

Walden University ScholarWorks

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

2020

Perceptions of Middle School Teachers' Experiences with **Student-Centered Learning Strategies**

Lucy Judith Plaisir Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations



Part of the Curriculum and Instruction Commons

Walden University

College of Education

This is to certify that the doctoral study by

Lucy J. Plaisir

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

Review Committee

Dr. Andrew Alexson, Committee Chairperson, Education Faculty Dr. David Weintraub, Committee Member, Education Faculty Dr. Leslie VanGelder, University Reviewer, Education Faculty

Chief Academic Officer and Provost Sue Subocz, Ph.D.

Walden University 2020

Abstract

Perceptions of Middle School Teachers' Experiences with Student-Centered Learning

Strategies

by

Lucy J. Plaisir

MS, Adelphi University, 1997 BS, York College, 1996

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education

Walden University

November 2020

Abstract

Teachers in the local research site are using student-centered learning (SCL) strategies as an instructional pedagogy to support students' learning. However, they are experiencing barriers in implementing SCL strategies consistently. The purpose of this study was to examine teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently at a middle school in the Northeastern United States to support students' learning. The conceptual framework used for this qualitative study was Schlossberg's transitional theory. Data were gathered through semistructured interviews with 15 participants who taught at a middle school and used SCL strategies for at least 5 years. Data were analyzed through a priori coding and thematic analysis. Six themes were identified: (a) students' resistance and inability, (b) problems relinquishing control, (c) pressure on curriculum and testing, (d) lack of technological resources, (e) lack of quality professional development, and (f) overcrowded and noisy classrooms. The significance of the study was to fill the gap in practice by exploring teachers' inconsistency in implementing SCL strategies to support students' learning. Findings may contribute to positive social change by gaining a body of knowledge related to the implementation of SCL strategies necessary to allow students to engage fully in educational activities to achieve better learning outcomes, which will enable them to master content and develop skills for optimal success in school, career, and civic life.

Perceptions of Middle School Teachers' Experiences with Student-Centered Learning

Strategies

by

Lucy J. Plaisir

MS, Adelphi University, 1997 BS, York College, 1996

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education

Walden University

November 2020

Dedication

This dissertation is dedicated to my beloved parents Virol and Corah Valmond, my husband, Jean R. Plaisir, and my two children Ginelle and Jervel Plaisir. Each one of you contributed tremendously to my success. My parents instilled in me the desire to strive for excellence and encouraged me to make education a top priority. Thank you for your hard work and the many sacrifices that you made for me. My husband believed in me and was by my side every step of the way. I hope the culmination of this part of my educational pursuit will inspire my children to maximize their fullest potential and shoot for the stars.

Acknowledgments

To God be the glory, great things He has done. I could not have done this without the wisdom, knowledge, and understanding from my Heavenly Father. He infused the desire to venture into this academic path and gave me the faith, health, time, inspiration, and endurance to reach thus far. Indeed, I made it because God gave me the strength to accomplish this arduous task. Lord, I thank you!

I want to express my sincerest gratitude to my husband, Jean R. Plaisir, for his support, patience, understanding, and encouragement. I love you more for being there for me when I needed you the most.

I would also like to thank my daughter Ginelle S. Plaisir for being my editor. She knows the APA manual, and I could depend on her to check my citations and references. To my son Jervel C. Plaisir, I would like to thank him for teaching me how to use the MacBook to write my dissertation. I would also like to thank my family members, friends, and Dr. Jennifer Watson, who supported me. How do I say thank you to my Chair and mentor, Dr. Andrew T. Alexson? My words are inadequate to express my gratitude and appreciation for all that he did for me to attain this doctoral degree. I could not have asked for a better person to guide and support me on my doctoral journey. I would also like to recognize the other committee members, Dr. David Weintraub and Dr. Leslie VanGelder. Dr. Weintraub contributed tremendously as my content specialist to my accomplishment by his knowledge, passion, and commitment. Dr. Leslie VanGelder, an amazing University Research Reviewer, gave me great insights to develop my dissertation successfully. Thank you!

Table of Contents

List of Tables	V
List of Figures	vi
Chapter 1: Introduction to the Study	1
Background	3
Problem Statement	5
Purpose of the Study	9
Research Question	9
Conceptual Framework	10
Nature of the Study	11
Definitions	12
Assumptions	12
Scope and Delimitations	13
Limitations	14
Significance	15
Summary	16
Chapter 2: Literature Review	18
Literature Search Strategy	18
Conceptual Framework	19
Literature Review Related to Key Concepts and Variables	22
Learning Theories	22
The Impact of Constructivists' Perspective on Student-Centered	
Learning	24

Benefits of Student-Centered Learning Strategies	27
Teaching Strategies	30
Teachers' Role in Supporting Student-Centered Strategies	33
Student-Centered Learning Strategies in Middle School	35
Challenges in SCL Implementation	36
Teachers' Motivation and Resistance to Change	38
Summary and Conclusions	41
Chapter 3: Research Method.	43
Research Design and Rationale	43
Role of the Researcher	46
Methodology	47
Participant Selection	48
Instrumentation	49
Procedures for Recruitment, Participation, and Data Collection	50
Data Analysis Plan	51
Trustworthiness	52
Ethical Procedures	53
Summary	55
Chapter 4: Results	56
Setting	57
Demographics	58
Data Collection	59

Data Analysis	60
Results	65
Components of Schlossberg's Transition Model	67
Theme 1: Students' Resistance and Inability	69
Theme 2: Problems Relinquishing Control	73
Theme 3: Pressure on Curriculum and Testing	76
Theme 4: Lack of Quality Professional Development	81
Theme 5: Lack of Technological Resources	89
Theme 6: Overcrowded and Noisy Classrooms	92
Evidence of Trustworthiness	94
Summary	97
Chapter 5: Discussion, Conclusions, and Recommendations	98
Interpretation of the Findings	99
Theme 1: Students' Resistance and Inability	101
Theme 2: Problems Relinquishing Control	102
Theme 3: Pressure on Curriculum and Testing	103
Theme 4: Lack of Quality Professional Development	105
Theme 5: Lack of Technological Resources	106
Theme 6: Overcrowded and Noisy Classrooms	107
Limitations of the Study	108
Recommendations	110
Implications	113

