have the opportunity and time to reflect on their answers.

Data were also collected through semi-structured interviews with open-ended questions. I chose this type of interview to leave my participants with space, as Galletta (2013) suggested, so they can offer new meanings to the study focus. The process of conducting interviews took two rounds: in the first round, participants were interviewed about their beliefs, understandings, concerns, and the challenges they face when implementing SC strategies. In the second round, I interviewed the participants about the current Saudi curricula design in relation to SC strategies, then the rest of the interviews were allocated to clarifications about the data that have been collected previously.

In the first round, four of the participants were interviewed via Skype calls, while the other three were interviewed in a written form based on their preferences at that time. In the second round, five out of seven participants were interviewed via Skype calls, while two participants continued with the written form. Interview calls were audio-recorded after receiving permission from participants and each interview lasted between 45 minutes to two hours.

During the collection phase all data were securely stored in my personal laptop and in an external hard drive and were only accessible to me. On closure of this study, all data will be transferred and stored according to the approval at UBC (H19-03140).

3.4 Data analysis

Before analyzing the data, recorded interviews were transcribed verbatim, then all responses from interviews, open-ended statements of concern, and background questionnaires
were translated from Arabic to English. Participants were also provided with raw transcripts of the interviews to check for accuracy.

Interpreting and analyzing qualitative data, as Marshall & Rossman (2016) describe, is ambiguous, time-consuming, creative, and does not proceed in a linear fashion. Due to the nature of the data collection method, data analysis went through two phases: in the first phase, I analyzed the responses on the open-ended statements of concern. Interpreting and analyzing participants’ statements regarding their concerns can enable the researcher to develop a global picture of one’s stages of concern regarding an innovation (Newlove & Hall, 1976). In this phase, first, a content analysis method was utilized. I read carefully through the participant’s complete statement to gain a general feel about what a participant had reflected or referred to. After the first read, I was able to determine the overall themes of participants’ concerns about SC strategies whether it was unrelated, self, task, or impact concerns. Then, as recommended by (Newlove & Hall, 1976), I re-read the concern statements and focused in more detail on the substance of each sentence to score the concerns based on the Stages of Concern levels.

The second phase was analyzing and interpreting participants’ semi-structured interviews. In this phase, I utilized a general approach of qualitative analysis where inductive analysis was used. Patton (2003) indicates that the inductive analysis approach enables the researcher to discover patterns, themes, and categories in a participant’s data. In this stage, I drew upon the works of Creswell (2012) and Thomas (2006). After preparing the interview data, five steps were followed to analyze the data. First, I read through all the data to familiarize myself with it. In this step I tried to write notes that came to my mind based on the data. Then, I re-read the data carefully to identify sentences and segments based on each interview. From this step, I ended up with a large number of codes from each data point. Then, I was able to reduce
and combine these codes into labeled categories. At that moment I had a large number of categories. I reduced these categories into six sub-themes and finally, I ended up with two themes from the interview data.

### 3.5 Trustworthiness

In a qualitative research paradigm, trustworthiness cannot be achieved through the same criteria that are used in a classic research paradigm. For instance, in the latter approach, generalization of a study’s findings can be applied to all contexts within the same population (Lincoln & Guba, 1985). Trustworthiness in qualitative research can be achieved through other criteria. Creswell (2012, 2014) identifies eight primary strategies that researchers should use to check the accuracy of their findings. In this study, I utilized three of them, discussed in the following.

Member checking is a technique used to determine the accuracy of the findings through taking the final report or themes back to the participants in order for them to check whether the findings are accurate or not. According to Creswell (2012), “member checking is a process in which the researcher asks one or more participants in the study to check the accuracy of the account” (p. 259). To do so, I sent each participant my findings about their concerns regarding SC teaching and learning strategies. Then, I interviewed three participants to discuss the common themes of the finding of the study.

Triangulation was used to enhance the accuracy of my study. Data collection of my study involved semi-structured interviews, written responses, and background questionnaires. These multiple data collection methods enhanced the credibility of the findings and provided me with rich data, which helped me with data interpretation. Moreover, in some cases, I was able to find missing information; for example, when I asked my participants to answer the question about
their concerns regarding the SC strategies, some of the points where not clear enough to me, however, I was able to find the explanation of these points during the interview phase.

Clarify the bias or reflexibility is described as the way that “the writer engages in self-understanding about the biases, values, and experiences that he or she brings to a qualitative research study” (Creswell & Poth, 2018, p. 229). This strategy is crucial in qualitative research, as the researcher is considered to be the main instrument throughout the study journey (Marshall, & Rossman, 2016). As a Saudi teacher, I am aware of the education system in Saudi Arabia and I share many aspects of its culture, history, and experiences with my participants (for more detail about my role as a researcher, see section 1.3). I also acknowledge the influence that my experiences and values might bring to the interpretation of the data. That said, when I started collecting data and analyzing them, I tried to write reflexive notes and comments about my thoughts as much as possible and every now and then I would review them to be conscious of their impacts on my interpretations.

Finally, I would like to point out the use of generalization in my study. This study has a small number of participants which does not represent the entire population of Saudi teachers; therefore, the data analysis and the findings cannot be generalized to other settings. Creswell (2014) asserts “the value of qualitative research lies in the particular description and themes developed in context of a specific site” (p. 253). However, the thick description that this study has provided enables the findings to be transferable to other similar contexts or settings (Lincoln & Guba, 1985).

3.6 Ethical considerations

According to The University of British Columbia guideline of research ethics, as a graduate student dealing with human participants, I am required to obtain two things before
starting my research: completing the TCPS tutorial ‘CORE’ and obtaining institutional ethics approval from the University of British Columbia’s Behavioural Research Ethics Board. After obtaining the ethical approval, consent forms were sent to the participants to be signed. The consent forms illustrated all the necessary information about the study including purpose, objectives, data collection procedure, and the potential benefits and risks. Even though the study was approved as a minimal risk study, participants were informed that they had the right to withdraw from the study at any time as the participation in the study was voluntary. Moreover, participants were informed of the protection and the confidentiality of their identities and answers as all the names of teachers were pseudonymized throughout the study.

As mentioned before, all my data were collected via the internet, particularly, using Skype and WhatsApp. However, collecting data through the internet poses some challenges and questions, one of the concerns being protecting participants’ anonymity and privacy (Marshall & Rossman, 2016). Both platforms offer end-to-end encryption methods as they helped users to protect the data through strong encryption and security. WhatsApp indicates on their website that “end-to-end encryption ensures only you and the person you’re communicating with can read what is sent, and nobody in between, not even WhatsApp” (WhatsApp, 2020, para. 2).

However, on Skype they have the right to review content submitted in Skype if it violates specific terms or the law. To ensure the security and privacy of my participants and myself, I adopted a couple of strategies indicated in the work of Lo Iacono, Symonds, & Brown, (2016). I created a Skype account just for this study, then after collecting data I transferred them to my personal laptop and removed all my participants’ data, and finally, I closed my Skype account. According to the authors, these strategies help to protect participants’ anonymity.
3.7 Summary

In this chapter, I provided an overview of the methods that are utilized in this study. The qualitative approach was used to examine teachers’ perceptions and beliefs about the SC approach. Moreover, different data collection methods were applied to gain a deep understanding of the topic and to understand how teachers construct their beliefs about it. Information about the participants and the procedure to protect their identities were addressed. In the following chapters, study findings and discussion will be covered.
Chapter 4: Findings and Discussion of Open-Ended Statements of Concern

This chapter discusses the findings of the open-ended statements of concern. Participants in this study were asked to fill out a background questionnaire (Appendix A). They were also asked to answer the following question in a written form: when you think about student-centred teaching and learning strategies what are you concerned about?