Conclusion	114
References	116
Appendix A: Interview Script	139
Appendix B: Interview Questions	140
Appendix C: Responses from Content Experts	141
Appendix D: Steps Taken to Obtain Content Validity of Interview Questions	148
Appendix E: Letter of Invitation and Recruitment Flyer	150

List of Tables

Table 1. Participants' Information	58
Table 2. Codes and Triangulation	64
Table 3. Theme and Theme Statements	66
Table 4. Themes and Schlossberg's 4S's Model Components	69

List of Figures	
-----------------	--

Chapter 1: Introduction to the Study

Access to quality education is a fundamental right for all students. However, there is a significant concern in the United States about the capacity of the country's public education system to meet the needs of all students. Berger and Wild (2017) claimed that students in the United States are lagging behind many international countries academically in math and science. Glowa and Goodell (2016) argued that the American education system was created for a society and economy that does not exist anymore. For instance, many districts across the country are still using the education system that was built in the early 1900s to meet different needs (Glowa & Goodell, 2016). Kaput and Education Evolving (2018) supported these views by indicating that the design of the system, which was to prepare students for an industrialized and standardized economy, needs to change to prepare students for a globally competitive world. An effective education system should undergo necessary transformations covering essential areas, such as instructional and learning strategies, to ensure its relevance in the ever-evolving world.

The adoption of student-centered learning (SCL) strategies aligns with their significant potential of addressing students' varying learning needs. Frăsineanu and Ilie (2017) posited that SCL optimizes students' learning by focusing on their needs, interests, and aspirations. Furthermore, Kenney (2018) emphasized that when teachers engage students in active learning, it enhances their critical thinking skills, and they develop a clearer understanding of the concepts they are learning. Similarly, Talbert, Hofkens, and Wang (2019) indicated that student-centered approaches promote middle

school students' enjoyment of mathematics and enhance their understanding of math concepts and practices. These perspectives demonstrate the importance of SCL in shaping classroom activities to ensure optimal learning. However, although SCL is supported by education policy and practice, critical concerns, and questions related to its implementation and effectiveness still exist (Talbert et al., 2019). These issues indicate the need to examine teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently to support students' learning.

SCL allows students to adopt a hands-on approach in their creation of new knowledge. While SCL, which is a constructivist approach to engaging students in active learning, has been in existence for a long time, there is an effort to implement the strategies more today to support students' learning (Baeten, Dochy, Struyven, Parmentier, & Vanderbruggen, 2016). Jones (2016) emphasized that schools are still preparing students for the past generation and not for today's society. To equip students with the skills that they need today, teachers need to take an SCL approach instead of using the lecturing method (Jones, 2016). Borda et al. (2017) noted that conventional passive lecture-style teaching is ineffective as it does not engage learners. As a result, the implementation of SCL strategies is necessary to foster students' construction of meaning from what they are learning.

Teachers are still struggling to implement constructivist-based curricula (Borda et al., 2017). According to Dole, Bloom, and Doss (2017), teaching students to memorize facts for standardized tests is inadequate to prepare them to become productive citizens in today's society. Such a situation requires the implementation of SCL as a component of

the constructivist approach, which improves opportunities for students' development of knowledge through active exploration of the subject material. Since students are continually interacting with technology, they require teachers who would actively involve them in their learning by using SCL (Holmes, Collins, & Rutherford, 2017). Osmanoglu and Dincer (2018) recommended a study among middle school teachers to gain a deeper understanding by conducting face-to-face interviews of teachers' ideas, reflections, and concerns about the implementation of SCL in various disciplines.

The examination of teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently in middle school (Season's Middle School) may bring about positive social change by enhancing students' knowledge and skills for socioeconomic development. In this chapter, the background, problem statement, purpose of the study, research question, conceptual framework, definitions, assumptions, scope and delimitations, limitations, significance, and a summary will be presented to lay the foundation for the study.

Background

Research indicates that the effectiveness of various SCL strategies has consistently proved to support students' learning (see Kettler, Guthrie, & Omelchenko, 2017). However, there are limited studies conducted to understand teachers' perceptions with SCL strategies, even though the use of the approaches is quickly becoming popular (Netcoh & Bishop, 2017). Although the number of schools adopting the method is not specified, the increasing use of the SCL signifies its potential in promoting students' academic performance. Glowa and Goodell (2016) posited that SCL is aligned with the

tenets indicating that learning is personalized, competency-based, can happen anytime, anywhere, and it allows students to take ownership of their learning. Sabah and Du (2018) emphasized the need for further research in identifying the strategies that teachers could use to promote an SCL environment, which will help to address educators' understanding in implementing the instructional method in their classrooms.

Furthermore, Louca and Zacharia (2015) highlighted that although there is a great emphasis on the use of actively involving students in the learning of science, there is limited research conducted on SCL strategies and teachers' use of the strategies.

Nonetheless, Andersen and Andersen (2017) posited that student-centered instructional strategies increase educational inequality and negatively impact their achievement. It is important to explore how these factors influence middle school teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently to support students' learning with the view of enhancing their use to enhance student participation in learning. I selected middle school teachers for this study based on their role in preparing Grades 5-8 students to undergo the transition to the secondary school level. Students' academic performance in the grades mentioned above influences their entry into high school, thus suggesting the need to explore perceptions that shape educators' use of SCL, which will help to foster learning. As a result, the examination of middle school teachers' perceptions of their implementation of SCL strategies is necessary to address any barriers hindering them from capitalizing on such techniques to support students' learning.

Problem Statement

The problem addressed in this study is that teachers are experiencing barriers in implementing SCL strategies consistently to support students' learning in Seasons Middle School, located in the Northeastern United States. The problem is supported by extensive information gathered from the Seasons School District. The implementation of more rigorous students' standards by the New York State Education Department and the increase of accountability for educational institutions caused a paradigm shift in the instructional process at Seasons Middle School. Such measures announced on January 17, 2019, require schools to focus on enhancing students' achievement in various subjects, including mathematics, social studies, science, and language arts in line with Every Student Succeeds Act (ESSA; New York State Education Department, 2019). However, in 2014, the Seasons Middle School District's superintendent mandated that all teachers in the district use SCL strategies to help to support students' learning. One of the Seasons Board of Education priorities is to engage students continuously in real-life activities and build a forward-thinking, progressive school system that offers a challenging educational program tailored to meet individual student needs (Board of Education, personal communication, Seasons School District, 2019). Moreover, the Season Middle School District's superintendent made SCL strategies the primary instructional focus in which there is a redesigning of classrooms to enable collaboration, problem solving, communication, creativity, and critical thinking to engage actively and support students' learning (superintendent, personal communication, September 2019). At a recent superintendent's Conference Day for teachers, the Season Middle School

District's superintendent indicated that students could no longer learn the same way as in the 1800s, requiring teachers to facilitate students' learning in an SCL environment (superintendent, personal communication, August 2019).

According to New York State Education Department (2017), out of 974 students who took the English Language Assessment test in Seasons Middle School, 49% were proficient, and 46% were proficient in math. Seasons Middle School principal indicated that the academic performance of students in mathematics continued to show limited progress despite the school's SCL initiatives (principal, personal communication, June 2019). Corkin, Coleman, and Ekmekci (2019) identified teachers' lack of knowledge of constructivism as one of the barriers to SCL in mathematics lessons.

According to a special education teacher, "With so many students at Seasons Middle School below proficiency level, it is challenging as a teacher to create lessons to engage these students in SCL activities, so I used SCL strategies only when I have a formal observation" (personal communication, July 19, 2018). This statement indicates the inconsistent implementation of SCL strategies in the school. As indicated, the teacher only uses such approaches when going through formal evaluation. As a result, examining the teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently is essential to determine factors influencing the use of the techniques for improved students' learning. Students with special needs pose a challenge in the implementation of SCL as they require other accommodations to enhance their active participation in learning (Schreiber, 2017). Thus, learner-centered teaching is challenging, and it requires the teacher to be competent in designing courses, integrating

technology, assessing students effectively, and exhibiting competence in classroom management (Kebaetse & Sims, 2016).

"Student-centered learning activities require students to discuss and work collaboratively towards a meaningful task, which is occasionally seen among teachers when I conduct observations" (Math supervisor, personal communication, August 2019). Corkin et al. (2019) claimed that teachers prefer step-by-step instructional approaches while others are concerned about students being distracted by the resources, such as technology, used in the classroom. Accordingly, variations in teachers' approaches to SCL implementation necessitated the examination of their perceptions of barriers influencing the consistent use of SCL to promote students' learning. The exploration of such perceptions was critical in identifying the changes needed to foster consistent SCL implementation to achieve desired student performance.

The lack of motivation, negative attitudes, inadequate collaboration, and students' low intrinsic interest are also critical challenges influencing the implementation of SCL (Corkin et al., 2019). The outcomes of the study will be vital in exploring the strategies necessary to address the barriers and teachers' concerns to facilitate the widespread adoption of SCL techniques for optimal student achievement.

Additionally, according to Kaput and Education Evolving (2018), while there is a substantial amount of research on the positive effects of SCL on students' achievement, teachers in schools that implement SCL struggle to use the strategies effectively to support students' learning. Furthermore, Netcoh and Bishop (2017) noted that middle schools implement SCL strategies, but teachers' perceptions of the barriers that prevent

SCL strategies from being implemented consistently to support students' learning are unknown as they tend to rely heavily on direct instruction. Dole, Bloom, and Kowalske (2016) posited that SCL poses challenges for teachers in the current educational climate when standardized testing is prevalent, and teachers must cover the curriculum to ensure that they prepare students for their assessments. It is important to understand the challenging new role that teachers play as facilitators of SCL strategies and to know how to best support them (Dole et al., 2016). As a result, the exploration of teachers' perceptions of the barriers underlying the consistent implementation of SCL strategies is vital in identifying effective instructional approaches for optimal learning. Such an approach is fundamental in ensuring that academic programs are focusing beyond assessment to incorporate meaningful knowledge construction.

The proven interventions to address the problem include encouraging teachers to adopt SCL strategies in their classroom practices. Kaput and Education Evolving (2018) stated that SCL strategies used in a study conducted with 11,000 students at 62 schools made significant gains. The more student-centered approaches used, the more positive effects there were on students' achievement (Kaput & Education Evolving, 2018).

Bingham, Pane, Steiner, and Hamilton (2018) proposed the need to explore best practices and strategies necessary to systematically and structurally enable teachers to implement SCL strategies to support students' learning effectively. Bechter, Dimmock, and Jackson (2019) indicated that students exposed to SCL learning strategies showed a substantial increase in their motivation, effort, autonomy, and learning efficacy, in comparison to their counterparts who learned traditionally.

Despite the explored best practices for SCL implementation, teachers continue to demonstrate inconsistency in the implementation of such approaches to foster students' learning. Consequently, I investigated teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently to support students' learning.

Purpose of the Study

The purpose of this study was to examine teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently in Seasons Middle School, located in the Northeastern United States, to support students' learning. This purpose was aligned with the problem statement indicating that teachers are experiencing barriers in implementing SCL strategies consistently in Seasons Middle School. For instance, some educators at Seasons Middle School used the traditional teacher-centered instructional method, which failed to actively engage students in classroom activities. The opportunity to obtain clarification from teachers about the barriers that they encountered in the implementation of learner-centered teaching may bring about positive social changes to support students' learning (Soysal & Radmard, 2017). Consequently, exploring their perceptions of SCL strategies implementation was necessary to identify the techniques that should be adopted to facilitate the consistent implementation of SCL strategies.

Research Ouestion

The following research question guided this basic qualitative study:

What are middle school teachers' perceptions of the barriers that prevent SCL strategies

from being implemented consistently to support students' learning?

Conceptual Framework

The framework for this study was Schlossberg's transition model (STM).