As discussed in Chapter 3, a content analysis approach is utilized to analyze the above question as recommended by Newlove & Hall (1976). The analysis of teachers’ concerns regarding SC strategies was based on the Stages of Concern Model. Table 3 illustrates the stages of concerns that users go thorough when implementing an innovation.
Table 3.

The Stages of Concern about an Innovation

<table>
<thead>
<tr>
<th></th>
<th>Impact</th>
<th>Task</th>
<th>Self</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Refocusing</td>
<td>The individual focuses on exploring ways to reap more universal benefits from the innovation, including the possibility of making major changes to it or replacing it with a more powerful alternative.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Collaboration</td>
<td>The individual focuses on coordinating and cooperating with others regarding use of the innovation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Consequence</td>
<td>The individual focuses on the innovation’s impact on students in his or her immediate sphere of influence. Considerations include the relevance of the innovation for students, the evaluation of student outcomes, including performance and competencies, and the changes needed to improve student outcomes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Management</td>
<td>The individual focuses on the processes and tasks of using the innovation and the best use of information and resources. Issues related to efficiency, organizing, managing, and scheduling dominate.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Personal</td>
<td>The individual is uncertain about the demands of the innovation, his or her adequacy to meet those demands, and/or his or her role with the innovation. The individual is analyzing his or her relationship to the reward structure of the organization, determining his or her part in decision making, and considering potential conflicts with existing structures or personal commitment. Concerns also might involve the financial or status implications of the program for the individual and his or her colleagues.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Informational</td>
<td>The individual indicates a general awareness of the innovation and interest in learning more details about it. The individual does not seem to be worried about himself or herself in relation to the innovation. Any interest is in impersonal, substantive aspects of the innovation, such as its general characteristics, effects, and requirements for use.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Unconcerned</td>
<td>The individual indicates little concern about or involvement with the innovation.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Adopted from George, Hall, & Stiegelbauer, (2006). Measuring implementation in schools: The Stages of Concern Questionnaire, Figure 2.1, The Stages of Concern about an innovation (p.8), with permission from American Institutes for Research

4.1 Findings of the open-ended statements of concern

In this section, I present the participants’ Stages of Concerns with regard to the implementation of SC strategies. Further, I discuss the common concerns the teachers faced in the classroom.
Based on the teachers’ written responses, all participants showed several concerns regarding the implementation of the SC approach. Table 4 shows some of the concerns that teachers had about SC teaching and learning.

Table 4.

*Participants’ concerns about implementing SC strategies*

<table>
<thead>
<tr>
<th>Impact</th>
<th>Task</th>
<th>Management</th>
<th>No concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Refocusing</td>
<td>No concerns</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Collaboration</td>
<td>- No help between teachers</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Some parents lack knowledge of SC teaching and learning</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Building relationships with parents</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Consequence</td>
<td>- Some students do not help</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- No motivation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Improving learning skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Impact of technology on students</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Management</td>
<td>- Large (crowded) classrooms</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Lack of instructional resources</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Not enough time</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Classroom management</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- The internet is not provided</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- No assistance in class or lab</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Classroom environment</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Personal</td>
<td>Financial cost</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Informational</td>
<td>Need for workshops about SC strategies</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Unconcerned</td>
<td>No concerns</td>
<td></td>
</tr>
</tbody>
</table>
Table 4 shows that participants had concerns in five stages while concerns were absent in two stages. All teachers did not have any concerns in the Unconcerned and Refocusing stages. According to the SoC framework, in the first stage (Unconcerned), new users show no concerns or few concerns regarding the innovation. Based on the data, the participants have been applying SC strategies fully or partially for more than five years. This might explain why teachers did not express any concerns related to the first stage (the Unconcerned Stage). As for the refocusing stage, none of the teachers mentioned any other alternative approaches that can be adopted instead of the SC approach.

Regarding the other five stages, the majority of the participants showed more than one stage of concern about SC strategies. The majority of concerns were found in one stage, the Management Stage. Only one participant showed concern in one stage (the Management Stage). All the teachers expressed concerns related to the Management Stage, where they showed concerns about classroom environment and time. This finding echoed Fuller’s observation in her study, where she found that teachers may have concerns at different levels, but they usually concentrate in one area (Fuller, 1974, as cited in Hall & Hord 2006).

Overall, concerns regarding SC strategies were varied between participants. In the following section I will discuss the most common concerns that teachers faced.

4.2 Common concerns

All of the teachers wrote about several concerns they faced when implementing SC strategies in their classroom. Below are the highly salient concerns.

4.2.1 Time management (Concerns about the task)

Time was the most common shared topic among all participants. Time was discussed by teachers in two different respects: preparation time and implementation time. The majority of the
teachers had enough time to plan their lessons; according to participant six: “I have enough time to plan my lessons based on SC strategies…my problem is with the implementation of these strategies in the classroom.” In this regard, participant five explained the difference in time when implementing SC strategies: “If I want to fully implement SC activities in class and allow my students to take their time constructing their knowledge, 45 minutes are not enough to do so. In fact, a lesson that I am required to finish in one period (45 minutes) would take me at least three periods in a SC-based classroom.” Their concerns about time seemed to be related to the nature of SC strategies, as these strategies, according to previous studies, require time to be implemented. Seng (2014) and Bloom et al. (2016) found that student-centred activities are considered to be more time consuming than teacher-directed approach. Al Ahmadi (2010) also mentioned that class time was insufficient for Saudi teachers when applying SC learning.

In this study, the challenge of time is not limited only to the nature of SC strategies, but also to the material that Saudi teachers are required to finish in class. Class syllabuses tend to be long for most Saudi school subjects. One teacher indicated that “class material is long which sometimes hinders me from implementing SC strategies or limits my use.” This finding could lead to the conclusion that 45 minutes in each class are only enough if the class syllabus is concise, so teachers and students can have enough time to implement SC strategies and cover class material. Or class periods could be more than 45 minutes, which was suggested by participant three. However, this suggestion could be controversial as some might find 45 minutes to be long depending on the school subject and students’ ages.

Because of this limitation in time, some teachers in the current study mentioned that they tried to save time when implementing the SC approach. For example, participant seven mentioned that he usually asks his students to prepare for the lesson before class so they can
have background knowledge before coming to class. Participant five said that she limits her use of SC strategies to class discussion because “I feel like other SC strategies take a lot of time. Because of that I mainly depend on dialogue in my classes as I feel that I can control the class discussion.” According to Newlove & Hall (1976), concerns related to time are seen as Management Concerns (Stage 3), where users concern about time demands are utmost.

4.2.2 Instructional resources (Concern about the task)

Lack in instructional resources is a task-related concern (Stage 3) that users go through when implementing an innovation. All teachers in this study except participant seven have complained about the shortage of tools and resources in their schools. This lack of equipment includes basic materials such as papers and pens to more advanced resources such as computers and access to the internet. Participant six commented that “even though our school provided us with an interactive whiteboard, in computer science class students need to use computers, but unfortunately we have only 18 computers and in each class, I have 50 students.” According to De la Sablonnière, Taylor, & Sadykova (2009); Schweisfurth (2011); Bloom, Kowalske, & Dole (2016); Sherimon (2019); Corkin et al. (2019); Salleh & Yusoff (2017); and Sherimon (2019), shortage in learning resources is considered to be one challenge that teachers face when implementing student-centred learning. Similar results were found in the current study as teachers believed that lack of learning resources affects their implementation of SC strategies.