According to Schlossberg (2011), STM addresses understanding transitions, coping with transitions, and applying the model to work-life transitions. Various researchers, theorists, and practitioners used this model to help people in different settings cope with challenging changes. According to Schlossberg, the approach makes up a system for coping with transitions called the 4 S's, which are *situation*, *self*, *support*, and *strategies*. According to Ravitch and Carl (2016), the conceptual framework helps to develop a structure for collecting and analyzing data. Moreover, the conceptual framework enables the researcher to thoughtfully develop research questions and instruments (Ravitch & Carl, 2016). The interview questions were framed based on Schlossberg's 4 S's model. It was necessary as the interviewer to determine the teachers' situation at the time when they implemented SCL. It was also essential to figure out the teachers' ability to cope with the pedagogical change, which dealt with self in the transitional model. For instance, I inquired about the educators' capacity to cope with the pedagogical change.

Furthermore, it was pertinent to understand the level of support that teachers received during the implementation of SCL strategies to support students' learning. If teachers were not receiving the appropriate support that they needed, this would help to create an awareness of what teachers need to implement SCL strategies to support students' learning effectively. Teachers would also require effective coping strategies to deal with the change of roles from being the disseminator of knowledge to be the facilitator of students' learning. By using Schlossberg's (2011) 4 S's for coping with

transitions, I examined teachers' perceptions of their implementation of SCL strategies and recommended strategies that should be adopted to support students' learning in the Northeastern United States. Schlossberg's 4 S's model was particularly useful in presenting the stages that middle school teachers should undergo to enhance their readiness to accept and implement SCL strategies in their classrooms.

Nature of the Study

The focus of this study was to examine teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently to support students' learning in Seasons Middle School, located in the Northeastern United States. Those invited were educators of various grade levels who worked in middle schools for the past 5 years. I chose the educators based on purposive sampling to arrive at the desired sample. According to Etikan, Musa, and Alkassim (2016), purposive sampling, which is also referred to as judgment sampling, involves the deliberate selection of participants based on their qualities. As a result, I used this nonrandom approach to obtain a sample that met the inclusion criteria, such as being a middle school teacher with at least 5 years of teaching experience. Such an experience was important to obtain comprehensive information related to teachers' perceptions of their implementation of SCL strategies to support students' learning in their schools. New teachers were not suitable as they have limited practical knowledge of SCL implementation. As a result, the admission of experienced middle school educators into the study was essential to generate valid data addressing the research problem.

Definitions

The following terms were defined to help the reader understand their meanings in the study:

Blended learning: An educational experience that uses a combination of in-person and online interactions (Zimmer, 2019).

Flipped learning: A process of learning in which students listen or watch videos or other digital content of lectures outside of the classroom and engage in various activities such as completing assignments in the classroom (Cho & Kim, 2019).

Project-based learning: A constructivist-based approach in which students engage in using projects in active learning (Meyer & Wurdinger, 2016).

Student-centered learning: An approach in which students' needs and learning goals are the primary focus of the educational process (Gounari, 2016).

Assumptions

An assumption in this study was that all the participants would answer the questions honestly and thoroughly during the interviews. Participants would be able to withdraw from the study at any time, with their confidentiality preserved. Besides, I assumed that the data in the study may help to bring about positive social change in the use of SCL strategies to support students' learning. After exploring middle school teachers' perceptions of the barriers that prevent SCL strategies to support students' learning, I assumed that I would be able to propose suitable interventions to foster the adoption of such strategies. I also assumed that the expected outcomes would improve educators' motivation and awareness of SCL strategies, leading to better implementation

for optimal students' learning and development of skills necessary for socioeconomic progress. Thus, resulting in transformations that would be vital to attaining positive social change aligned with the evolving world.

Scope and Delimitations

My initial plan was to conduct my study in a middle school in the Northeastern United States, which would limit the scope of the study. Due to a lack of response from the middle school accountability administrator to conduct my study and the presence of a pandemic, I had to venture into other avenues to recruit participants for my study. I got approval from the institutional review board (IRB) to use various methods to recruit participants for my study, such as social media, referrals, using district websites, and emails. I endeavored to do so. The study was no longer delimitated to 12 teachers from Seasons Middle School in the Northeastern United States as a representative sample of middle school educators from other parts of the country. It made my study more generalizable to educators who teach other K-12 schools in the United States and internationally. The teachers met the desired criteria, including a teaching experience of at least 5 years and an instructor of middle school students.

Qualitative studies usually present a significant challenge related to the generalizability of results. This view is supported by Carminati (2018), who posited that generalizability is a controversial concept in qualitative research due to the dominant positivist perspective, which gives generalizability a quantitative meaning. Nonetheless, Carminati indicated that generalizability in qualitative studies emphasizes the researcher's evaluation and understanding of circumstances instead of the gathering of

representative data. Based on such a perspective, the analysis of middle school teachers' perceptions of their implementation of SCL strategies to support students' learning yielded critical data indicating SCL implementation trends, which can be generalized to other K-12 schools in the United States and around the globe. The information obtained from data analysis was important in demonstrating patterns prevalent in middle school teachers' perceptions of their implementation of SCL strategies to support students' learning. Based on Carminati's view, the generalizability of qualitative research depends on the evaluation and comprehension of the study circumstances.

Limitations

I collected data for the study by conducting interviews only, which limited the triangulation of data. According to Creswell and Poth (2018), gaining access to research sites and obtaining participants for the study could be relatively challenging. The researcher's ability to build trust and credibility could pose a challenge (Creswell & Poth, 2018). Furthermore, participants may be fearful that what they discuss with the interviewer could be divulged outside of their educational institutions (Creswell & Poth, 2018). A potential factor affecting data collection was the availability of potential interviewees. However, participants were available when I conducted the interviews because most teachers were on vacation during that time.

Moreover, Creswell and Poth (2018) emphasized that interviewing participants to understand their experiences requires patience and the researcher's ability. Additionally, as a teacher who uses SCL strategies, I may intentionally and unintentionally brought some biases as there was a risk that I could bring biases from my teaching and workplace

experience to the data collection. I took notes of my possible biases that could influence any aspect of the study and remained objective as the interviewees shared their experiences. I remained impartial to participants' responses by understanding that they may be responding based on what they think that I would like to hear. I was also careful in structuring my follow up questions to ensure that the interviewees answered the research questions based on their experiences and not what I wanted them to share. Consequently, another possible factor affecting data collection was the availability of potential interviewees.

Significance

In this study, I focused specifically on exploring middle school teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently to support students' learning. Teachers in Seasons Middle school must use various SCL strategies to support students' learning. They must create SCL environments that foster individual student's engagement and positive academic outcomes (New York State Education Department, 2019). Consequently, SCL strategies are a vital part of teachers' evaluation.

The results of this research study may bring about positive social change by proposing the strategies required to enhance the widespread adoption of SCL to facilitate students' acquisition of knowledge and skills for optimal participation in socioeconomic development in the evolving, competitive world. This information is essential in determining the techniques necessary to enhance students' optimal learning and development of vital skills and knowledge to address emerging economic and social

problems. These views demonstrate that education is an integral instrument of positive social change, thus indicating the need to improve its delivery based on the needs and trends of the 21st century.

According to Esahaque (2017), education is the most effective and powerful tool for positive social change and development. It enhances social reform, progress, promotes social mobility, industrialization, rural development, and urbanization through vocational training and disseminating knowledge and skills to citizens (Esahaque, 2017). These perspectives indicated the need for effective educational programs aligned with students' needs to enhance the cultivation of the skills and competencies necessary for societal progress in the ever-evolving world. As a result, the results of this study may bring about positive social change. Such an outcome hopefully promotes students' learning to ensure their optimal participation in socioeconomic development.

Moreover, support, professional development, and different approaches may assist teachers in middle schools to implement student-centered pedagogy more effectively. According to Bright et al. (2016), when students are engaged in SCL activities, they are more productive in learning the content because of their interest and motivation in the assigned task. Students also increase in their academic achievement and obtain the necessary skills to prepare them for the workplace (Lee & Hannafin, 2016). Besides, teachers identified the areas of concern that should be addressed with the view of enabling teachers to integrate SCL strategies into their classroom activities.

Summary

This study focused on examining middle school teachers' perceptions of the

barriers that prevent SCL strategies from being implemented consistently to support students' learning. Seasons Middle School implemented SCL strategies since 2014 to support students' learning, and limited progress occurred in supporting students' learning. As a result, I attempted to identify the strategies teachers need to use to support students' learning. Research suggests that SCL strategies support students' learning and enhance students' academic performance. This study may bring about positive social change and serve multiple stakeholders, such as school administrators, teachers, and students.

Chapter 2 is a comprehensive review of the literature on SCL strategies to support students' learning. In Chapter 2, the literature review outlines four main theories behaviorism, cognitivism, and constructivism, and social learning, which describe how learning takes place, followed by the influence of learning theories on teaching strategies. Further discussed is the positive impact of the constructivists' perspectives on SCL strategies to support students' learning. Moreover, listed in the literature review are the benefits of SCL strategies, which positively support students' learning in different educational settings. Other areas addressed in Chapter 2 include teaching strategies, teachers' role in supporting student-centered strategies, challenges in SCL implementation, and teachers' motivation and resistance to change. Chapter 3 includes the research design, the researcher's role, the methodology, instrumentation, and issues of trustworthiness. The research design expounds on the need for conducting a qualitative research study to understand the problem. The researcher's role highlights the possible biases that I brought to the research study and the steps I used to ensure trustworthiness.

Chapter 2: Literature Review

The problem addressed in this study is that teachers are experiencing barriers in implementing SCL strategies consistently to support students' learning in Seasons Middle School located in the Northeastern United States. Relevant studies with generalizable results were selected for an extensive analysis. According to Costes-Onishi and Caleon (2016), teachers expressed their interest in participating in research studies in which they could voice their concerns to receive the appropriate continuous professional development for implementing SCL strategies. Hall and Miro (2016) further stated that implementing SCL strategies is challenging for teachers and understanding their experiences would assist in providing them with the appropriate professional development. Walkington and Bernacki (2018) emphasized that teachers play a critical role in promoting relevance to students, so future research should examine the best way to prepare teachers to personalize students' learning.

In this chapter, the focused sections are on the learning theories, teaching strategies, historical background of the constructivist theory, the impact of the constructivist theory on SCL strategies, benefits of SCL strategies, various SCL strategies, teachers' role in supporting SCL strategies, and challenges for implementing SCL strategies. However, there are many studies discussed in this chapter to support the effectiveness of the use of SCL strategies to support students' learning.

Literature Search Strategy

The databases and resources used included Walden University, Library Google Scholar, ERIC, Thoreau, Sage, EBSCOhost, and ProQuest. The following keywords included in the literature search were *student-centered learning*, *Schlossberg's* transitional theory, constructivism, and teacher motivation.

Conceptual Framework

Teachers tend to demonstrate a high level of anxiety as their roles change from facilitators of students' learning to implementers of SCL approaches to encourage students to take a proactive role in their learning (Murphy, Abu-Tineh, Calder, & Mansour, 2019). I used Schlossberg's transitional theory to understand teachers' reactions to the changes from using a traditional approach to students' learning to using SCL strategies to support students' learning. According to Schlossberg (2011), it is critical to support any individual going through a change to ensure success during the process.

The transitional theory covered various types of transitions, which was considered when exploring middle school teachers' perceptions of their implementation of SCL strategies. According to Patton, Renn, Guido, and Quaye (2016), transitions may be anticipated, indicating that they occur predictably. Transitions may also be unanticipated, which implies that they are not scheduled or predictable (Patton et al., 2016). Transitions may also be nonevents, implying that they are expected but fail to occur, such as the failure to graduate (Patton et al., 2016). In the context of SCL implementation, the transition fell in the anticipated category, thus suggesting that teachers were expected to change their instructional strategies with the view of promoting students' learning.

Despite its predictable nature, the SCL strategy's adoption was a major transition that required middle school teachers' adequate preparation to ensure effective SCL

implementation for improved students' performance. Consequently, the examination of the elements of Schlossberg's 4S's model was necessary to identify the specific stages that middle school teachers should go through to ensure optimal implementation of SCL strategies.