Despite the findings from this study and previous studies regarding the need of instructional resources in the SC classroom, teachers should be aware that some SC strategies can be implemented without any instructional resources. For example, engaging students in class dialogue or enabling students to lead their own learning by asking them to plan, design, and present some topic in class might not require any resources or very minimal ones.
4.2.3 Students (Impact concern)

Teachers’ concerns with regard to students in this study are related to students’ attitudes toward the SC approach and students’ learning skills. In the Stages of Concern model, teachers’ concerns about students are considered to be impact concerns, which are in the Consequence Stage. In this stage, teachers focus upon the impact on students in their classroom and on the relevance of the innovation to their students.

Several participants indicated that some students are not motivated to construct their own knowledge. Participant five mentioned that “after teaching for 14 years, I can tell you that in some subjects a large number of students lack motivation. They do not want to think, they want to gain knowledge without putting in any effort.” This echoes what Tawalbeh and AlAsmari (2015) found in their study. They suggested that 58.4% of the Taif University instructors agreed “that their students are passive and not always responsible. They are not ready for the learner-centred approach, in which they take responsibility for their learning” (p. 45). Some teachers in the current study attributed this trend in students’ attitudes to the method of learning and teaching that students are used to, in which the traditional method of learning is widely practiced. This finding is similar to the results found in the works of Al Ahmadi (2010); Aslan & Reigeluth (2015); Corkin et al. (2019); and Sherimon (2019). In their studies, they found that the lack of motivation among students might be due to the fact that the students are used to depending on teachers as the main source of knowledge.

However, in this study another reason was found to be impacting students’ attitudes towards the SC approach. According to three of the teachers in this study, the evaluation method affects students’ attitudes. Participant two commented that “evaluation depends mainly on
memorization; therefore, students hesitate to construct their own knowledge as they know that they only need to memorize the textbook.”

Another student-related concern was also found in this study; six teachers showed concerns regarding students’ learning skills. From all school levels, students lack basic learning skills. Participant four mentioned that “some students lack basic learning skills, such as comprehensive reading, and that sometimes this hinders them from guiding their own activities since reading is an essential learning factor.” Students basic learning skills are important in learning in general, especially in the SC approach, as students are responsible of their own learning. Six teachers believed that lacking learning skills hinders them from applying some activities that require writing and reading. Participant five also mentioned that her students lacked basic physics knowledge. She commented that “sometimes I find myself forced to apply traditional teaching methods…so sometimes if my students do not recall basic physics knowledge I present it to them without letting them construct their own knowledge as it will take me a long time to let them explore basic knowledge themselves.”

4.2.4 Classroom environment (Concerns about the task)

Based on the Stages of Concern framework, concerns around managing and organizing are considered to be Management concerns that users face when dealing with an innovation. Six out of the seven teachers discussed concerns related to the impact of the nature of their classroom on the implementation of SC strategies. Public schools in Saudi Arabia, especially in big cities, tend to have a large number of students. As mentioned by all participants, these crowded classrooms challenge teachers in applying SC strategies, where large classes prevent them from learning about students’ needs and interests. The participants’ comments are also reported in other studies in literature (e.g. Salleh & Yusoff, 2017 and Sherimon, 2019). In the SC classroom,
teachers need to learn about their students’ needs in order for teachers to help students learn. However, as participant three indicated, “it is almost impossible to learn about 45 students’ needs in each class.”

This large number of students in classes also affects the class management. SC classrooms tend to get busy as students are engaged mentally and physically during activities. The majority of teachers complained about large class size as it difficult for them to manage and arrange students. Previous Saudi studies also showed that Saudi teachers considered large class size and class management to be among the main obstacles that they face when implementing student-centred learning and the constructivist approach (Al Ahmadi, 2010 and Alsharif, 2013). In the current study, participant seven mentioned that “Class management is challenging in a SC environment especially as I teach first and second graders and each class has up to 30 students.” Participant six also indicated that “The classroom seating arrangement is not suitable…in collaborative learning when I arrange 50 students in groups, I find it very challenging for us to move or for students to engage in their learning task.”

4.2.5 Issues related to teachers (Impact concern and self-concern)

Teachers discussed concerns related to them in two different categories: relationship with the school community and the impact of SC strategies on themselves. In the first category, the majority of teachers complained about the lack of collaboration between teachers. Five out of the seven participants indicated that teachers in their schools are not willing to help each other. Participant five commented: “The problem is that there is no collaboration between teachers, so we can discuss the proper ways to implement SC strategies and how to overcome the challenges we face.” Other teachers mentioned collaboration with each other and the need for more knowledge about SC strategies as well: “if we as teachers have meetings together, we can learn
more about the approach from each other since the approach is new to us and come up with solutions to the challenges that we have” (p 2). This finding could indicate that schools might not encourage and support the implementation of SC strategies. If they support them, they should provide teachers with workshop sessions or seminars or any other references that can facilitate these strategies for teachers and school members. Participant two mentioned that “I wish that they could provide us with websites where I can find information about the right way to implement these strategies…there is little information in Arabic about SC strategies online.”

What she mentioned is accurate as when I searched about SC strategies in Arabic, I found little information compared to that in English. Further, she added “the majority of information on the internet is in English and as you know not all of us can read or understand English.”

This lack of collaboration between teachers is a significant challenge which might be due to that fact that teachers are not used to freely expressing their feelings regarding any requirement they receive from the Ministry of Education. Within the Saudi education system, Saudi teachers are usually asked to apply an innovation as recommended by their supervisors and principals. This is illustrated by the power-coercive approach where people with less power comply with changes that are presented by the authorities (Chin and Benne, 1969, as cited in Richardson, 2001). For SC strategies, Saudi teachers followed the advice and approaches of supervisors and principals, usually without complaining. Due to the novelty of the approach in Saudi Arabia, teachers should be given the time and the chance to discuss the possibilities of the change that they are undergoing. This can help them to suggest or raise some points that are crucial to be discussed before implementing the change.

Teachers in the study also mentioned concerns about their relationship with parents. Three of the participants, all of whom are elementary school teachers, mentioned the lack of
relationship between teachers and parents. According to them, there should be communication and collaboration between the schools and the parents. Participant two said: “Many parents do not know enough about the benefits of this SC approach on their children and at the same time there is no strong communication between families and teachers to educate them.” Participant one mentioned that: “Our school should build positive parent-school relationships, so parents can be aware of the benefit of this approach on their children’s education.”

From the interviews, only elementary school teachers asked for the support of parents. This might be due to the fact that young students usually rely on their parents when learning. Therefore, if parents are aware of the teaching approach that the teachers utilize then parents can either support it or negotiate it with teachers. As mentioned by participant seven: “if parents knew the benefits of the SC approach, they would not complain about the projects that their kids are required to finish at home.” Communication between schools and parents could also provide an opportunity for schools to provide parents with workshops that focus on the SC approach if parents are interested.