Schlossberg (2011) presented the *situation*, *self*, *support*, and *strategies* as the 4 S's model of the transitional theory, which covers critical areas related to coping with change. These 4 S's model was the lens through which I interpreted teachers' inconsistency to implement SCL strategies to support students' learning. According to Schlossberg, transitions take time, and the process of taking on different roles may take time. Some individuals may adjust relatively quickly, while others may take time. Schlossberg also describes the situation as what a person may be experiencing at the time of transition. It also has an impact on that individual during the process of change.

Self is another factor to consider during the process of change. Schlossberg (2011) indicated that a person's sense of resilience or inner strength for coping with the situation and having a sense of optimism are essential components to dealing with change. The individual with the least stress is more likely to cope with the change, and the person's attitude (Schlossberg, 2011). Support is another element to consider during a transitional period. Schlossberg stressed that for a person to go through change confidently, it is critical to provide adequate support at the time of transition because without the support needed, the adjustment tends to be slow. Schlossberg also recommended professional associations as a means of support or other support groups. The explored elements of Schlossberg's (2011) model are essential in identifying the key

areas that teachers must address to foster the consistent implementation of SCL strategies. The failure to address issues related to the situation, self, support, and strategies may undermine teachers' capacity to adopt and implement SCL strategies consistently.

The other part of the model for coping with transitions is strategies. Schlossberg (2011) highlighted that there is no one coping strategy to deal with change. However, Schlossberg suggested that using different strategies would provide a better coping mechanism for change. For instance, if the situation cannot change, it would be better to change how the individual looks at the change. Additionally, Schlossberg indicated that changing the way to look at the situation may make it less stressful. According to Schlossberg, before implementing change, the person involved in the change must figure out if delaying the change is the most suitable thing to do or if there is adequate support to implement the change. Teachers' capacity to cope with educational system changes is critical in mitigating stress while fostering timely reforms for meaningful outcomes.

Based on such an understanding, the perceptions of barriers to SCL implementation were explored with the view of generating extensive information that educators can use to facilitate consistent SCL implementation to improve students' learning.

The transitional model was also central to exploring the changes necessary to achieve effective SCL implementation. Schlossberg (2011) indicated that a transitional model is an effective tool that provides structure and helps analyze any process of transition. It is essential to evaluate the available resources to support the change (Schlossberg, 2011). Patton et al. (2016) suggested that strategies and coping responses

to change may alter the situation, those that control the meaning attached to the problem, and those that aid in managing the stress linked to the transition. Hence, Schlossberg placed great emphasis on the 4S's model as the essential resources necessary to go through any transitional period. However, it is critical to understand that transitions are not to be instantaneous; time is needed, as well as a good perspective that the misery of the change cannot last forever (Schlossberg, 2011).

Literature Review Related to Key Concepts and Variables

Learning Theories

Learning is a complex process, and to understand its complexity, many research-based descriptions help to clarify how knowledge is acquired, and the skills and competencies needed to make learning possible (Eryaman & Genc, 2010). Clark (2018) defined learning as knowledge gained through study, teaching, instruction, or experience. The theorists' beliefs on the acquisition of knowledge determine the meaning of learning. As a result, multiple theories developed, which influence the roles that teachers play and instructional methods that they use in their classrooms (Clark, 2018). The exploration of learning theories is important to generate ideas related to teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently to support students' learning.

Behaviorism, cognitivism, constructivism, and social learning theory are some of the major categories of how people learn (Eryaman & Genc, 2010). Behaviorism views learning as being affected by environmental factors, cognitivism views learning as a mental organization of knowledge, and constructivism views learning as an individual

actively involved in constructing new ideas based on experience (Eryaman & Genc. 2010). Bandura's (1977) social learning theory indicated that behavior is developed through observational learning in an environment where the mediation occurs between stimuli and responses. Additionally, Ponticell (2006) described that behaviorists believe that learning is affected by environmental stimuli; as a result, the behaviorist theory has influenced the instructional methods that teachers use in the classroom. For instance, teachers provide positive reinforcement to students because of the behaviorist theory that creating a positive environment increases the likelihood of learning to occur. Clark (2018) stated that cognitivism deals with the mind and how it obtains, stores, and processes information. According to Clark, the cognitivist approach emphasizes learning, instruction, and memory, so what students learn must be meaningful to help them organize the new information with their prior knowledge. When the learner can store newly acquired information in an organized and meaningful manner, learning has taken place (Clark, 2018). The constructivist learning theory focuses on the learner as being an active agent in which the learner makes connections with new and existing knowledge (Ponticell, 2006). Social learning theory, which is another learning theory, centers on how people learn from one another by observing (Kretchmar, 2018; Ponticell, 2006). Thus, the extensive examination of the impact of constructivists' perspectives on SCL strategies is essential to support the study. Consequently, as explored above, behaviorism, cognitivism, constructivism, and social learning are the four fundamental perspectives underlying students' learning. Although they are all vital in guiding instructional and learning activities, the constructivist perspective aligns closely with

student-centered learning. As a result, it provides the foundation for exploring teachers' perceptions of the barriers shaping the consistent implementation of SCL strategies.

The Impact of Constructivists' Perspective on Student-Centered Learning

The constructivist theory, which focused on how students learn, incited relevant discussions and impacted a great interest in SCL strategies. According to Dewey (1916), students should not be compelled to produce behaviors as machine-like skills as such a process may undermine crucial qualities, including alert observation and coherent planning, which make learning intellectually rewarding. Additionally, Dewey's contributions to the constructivist model indicate the need to create learning settings that promote observational learning to ensure knowledge construction. Dewey argued that the prescription of directions limits observation and memory. This view shows that conventional direct teaching has a shortcoming as it hinders students' active exploration of knowledge through observation. According to Dewey, teachers can instigate learning by providing conditions that stimulate thinking. Moreover, Lev Vygotsky contributed to the constructivism model by indicating the role of social interactions in knowledge development. Based on his social constructivist approach, Vygotsky (1978) proposed the necessity to create opportunities for students to learn from more skilled peers and teachers. The constructivist theory presents essential information that teachers must consider to ensure the effective implementation of student-centered learning. As mentioned above, instructional approaches that foster observational learning besides stimulating thinking are vital in promoting student-centered learning.

The various groups of constructivists such as Vygotsky, Dewey, and Piaget

contributed to the debate on strategies to support students' learning and generated different models of learning (Prawat, 2008). Constructivists' core beliefs center on teachers' practice and how the dissemination of knowledge transpires in the classroom (Prawat, 2008). According to Prawat (2008), some constructivists emphasized that the curriculum should be problem-based, and others indicated that the curriculum should interest students. In a study consisting of 60 students in a senior secondary school in Nathupur, Sonipat, a quasi-experimental pretest and posttest design were applied to evaluate the effectiveness of the constructivist method on students' academic achievement (see Prawat, 2008). According to Dev (2016), the constructivist approach enhanced the academic performance and problem-solving ability of the students. Dev emphasized that in education presently, the constructivist style of teaching, which is a more student-centered approach to teaching, is quickly becoming an alternative to the traditional method of teaching. The student-centered approach to teaching reinforces a higher level of literacy, problem-solving skills, and students are more intrinsically motivated to be a part of their education (Dev. 2016). In the traditional classroom, the teacher controls and disseminates the knowledge in a teacher-directed format for students to understand. On the other hand, in a constructivist classroom, students are actively engaged in organizing the information, they conduct investigations, monitor their learning, and the teacher acts as a support for students (Dev. 2016). The constructivist perspective underscores students' critical role in guiding their own learning processes. This strategy is essential to minimize the teacher-directed instructional procedures, which tend to encourage passive learning among students. Hence, the examination of issues

related to the consistent implementation of SCL strategies is critical to encourage students' active engagement in activities designed to enhance knowledge construction.

According to Al Chibani and Hajal (2017), in constructivism education theories, the learners are actively involved in the learning process, and they do not acquire knowledge verbatim from the teacher. The new teaching approaches, which, in the case of this study, are the use of SCL strategies, are to support students' learning. Students gain their knowledge by engaging in activities (Al Chibani & Hajal, 2017). The constructivists believe that teachers should create a classroom environment in which students develop their higher-level thinking skills by learning to analyze, predict, moderate, and preserve their ideas (Al Chibani & Hajal, 2017). DeVries (2008) emphasized that constructivist teachers make a concerted effort to actively involve students in their learning instead of making them passive learners. In a constructivist teacher's classroom, children engage in making decisions on classroom procedures, curriculum, solving problems, and participate in many other aspects of their learning.

SCL is closely related to constructivism as it promotes students' active engagement in knowledge development. Constructivism's main idea involves the view that knowledge is developed based on previous learning (McHaney, Reiter, & Reychav, 2018). As a result, it suggests that prior knowledge shapes individuals' new learning experiences (McHaney et al., 2018). Additionally, it rejects the traditional perspective of learning, which considers the student as a passive recipient of knowledge rather than an active participant in the learning process. These details demonstrate a strong relationship between students' experiences, the learning process, and the development of new

knowledge, indicating the need for their engagement in the learning process (McHaney et al., 2018). However, SCL goes beyond the constructivist approach by incorporating instructional approaches, support systems, and educational programs designed to address students' diverse learning needs, interests, and goals (see McHaney et al., 2018). For instance, it incorporates various SCL strategies, which are covered in the subsequent parts of this literature review, to foster students' optimal learning.

Benefits of Student-Centered Learning Strategies

In a student-centered classroom, the teacher allows the learners to take more responsibility for their learning by engaging them in developing classroom activities and setting their learning goals (Tomlinson, 2015). The teacher builds bridges between the students' homes and school, respectfully embraces every culture, demonstrates confidence in each child, and knows how to assist students in making progress (Tomlinson, 2015). In an SCL classroom, students are no longer recipients of information but are involved in setting goals and making decisions in the learning process (Lee & Hannafin, 2016). Furthermore, teachers play the important role of facilitators rather than the sole source of information. In such a situation, students engage in a discovery process, which allows them to explore and develop knowledge aligned with their goals and objectives.

SCL strategies incorporate the constructivist principles, which focus on students as being active participants of their learning. The constructivist approach focuses on student-centered learning, which supports the idea that the more involved that students are in their education, the better they comprehend what they are learning (Asiksoy &

Ozdamli, 2017). SCL activities enable students to take control of their learning and develop problem-solving, collaborative, and higher thinking skills (Worthington, 2018). In view of that, teachers should focus on promoting a sense of responsibility among students with the objective of encouraging them to take charge over their learning activities. The process requires continuous collaboration and participation in learning activities that foster students' development of critical and creative thinking skills.

In the SCL environment, students clearly understand the subject and make connections with what they already know and what they are currently learning (Otara, Uworwabayeho, Nzabalirwa, & Kayisenga, 2019). Kang and Keinonen (2018) investigated the impact of SCL activities to teach science to Finnish students and concluded that students' interest and achievement in science increased. Kang and Keinonen suggested that it is important to understand teachers' perceptions of SCL approaches to support students' learning in other countries and to do more research on the use of SCL strategies to improve students' performance in science.

SCL makes students' role in the learning process a priority. The teacher and the student exchange knowledge, and the dynamics in the classroom are more focused on the student (Ward, 2016). Students no longer sit passively and listen to the teacher disseminate knowledge, as depicted in a traditional classroom; they come with their experiences to construct and make sense of what they are learning (Ward, 2016). According to Jaiswal (2019), SCL approaches take students' learning styles, skills, interests, and needs into consideration. Twenty-six students who studied at the University of Bahrain participated in a study using SCL instructional approaches to

determine the effects on developing mastery in learning vocabulary (see Jaiswal, 2019). Before using the student-centered learning approaches, students received a pretest. The results indicated that student-centered learning approaches were effective in helping students retain vocabulary knowledge (see Jaiswal, 2019). While classroom activities incorporate knowledge exchange between teachers and students, the focus should be on students to ensure their optimal learning. The adoption of a student-centered learning plays a critical role in making academic programs more meaningful and interesting to students, thence promoting their overall achievement.