Teachers concerns about communicating with each other are considered to be in the Collaboration Stage of Concern. In this stage (Stage Five) users of an innovation have concerns about issues related to coordination and cooperation with others to maximize the benefits of the innovation for students. The concern that teachers mentioned for the need to learn more about SC strategies is considered to be self-concerns, in the Informational Stage. The need for collaboration between teachers could indicate that Saudi teachers are willing to implement SC strategies in their classroom. However, they need help, guidance, and support from others in order to be capable of implementing the approach in an appropriate way.
The second aspect that the teachers discussed was the impact of the SC approach on themselves in particular. Teachers were concerned about the money that they needed to spend every year to provide students with resources. Participant six indicated that: “during my teaching journey, I have spent thousands of Riyals in order to support my lessons.” Participant seven said that: “I spend my own money to provide my classroom and my students with material and awards.” According to the participants, when applying the SC approach, you need to have different materials in the classroom, but, as with the majority of Saudi public-school teachers, they tend to spend their own money to support their classes with materials without much assistance from the Ministry of Education. This last point and the other concerns mentioned above might indicate that a change in teaching approach from a teacher-centred approach to a student-centred approach in Saudi Arabia was started without providing a suitable environment in Saudi schools. Therefore, much is needed to be done in order to make change efficient and sustainable within Saudi education.

As can be seen in these common concerns, teachers had concerns in different stages. They did not gradually move from one stage to the next. Teachers expressed self-concerns and impact concerns at the same time. This can happen, according to George, Hall, and Stiegelbauer (2006), since there is no guarantee that the emergence of higher-stage concerns would result in the reduction of lower-stage concerns.

However, as mentioned above, in this study all the teachers had more than five years of experience with SC strategies and they still had self-concerns, which is unexpected if an innovation is carefully implemented, as Hall and Hord (2006) write:

if the innovation is appropriate, if the leaders are initiating, and if the change process is carefully facilitated, then implementers will move from early self-concerns to task
concerns (during the first years of use), and ultimately to impact concerns (after three to five years). (141)

Based on the findings from the interview data and the written responses, none of these three ways suggested by Hall and Hord of properly implementing innovation were found in the Saudi schools. All the teachers claimed that SC strategies were not appropriate to the current Saudi education system, some teachers felt a lack of support from their school principals, and finally teachers were asked by their supervisors and principles to apply the SC strategies without any preparation for the teachers to adopt the approach. Consequently, as Hall and Hord (2006) indicate, if those three “ifs” are not met, then task concerns (in Management Stage) will continue to be intense. This reflects the situation in this study, where the most expressed concerns by all teachers were related to the Management Stage.

4.3 Summary

In this chapter, I presented the main findings and analysis of the open-ended statements of concern with reference to relevant literature. Management was the most shared stage across all the teachers. Five main concerns were also found between the participants that hindered them from implementing SC strategies fully in their classroom. In the next chapter, the findings and the discussion of the interview data will be presented.
Chapter 5: Findings and Discussion of the Interview Data

Data was collected through semi-structured interviews. The individual interviews were guided by the following questions.

1. What does it mean to be a teacher?
2. What are the public-school teachers’ perceptions about student-centred strategies?
3. What opportunities does a student-centred learning approach provide for the teaching practices of the teacher?
4. How does the current Saudi curriculum fit within the student-centred approach?

As mentioned in Chapter 3, an inductive analysis approach was utilized to analyze the interview data. Based on the data, a large number of codes were identified, then the number was reduced to several categories and eventually to six sub-themes. From these sub-themes, two highly salient themes for the majority of the participants were identified. I discuss these themes in the following sections.

5.1 Theme one: modifications

Findings from the interview data indicated that all participants cited that changes need to be done to some of the Saudi education system in order for SC learning and teaching to be effectively implemented. This theme emerged mainly after asking teachers about their conceptions of SC strategies. Participants showed that they have great understanding regarding the SC approach. When they were asked about their perceptions about the SC approach and strategies, all seven teachers seemed to recognize their role in class. Participant two mentioned that “throughout my teaching journey I have never presented knowledge for my children without letting them construct it themselves…I believe I am implementing a SC approach way before it became a trend in Saudi Arabia.” They also expressed that subject topics should be based on the needs and
interests of students. In this regard, participant five indicated that “sometimes I feel sorry for my students. The physics curriculum is not designed based on their interests…then how can we blame students for not being interested in physics class?” Despite the fact that teachers have enough knowledge about the SC approach and have positive attitudes toward the SC approach, it is evident throughout the interviews that the majority of teachers are not sure if the approach is suitable for the current Saudi education system. Therefore, participants suggested a variety of modifications that should be done in parts of the Saudi education system to enable the success of the SC approach in the country. Four areas which needed modification were identified from the interview data: textbooks, the Saudi curriculum design, the evaluation method, and the preparation of the class members.

5.1.2 Modifying the textbooks

All teachers indicated that the current textbooks were not always compatible with a SC approach or twenty-first century education skills. Six teachers seemed to be not satisfied with their textbook contents. They mentioned a lot of issues in the textbooks that need to be changed so the SC approach could fit within the Saudi context. The display of information in textbooks was suggested to be an issue with the majority of the teachers. Participants had negative impressions about the way their textbooks display topics and concepts. Participant two mentioned that “some textbooks are not just boring for students but also for me as a teacher.” In this regard, five out of seven teachers asked that textbooks be presented in an attractive way which can motivate both teachers and students instead of presenting the knowledge in a rigid way. In this sense, one participant indicated that “topics in Saudi textbooks are presented in a way that does not challenge students before gaining knowledge…textbooks’ topics should encourage students to explore and discover as we mainly depend on them.” As she mentioned, in
a SC classroom, students need to explore and look for knowledge themselves in order to be autonomous learners. Therefore, to implement SC strategies efficiently in Saudi schools, textbooks should contain skills and activities that promote the SC approach. One teacher commented that “I wish I could add more practical topics to the computer science textbook that are suitable for twenty-first century learning skills and also focus on students themselves.” What the majority of the teachers identified was also found in the study of Al-Abdulkareem & Hentschke (2014), who explored the opinions of intermediate school teachers about Saudi textbooks and found that the majority of teachers disagreed that Saudi textbooks gave students the opportunity to manage their learning.

Displaying textbooks’ knowledge without challenging students may affect the implementation of SC strategies, especially in the Saudi context. One teacher indicated that: “Textbooks’ topics should not be presented in a direct way because this could hinder students from thinking and engaging in the learning process.” Indeed, presenting textbooks’ topics in a direct way can fit within teaching and learning in a teacher-centred classroom, while in a SC classroom, according to postmodern views, students need to interact more with the textbooks by thinking, reflecting, researching, and engaging in dialogue with textbooks. By displaying textbooks’ topics in an indirect way, or as Doll (1993) identifies it, in a chaotic manner, enable both teachers and students to engage with the text and eventually they can come to a self-organization point.

The findings also revealed that the school subjects being studied affected the implementation of SC strategies. Subjects and topics that utilized experiments and hands-on experiences usually focused on students constructing their own learning. Teachers find these topics suitable for SC strategies. Participant seven, a science teacher, for example, commented
that “I find it easy to implement SC strategies in my classroom as science is a practical subject and depends mainly on students’ engagements in experiments.” In the same manner, participant six, a computer science teacher, mentioned that “in computer science textbooks, we have two sections: one contains theoretical knowledge and the other one is practical. I implement SC strategies more in the practical section and if it were up to me, I would design the entire textbook to be practical since students enjoy it more and it shows a lot of engagement.” On the other hand, teachers who teach Arabic and Social Studies commented that designing some SC strategies around some topics of their textbooks is challenging. Participant three, an Arabic teacher, mentioned that “when I designed my class activities based on SC activities, I found some topics that contain some facts to be more challenging than other topics.” Further, she explained that this type was mainly dialogues. The challenges that the Arabic and Social Studies teachers highlighted might indicate that within Saudi culture, there are some topics that cannot be negotiated with students, but instead should be presented as is. That could indicate that the nature of subject could affect the implementation of some SC strategies as in this study, where the science teacher found it easy to implement SC strategies as his subject was based on experiments. However, other teachers find difficulties in implementing some SC strategies in topics that consist of theoretical knowledge, as in the case of the computer science teacher or as the Arabic and Social Studies teachers who cannot negotiate some topics within Saudi culture.

Textbooks in Saudi Arabia also tend to be long and contain a lot of details and so issues regarding the length of the textbook were mentioned by all participants. They indicated that the textbooks often contained unnecessary material. These extra details do not add any valuable knowledge to the main concepts of the textbooks and might have negative impact on students. Teachers called for a reduction in the length of textbooks. The Arabic teacher explained that:
“Arabic textbooks are filled with material that students do not necessary need. Such material can be covered in other topics. The excessive length of textbooks confuses students and does not help them focus on the main topic.” In the SC classroom, teachers should enable students to construct their knowledge and engage more in class material in order for students to gain deep learning. However, the length of Saudi textbooks could hinder students from constructing their knowledge as it takes a lot of time for them to finish the required textbooks. Therefore, teachers called for quality over quantity as it will help students to concentrate more and be able to gain deeper understanding of topics. A science teacher believed that: “The extended details in physics textbooks make the idea or concept more difficult to understand and the main ideas may be missed.” For Whitehead (1929, 1967), as cited in Doll (1993), instead of teaching many subjects, it is more effective to “teach thoroughly” (p. 180). Students need to gain knowledge in depth so they can be able to engage with topics. One teacher commented that her high school students graduate with superficial knowledge about computer science. Further, she mentioned that these outcomes are due to the long textbooks that students are required to learn. The reduction in textbook length that teachers asked for is what Doll (1993) calls richness in the postmodern curriculum view. This stance helps both teachers and students to focus more on the subject matter through dialogue and listing to each other.

5.1.3 Modifying the curriculum design

Participants discussed modification to the curriculum from two perspectives. First, they identified a concern to have more control over their curriculum. Second, they commented on who should be responsible for designing the curriculum.

First, all participants emphasized that teachers should be given the opportunity to modify their own curriculum. All participants expressed frustration about the limited agency that they
have over their curriculum. Teachers also indicated that their curriculum is inflexible, and that having to follow the pre-planned curriculum made it difficult to respond to and deliver content that meets their students’ needs. Participant seven explained that: “I do not have any agency over my curriculum, in other words, I am not able to make any modification. In fact, I am required to teach every single detail in the syllabus…Lessons also should be taught in the same order as presented in the textbook.” This pre-planned curriculum reflects what Doll (1993) and Cullen et al. (2012) identify as one of the characteristics of modernist curriculum in which curriculum is inflexible and fixed, and teachers and students are required to follow a pre-planned curriculum. This type of curriculum is challenging for teachers who want to implement a learning approach that focuses on students, such as a SC approach. In this regard, Pedersen & Liu (2003) indicated that if teachers have limited flexibilities in their curriculum and they are required to follow scripted curriculum, they might face conflicting visions between SC learning and the material that they are required to teach in the classroom. This can result in lack of implementation and practice of SC activities in the classroom. Teachers need to have flexibility in their curriculum so they can be able to adjust the curriculum based on their students’ needs. Participants indicated that it is difficult to meet their students’ needs if they cannot modify the curriculum. Only one teacher in the study commented that: “throughout my eleven years as a teacher, only one supervisor allowed me to partially modify my curriculum.”

Second, all of the participants claimed that teachers should be given the opportunity to design their curriculum. All participants agreed that teachers should be able to completely or partially design their own curriculum. The majority of teachers believed that Saudi teachers should personally design their own curriculum based on their students’ needs and their own school’s nature. One participant commented that: “I wish science elementary teachers could have
the opportunity to redesign the curriculum based on our resources and students’ needs.” This point is similar to what Doll (1993) suggests about designing curriculum: “curriculum in a postmodern frame needs to be created (self-organized) by the classroom community, not by the textbook authors” (p. 180). Reflecting on the point that curriculum should be locally designed, participants also raised an important point about the nature of Saudi textbooks. A number of teachers called for the necessity of textbooks to be suitable for students’ context. They discussed that some of the current textbooks do not reflect students’ environments. Four out of seven teachers confirmed that their textbooks are not relevant to students’ context and seemed to be abstract. Two participants indicated that: “Some topics or activities do not reflect students’ own environment as they are seemed to be adopted from other cultures. Science textbooks are one example of that.”

5.1.4 Modifying the evaluation methods

Evaluation was one of the topics that teachers discussed during the interviews. The findings indicated that two elementary school teachers were able to implement SC strategies more than teachers from other school levels. This finding may be due to the fact that in elementary schools, students are not evaluated through tests, instead they are evaluated through a continuous evaluation method. A comment from participant three, who is an intermediate school teacher, supported this point. She said that: “In my curriculum, some lessons should be assessed through continuous evaluation, in which students are assessed about their performance during class only. Other lessons should be assessed through tests…when I assess their performance in class, I find that they engage more in class activities and really try to construct their knowledge.”

Other studies (e.g. Pedersen & Liu, 2003; Nieto, 2003; Bloom et al. 2016; Corkin et al., 2019)
showed that high stake testing and standardized tests limit teachers’ capacity to apply SC activities as these tests examine students’ factual skills instead of problem-solving skills.

All teachers in the study suggested that current evaluation methods in Saudi education need to be modified if the education system were to effectively adopt the SC approach. For instance, evaluation methods in Saudi education depend mainly on tests. All the participants were against the idea of having tests as the only tool to assess students. They believed that tests in general tend to only measure students’ memorization skill, while other skills are not adequately assessed. Participant two mentioned that: “Assessing students’ performance through tests only is the fastest way to destroy students’ creativity.” Participant three suggested that modification to the evaluation method should be done through modifying tests. She suggested that: “As for tests we can design them in a way that assesses students’ understanding instead of measuring their memorization skills. For example, well-designed multiple-choice questions can measure the level of students’ understanding.” Participant six believed that tests are not suitable for her subject (computer science). She indicated that she would prefer to assess her students through projects, self-evaluation, and peer-evaluation over tests. However, the majority of teachers believe that tests are necessary for students’ learning. They have suggested other evaluation methods beside tests such as self- and peer evaluation. The physics teacher in the study believed that these types of evaluations also help students in their learning. Her point echoed Weimer’s (2002) view of the benefits of self- and peer evaluation: “These self-and peer assessment activities develop skills that independent, self-regulating learners need” (p. 119).

Providing students with feedback was another strategy that was suggested by a number of teachers as an effective tool that can add value to the evaluation process in the SC approach. These participants stated that feedback should be included when assessing students learning, as it
can help students reflect on their own learning and eventually help them enhance their own learning. Four out of seven teachers believed that learning cannot occur unless students can reflect on, and be aware of, their learning abilities. Participant two suggested that: “when assessing students’ learning, students should be provided with ongoing feedback so they can be encouraged to think critically about their own learning.”

Participant five highlighted that when Saudi teachers use other tools to assess students’ learning, such as assessing them through projects, teachers needed to help their students reflect on their works by discussing it with them. Her point reflects Doll’s idea of evaluation in postmodern curriculum. Doll (1993) indicates that evaluation in postmodern curriculum can be done through negotiation between students and teachers and between peers themselves. Further, participants commented that adopting other evaluation methods to be the main tools for assessing students requires preparation for both teachers and students. This can be a burden in itself, since the transition is not easy in an education system that has been relying on tests for decades.

5.1.5 Preparing the school community

All participants indicated that preparation is a key factor that needs to be taken into account to implement SC strategies efficiently in Saudi education. As suggested within all of the interviews, preparation should not be limited to teachers, but should also include principals, supervisors, and students. All seven participants at some point during the interviews acknowledged that they needed to learn more about SC approaches. They also indicated that they do not see themselves as well prepared to teach in SC classrooms. Participant four indicated that she would like to find answers to her questions. For example: how could she implement SC strategies successfully? Also, what are the appropriate evaluation tools for the SC approach? Or what are the new SC strategies that she could use in her class? A study done by Tawalbeh and
AlAsmari (2015) in a Saudi university found that despite the fact that instructors had knowledge about learner-centred instructions, they wanted to learn more about it. This need for learning about the approach might be due to two possible reasons. First, the lack of training in SC approaches. The majority of teachers in this study had attended few training programs about SC strategies in particular. In this regard, a previous Saudi study showed that the lack of training programs was one of the challenges that Saudi intermediate school teachers faced when implementing SC strategies (Al Ahmadi, 2010). The second reason might be due to the lack of resources about the SC approach. Participant two mentioned that: “I would like it if they can provide us with resources about SC education so we can learn more about the approach. Unfortunately, there is a lack of resources about the SC approach in Arabic; the majority of resources about the topic are in English.”

The need for preparation of principals and supervisors was also mentioned by the majority of the participants. Five out of seven teachers stated that some of their supervisors and principals seemed to be either lacking knowledge of the SC approach or not supporting the approach. Participant one indicated that: “The school principal is indifferent if teachers implement SC strategies or not, so how can teachers be motivated to implement these strategies?” Further, he mentioned that “it is difficult to be motivated to apply these strategies if you do not have any support.” Although the support that teachers receive from their supervisors and principal could be important for teachers to be motivated to implement SC strategies, teachers’ attitudes play an important role when implementing a new approach. Participant one was the only participant who claimed that “I believe teaching should be done through two approaches: teacher-centred and student-centred.” When I asked him how frequently he implemented SC strategies in his classroom, he answered “not all the time…to be honest with
you, I do not apply them for the majority of my classes… there are a lot of challenges that hinder me from implementing these strategies.” The lack of support and his belief about the teaching approach and his long experience of teaching through the teacher-centred approach seem to impact his motive for practicing the SC approach in his classroom.

As for students, the teachers highlighted the need for students to be aware of the benefits of the SC approach in order to maximize their learning. Participants indicated that some students do not know their role in a SC classroom, and sometimes they are not confident enough to guide their own learning. Participant four indicated that when shifting from traditional methods of learning to SC methods, “students should not be asked to be independent learners, instead they should go through gradual release of responsibility so they can be aware of their roles.”

Therefore, all the participants in the study said that students need to be trained in this approach, especially in intermediate and high schools. This need for preparing the school community for the SC approach might have emerged from the idea that schools in the Saudi Arabian context have not been exposed much to a SC approach. In this study, all the teachers had never experienced SC approaches as students. Their lack of experience with the SC approach can impact their implementation in class; this finding echoed studies of Schweisfurth, 2011; Al Ahmadi, 2010; Tawalbeh & AlAsmari, 2015; and Alturki, 2016. In their studies, teachers who are exposed to teacher-centred pedagogy before and after becoming teachers face difficulties when applying SC strategies in their classrooms.

According to the modifications that the teachers asked for, it seems that Saudi teachers support the adoption of the SC approach. In fact, six out of seven participants believe that teaching and learning should be mainly focused on students, with teachers acting as facilitators and students guiding and constructing their own learning. However, not all of them were able to
reflect their beliefs fully in their classrooms. According to the estimation of the participants regarding their implementation of SC strategies, only two out of seven teachers mentioned that they implemented SC strategies fully in their classroom, while the rest seemed to apply it partially. This contradiction between beliefs and practice of those who could not implement the SC approach fully in their classrooms can be called, as Fang (1996) indicates, an inconsistent relationship.

This inconsistent relationship between beliefs and practices can be a reflection of different factors such as contextual factors and the nature of the school. Sometimes teachers are eager to implement an innovation to improve their students’ learning and themselves too. However, when they implement the innovation in class, they are faced with difficulties that might hinder them from doing so. What Fang (1996) indicates is illustrated in this study. When I clarified some points with my participants during the interviews, I found that the two teachers who implemented the SC approach fully in their classrooms had different circumstances compared to the rest of the participants. One of the teachers is an elementary science teacher (participant seven) who has a relatively shorter syllabus to cover compared to the rest of the teachers. Moreover, he has his own classroom that he equipped personally. The second teacher is an elementary school teacher (participant two) who makes use of other block periods in order to finish her classes. In addition to that, she has a much smaller class size compared to the other participants. Another reason that implementing SC strategies is more suitable for the two teachers might be their grade level. Teachers who praised students’ positive attitudes toward the SC approach were elementary school teachers, while teachers in other school levels complained about some of students’ attitudes, except for participant three. Participant two, who is an elementary school teacher, pointed out that: “I can tell from my students’ reactions how
enthusiastic they are about these strategies. You can see it through their engagement and interaction in class… Students really like my method of teaching; in fact, they always ask me to teach them other subjects.” For these two participants, their ability to implement SC learning could be due to the age of the students that they are teaching. Children of a younger age are usually eager to learn as a lot of knowledge and experiences are new to them. However, this is not the only reason behind that, since other elementary school teachers could have the same circumstances, but they do not apply SC in their classroom. Other factor could be due to their desire for change, which can be seen from the methods that they adapted in order to implement SC strategies in their classroom. Participant seven did not rely on his school to provide him with instructional resources; instead, he equipped his own classroom based on his students’ needs. As for participant two, she solved the insufficient period time by managing to use other block periods to enable her students to have enough time constructing knowledge and engaging in class activities.

Due to their different circumstances, these two teachers were able to fully apply SC strategies as they believed learning should be this way. Therefore, if the rest of the participants in the present study had a suitable environment, they might have been able to implement the approach, as they already held the beliefs that learning, and teaching should be focused on students. One teacher commented that: “We are capable of adopting and implementing SC strategies in our classrooms, if we have the proper environment.”

5.2 Theme two: opportunities and positive impact

Based on the interview data, teachers indicated that the SC approach provides opportunities and has a positive impact on Saudi education. They discussed the general impact of SC activities that they have witnessed on their students and themselves as well.
5.2.1 Opportunities and positive impact on teachers

Despite the fact that teachers expressed many concerns in Chapter Four regarding implementing SC strategies, teachers showed positive attitudes towards the approach. Participant Five mentioned that: “if it were up to me, I would like to adopt the SC approach in all my classes because of its great outcome for both students and teachers.” Further the participant mentioned that “when I plan my lessons, I try to research more about the topics and concepts as students in this approach ask more questions, especially if they are interested in a topic. Students also sometimes ask about things that are not directly related to the main topic. Therefore, I need to be more prepared so I can answer all of their questions.” The opportunity that SC learning provides for her and her students is what Doll calls “intellectual play,” where both students and teachers can explore and engage in dialogue and negotiation, and eventually they can be able make meaning of things (p. 286).

The majority of teachers also highlighted that when they implement SC activities in their classrooms, they noticed positive impact on their teaching. For example, some participants mentioned that in a SC classroom, they feel there is less pressure on them compared to the traditional way of teaching. One teacher mentioned that: “in a teacher-centred classroom I need to do everything myself. However, when I implement SC activities I feel as if the burden is lighter since students can guide their own learning and I am only a facilitator.” According to Weimer (2002), in learner-centred classrooms the teacher acts as an organizer or a facilitator who can give advice as needed. For the teachers in the current study, this new role gives them the opportunity to enjoy their classes, as participant six mentioned: “when I implement SC strategies in my classroom, lessons become more enjoyable, which is the opposite to what happens in a
teacher-centred classroom.” This positive atmosphere also helped teachers to engage more with students.

Relationship with students were highlighted by interviewees as one of the positive impacts of SC approaches that they witnessed with their students. All teachers agreed that they noticed differences in their relationship with their students, particularly by learning about their needs and abilities. One teacher commented that: “I generally have a strong relationship with my students as I view them as my daughters, and I think they view me as their mother. However, I feel like in some SC activities I get to talk with them more and that helps me learn about their interests and needs…recently, one of my students has improved a lot, not only academically, but also personally. She told me that the improvement was because of me.” This strong relationship between teachers and students reflects Doll’s (1993) view about the postmodern classroom, where teachers and students work together through dialogue and interaction instead of being separated as in modernist thought. When students find a safe climate in the classroom where they are able to express their thoughts and opinions, they could thrive in their learning and in other aspects of their life. Giving students this opportunity could open doors for them and help them to reflect on their learning and life in general. I believe my experience in one of my MA classes that I took with Dr. William Pinar changed me in a number of ways. In every class, Pinar dedicated an hour to reflect on our reading or on the lecture that he presented in the first hour of the class. In this hour, Pinar genuinely cherishes all students’ comments. His approach has helped me not only to reflect on his class but on many aspects of my life in general.

I agree with participant four when she said that “students need to be trusted,” and if that happens, according to her, teachers would be surprised with the result. This opportunity cannot be given to students unless teachers hold a belief that students also have valuable knowledge to
share. What participant four attempted to explain indicated that knowledge is not only limited to teachers. This point can be seen in the one of the five elements of instructional practice that Weimer (2002, 2013) proposed for the SC classroom. In this regard, Weimer indicated that in a learner-centred approach, teachers are not the only expert in the classroom and students should take the lead for their learning.

5.2.2 Opportunities and positive impact on students

Teachers expressed several advantages of the SC approach for students; some are general, and the others were outcomes of their implementation of the approach. These advantages were discussed when I asked them who teachers ought to be. First, the majority of them discussed the meaning of being a teacher in a general manner, regardless of the teaching approaches that they were utilizing. All participants asserted that teaching does not mean merely conveying a message or facilitating learning to students. Instead, they believed that it is an opportunity for a teacher to influence students in every aspect of their lives. Participant two indicated that “for me, teaching is one of the most tedious yet rewarding jobs…I am not only teaching my students to gain knowledge, but I could be a reason for them to be better person in future. In fact, I can see the changes in their personality in a matter of a school year or even sometimes in a couple of months.” Few participants discussed their role as Saudi teachers; one teacher mentioned that “as a Saudi teacher I should be a good example to my students and teach them in a best way.” Another participant indicated that “being a Saudi teacher means that you need to improve yourself in teaching a lot…for example, [there are] a lot of concepts and approaches in teaching I had never heard of ten years ago, including student-centred learning.”
Further, participants expanded the meaning of teaching within a SC classroom, especially the impact of their role as teachers on their students academically and personally. As participant six mentioned, “when I enable my students to guide their own learning, I feel like I did my work well… I can witness how this way of teaching improves my students from different aspects.” Her comments indicated that teaching goes beyond facilitating or transmitting knowledge to contributing in changing students’ lives.

All participants agreed that SC approaches have a positive impact on students’ learning skills and learning outcomes. As for improvement in students’ performance, four teachers believed that SC activities helped their students in their academic performance. Participant three mentioned: “Their academic achievements and understanding have improved dramatically, especially when they learned through their peers,” while participant six pointed out that “when I encourage my students to look for knowledge themselves, I notice an improvement in their academic achievements.”

With regard to learning skills, one teacher mentioned that “SC strategies give students the opportunity to develop and improve a variety of learning skills such as deep understanding, autonomous learning, and other skills that can help them in their life.” Relevant literature also indicates different positive impacts of the SC approach on students. Attard, Di Iorio, Geven, & Santa (2010), Seng (2014) and Weimer (2002) identify several advantages of the SC approach, including helping students to be active in class, developing independent learning skills, and encouraging students to practice lifelong learning.

Moreover, teachers in the study have strongly praised the impact of the SC approach on students’ lives in particular. Participant two pointed out that “a SC approach provides individuals with different learning and life skills such as problem-solving skills that prepare them to
overcome any difficulties that they might face in their lives.” Participant four also indicated that “a SC approach gives students the opportunity to develop and improve a variety of skills, especially skills that can help them in their future life.” She highlighted that giving students the opportunity to express their thoughts, engage in critical thinking activities, and reflect on their learning, empowers students not only in their learning abilities and skills, but also in their life in general. This empowerment that students gain from these approaches can enable them later in life to make positive changes within society.

Other teachers discussed the impact and the value that SC approaches provide for students in the classroom. Participant three mentioned that “In SC classrooms, students have many roles: they become young teachers who can guide their own learning, and at the same time they can be supervisors to their peers. This new role may empower students later in their lives.” The new role of students in the SC classroom enhances students’ confidence levels. Participant seven indicated that, after he applied student-centred strategies, he found that his students became more confident in their learning. Participant five also pointed out that when she gave her students the chance to express their opinions in class, they showed confidence. She indicated that: “in some of the physics classes, I think that my students engage more in class discussions, where they present their ideas and challenge each other. I believe this type of discussion is healthy, as students can be more open about other perspectives.” The point that she mentioned is similar to Doll’s (1993) idea of rigor in the postmodern curriculum, in which in class community teachers and students can mix between indeterminacy and interpretation by looking always for new patterns and interacting with the text and others.
5.3 Summary

In summary, in this chapter the findings and discussion of the interview data were provided. The findings showed two main themes that emerged from the interview data: modifications that need to be done to Saudi education, and opportunities that SC teaching and learning can offer to Saudi education. In Chapter Six, a summary of the findings will be provided, along with the limitations of the study and finally recommendations for Saudi policy and future research.
Chapter 6: Conclusion

The aim of this study was to investigate the perceptions and concerns of Saudi teachers regarding their implementation of SC strategies. It takes into account the grade level as well as different school subjects and the current Saudi curriculum design. This chapter summarizes the objectives and the research questions and the main findings of the study. Further, strengths and limitations of the study, in addition to recommendations for future research, will be presented.

6.1 Summary of the main findings

In this section, I present a summary of the common concerns that the participants faced when implementing the SC approach and the teachers’ perceptions of the approach.

6.1.1 Teachers’ common concerns

According to findings from the Stages of Concern responses, teachers in the study showed the most concerns in the Management Stage (task concerns). In this stage, the teachers expressed concerns about time and class nature, with time being the main concern among all teachers. The findings indicated that class time was insufficient for teachers to implement SC strategies or for their students to construct their knowledge. According to Hall and Hord (2006), the Management Stage will be intense if the innovation is not appropriate or there is no support, or if the leaders fail to facilitate. This might reflect the situation in the current study as the participants claimed that different modifications need to be done in Saudi education in order to effectively adopt SC strategies. Concern regarding students was the second-most common concern across all teachers. Teachers reported that students’ attitudes and lack of basic learning skills affected the implementation of SC strategies. The findings also revealed that among all teachers the Unconcerned and Refocusing Stages were absent.
Other stages of concern were also indicated by a number of teachers, for example, the findings showed that teachers expressed the need for learning more about the approach (Informational Stage). The findings also showed that teachers had concerns in the Personal Stage. Additionally, the lack of collaboration with others (Collaboration Stage) was also identified in the study.

6.1.2 Teachers perceptions about SC strategies

Analysis of the interview data revealed two main themes that emerged from the teachers’ responses about their implementation of SC strategies. The first theme was modifications, while the second theme was opportunities and positive impact. For theme one, findings indicated that change needs to occur in order for SC learning and teaching to be properly implemented. Four different aspects were highlighted: the textbooks, the Saudi curriculum, the evaluation method, and the preparation of the school members. For modification within the Saudi textbooks, the findings revealed that school subjects may affect the implementation of SC strategies, as subjects that have experiments and activities are more easily associated with SC strategies. The findings indicated that, first, Saudi textbooks need to be modified as teachers believed that the textbooks in their current format did not support SC learning. Second, teachers thought that if they had more control over their curriculum they could create a SC curriculum. The findings also indicated that with teachers having opportunity to fully or partially design their own curriculum, it would be more likely to meet their students’ needs. Third, for modifications of the evaluation method, findings indicated that implementing SC strategies at the Saudi elementary level can be more easily applied compared to intermediate and high school levels. That might be due to the evaluation method and to students’ attitudes in elementary school. The findings also revealed that tests are not suitable for the SC approach; other methods were suggested by teachers to
evaluate students’ learning skills instead of evaluating their memorization. Additionally, the findings revealed an inconsistent relationship between teachers’ beliefs and practice. Therefore, preparation for teachers and other school members are necessary to maximize the benefits of the CS approach.

Theme two was opportunities and positive impact. The findings indicated that the participants had positive attitudes regarding SC strategies; in fact, the majority of teachers believed that teaching and learning should be focused on students. Also, they believed that the SC approach not only has great potential for Saudi students, but also for Saudi teachers.

6.2 Strengths

When implementing a new approach or pedagogy, teachers’ perceptions and opinions should be taken into account as they are responsible for the changing process. Therefore, this thesis attempts to address Saudi teachers’ perceptions and concerns regarding SC strategies.

To the best of my knowledge, within the Saudi context, only a few quantitative studies discussed teachers’ perceptions regarding student-centred strategies (e.g. Tawalbeh & AlAsmari, 2015 and Idris, 2016). However, these studies were limited to the perceptions of university instructors in Saudi Arabia. The perceptions of public-school teachers have not been investigated regarding SC strategies. The only study that I can find is Al Ahamidi (2010), in which she examined the use of student-centred strategies in one subject, Family Studies. This study, on the other hand, is a qualitative study that provided a deeper understanding of the perceptions and concerns of Saudi teachers regarding the implementation of SC strategies. In addition, my study was not limited to one school subject, instead it included five different school subjects. Moreover, this study presented the perceptions of five female and two male teachers from the three school levels, i.e. elementary, intermediate, and high schools.
6.3 Study limitations

This study investigated a small number of Saudi teachers from Jeddah, Saudi Arabia. Only seven teachers discussed their perceptions and concerns regarding SC strategies. The perceptions and opinions presented in this study are limited to those teachers and did not reflect the perceptions of the teacher population in Saudi Arabia. However, the findings may be transferable to those in a similar context.

Moreover, in the changing process, it is important to address the perceptions and opinions of all changing members. However, this study was limited to exploring the perceptions and concerns of Saudi teachers, while other members such as students were not included. Additionally, the study is limited by my analysis and interpretations as a researcher and a teacher who teaches in Jeddah, Saudi Arabia.

6.4 Recommendations

The current study was conducted in order to examine the concerns and perceptions of Saudi teachers regarding SC strategies. There are several recommendations that can be derived from this study based on the findings. In the following sections I offer some recommendations to policymakers, teachers, and future research.

6.4.1 Recommendations for policymakers

Saudi teachers are required to implement SC strategies in their classroom, but they are not prepared for this change. Providing teachers with training programs before asking them to implement a new approach would enable them to be better prepared. Also, there is a need to provide teachers with more resources about SC strategies or provide teachers with more workshops and seminars related specifically to SC strategies. Moreover, other school members
should also be prepared and be aware of the benefits of the SC approach including principals, supervisors, students, and parents.

Additionally, school district trustees, supervisors, and principals ought to take into consideration the challenges that teachers face when implementing SC strategies, such as class size, lack of instructional resources, and the need for modifications. To that end, using the findings of the Stages of Concern framework could be a proper method to facilitate SC strategies for teachers.

6.4.2 Recommendations for teachers

Some of the findings of this study resonate with me as a Saudi teacher, which leads me to recommend some points for my colleagues. First, as many participants mentioned, the majority of teachers do not open up regarding their concerns about SC strategies with their colleagues, let alone with their supervisors and principals. As teachers, we need to develop ways to support colleagues to engage with any new approach or legislation in education more effectively. This would also assist principals, supervisors, and eventually the education policymakers to understand about the range of perceptions, needs, and concerns regarding the change.

Second, for teachers who are willing to maximize the implementation of SC strategies, I return to the assumptions of CBAM about change (Hall & Hord, 1987). I will refer to two of the assumptions: first, according to CBAM, change is a process, not an event; therefore, we need to bear in mind that change might take a long time, especially in our current circumstances. Second, individuals’ feelings and skills about an innovation are important. Thus, we need to have positive feelings regarding the SC approach and we also need to improve our understanding and skills to enable us to implement the approach.
6.4.3 Recommendations for future research

Since this study was limited to seven participants, future researchers may expand the number of participants in order to gain richer insights into the concerns and perceptions of teachers regarding SC strategies. The perspectives and opinions of other school members might need to be considered in future studies, such as examining principals’, supervisors’, and especially students’ feelings about the SC approach, which may shed more light on the concerns with and perceptions of the SC approach. Finally, future studies within the Saudi Arabian context will benefit from examining the concerns of teachers in other cities and regions in Saudi Arabia, especially in small areas, as teachers may have additional concerns due to differences in terms of resources, internet access, and the nature of the schools and communities.

This study examined the concerns of Saudi teachers, teaching different subjects at different public-school levels, regarding the implementation of the SC approach. Given that a SC approach is a new trend at public schools in Saudi Arabia, this study provides an important overview of how teachers perceive this approach and its suitability in the Saudi context. It also sheds some light on the challenges and the needs of teachers in order to better shift from teacher-based approaches to the SC approach. Hopefully, this work will help those involved in education in Saudi Arabia improve the education system in order to succeed in implementing the SC approach.
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Appendix A: Background Questionnaire

Demographic Page

Please complete the following questions:

1- Gender: Female ______  Male ______

2- How long have you been teaching? _________________

3- What is your highest educational level?

   ___ Bachelors   ___Masters   ___PhD      ___other

4- How long have you been implementing student-centred teaching strategies in your classroom?

   _never  _ one year  _ two years  _ three years  _ four years  _ five years or more

5- During this school year, have you received formal training in student-centred teaching strategies (workshops, courses)?

   ___Yes  ___ No

6- In your use of student-centred teaching strategies, do you consider yourself to be a:
__ non-user  __ novice  __ intermediate  __ old hand (specialist)  __ past user

7- What school level are you teaching?

__ elementary  __ intermediate  __ high school

8- What school subject are you teaching? ____________________

Thank you for answering and completing these sheets.
Appendix B: Open-Ended Statement of Concern

Response Sheet

Please answer the following question in complete sentences, and please give as much detail as you can.

When you think about student-centred teaching strategies, what are you concerned about?

(Note: Please do not say what you think others are concerned about, but only what concerns you now).