Currently, educating students to enhance their social skills is more important than before (Trester, 2019). Social skills are essential in ensuring students' healthier interactions in their lives. Such skills are also vital for their optimal functioning in society, including effective communication, interpersonal relationships, and expressing concern for others (Deming, 2017). Students should obtain a student-centered experience, which can prepare them to become productive citizens (Trester, 2019). Jacobs and Power (2016) stressed that in an SCL classroom, students benefit from making decisions, and they have more autonomy in how they approach learning. It is necessary to teach students to understand the message that the author is conveying in the text, which is an integral part of teaching literacy (Moon, Wold, & Francom, 2017). According to Moon et al. (2017), in a research study in which university candidates facilitated student-centered activities to improve fifth-grade students' reading comprehension, findings indicated that the students' reading achievement scores increased significantly with the use of the SCL instructional approaches. The use of

technological devices in an SCL environment contributed tremendously to the improvement in students' reading skills.

In another study conducted in a medical facility in a university in Barbados, there were various SCL strategies used to support the learning of anatomy education after moving away from the teacher-directed approach. According to Singh, Bharatha, Sa, Adams, and Majumder (2019), students received a pretest and posttest. The study revealed that students showed significant gains after the use of SCL strategies. Singh et al. recommended that SCL be used to continue to teach anatomy to medical students. Overall, instructors indicate that SCL strategies help students to better understand the material they learned, think critically, and make more real-life practical applications (Brigati, England, & Schussler, 2019). These details support the need for an extensive examination of teachers' perceptions of their implementation of SCL strategies to support students' learning.

Based on the information explored above, SCL is an integral aspect of effective classroom practices aimed at promoting students' learning. The method indicated a significant potential in addressing learning needs at the selected school. Nonetheless, to develop a deeper understanding of SCL's significance in today's educational settings, different teaching strategies are examined below.

Teaching Strategies

According to Salkind (2008), teachers follow a set of procedures known as strategies, and many factors determine the strategies that teachers use to educate students.

Teachers must rethink and reflect on the instructional strategies that they use to promote

students' learning since reflecting is where the teacher evaluates different aspects to improve instructional practice (Enríquez, de Oliveira, & Valencia, 2018). In a qualitative study, teachers were observed using teaching SCL strategies in the teaching of mathematics to support students' learning. The results indicated the importance of using teaching strategies such as group work to promote the teaching of mathematics. There is a need for innovative teaching approaches since students today have different skills and expectations when compared to the past. It is difficult to captivate students' interest by using traditional teaching approaches (Cevikbas & Argün, 2017).

Based on the research conducted on learning, teaching strategies are now grouped into two categories: instructor-centered and student-centered (Salkind, 2008). The constructivist learning theory takes on a more student-centered and problem-based learning approach to learning, which enables students to engage in cognitive processes involving comprehending, analyzing, creating, elaborating, reflecting, critiquing, and reorganizing knowledge (Eryaman & Genc, 2010). The strategies that teachers use have an impact on students' learning. As a result, teachers need to align the instructional styles and strategies that they use to optimize students' learning (Lear, Bridges, Van Horn, & Hodge, 2019). When teachers engage students in SCL strategies, which were developed from the constructivist view, students become co-constructors of their knowledge, and they learn by engaging in experiential interactions (Salkind, 2008).

There are many different SCL strategies that teachers can use in their classrooms to enhance students' learning. The flipped classroom is an SCL strategy in which the classroom is not the only learning environment for the learner. Students' learning

becomes more flexible, individualized, and teachers provide students with resources and act as guides (Ocak, Ocak, & Boyraz, 2017). Blended learning is a learning strategy, which consists of the use of computers and in-person learning experiences (Bhowmik, Meyer, & Phillips, 2019). Cooperative learning is an effective SCL strategy, which can help 21st-century graduates to become job creators instead of job seekers by enhancing their critical thinking skills (Chen, 2018). Problem-Based Learning is an SCL strategy in which the teacher poses a problem, and a discussion ensues, followed by the teacher's instruction. Students may work individually or as a group to solve the problem (Mackey, 2016). Project-based learning is a student-centered approach in which learners participate in meaningful projects (Chiang & Lee, 2016). Personalized learning is also used to promote effective learning for a diverse student population, which refers to the strategy in which the instructional approach and learning pace are optimized to each student's needs (Xie, Chu, Hwang, & Wang, 2019).

Moreover, today's students are more technologically inclined, and the traditional approach to teaching by having students sitting in rows to listen to lectures by their teachers is ineffective (Gordy, Jones, & Bailey, 2018). Students are more productive when they are actively engaged in using technology in their learning than being passive listeners (Gordy et al., 2018). Bass (2018) asserted that technology enables active learning classrooms and that students who use technology in their learning have a more favorable view of learning, and outperform students taught in a traditional classroom.

According to Nicol, Owens, Le Coze, MacIntyre, and Eastwood (2018), more SCL is necessary because of the rapid changes in technology, availability of information, and the

demand for individuals to become better consumers of knowledge.

It is essential for today's students to develop high order thinking and problem-solving solving skills, so educators must design lessons that can prepare students to practice those skills (Brown, Ernst, Clark, DeLuca, & Kelly, 2017). As a result of the integration of technology, students enhance their critical thinking skills, gain a more practical learning experience, and prepare themselves to enter the workplace (Brown et al., 2017). Muhammad, Mitova, and Wooldridge (2016) emphasized that the Net Generation students are technologically savvy, and teachers make more effort to use active learning strategies to support students' learning. However, teachers face the challenge of making learning relevant to students by implementing technology in the classroom.

Teachers' Role in Supporting Student-Centered Strategies

In today's educational environment, teacher-centered learning in which the teacher is considered the primary disseminator of information to students has drastically changed (Baeten et al., 2016). According to Krahenbuhl (2016), there has been a focus on SCL in this 21st century affecting classroom teachers. Teachers must act as facilitators, and students are encouraged to take more responsibility for their learning (Onurkan Aliusta & Özer, 2017). Teachers are to become familiar with their new role as facilitators of students' learning instead of disseminators of knowledge (Dole et al., 2016).

As the paradigm shift in teaching strategies move from teacher-directed to student-centered, teachers are faced with the challenge to shift their role in disseminating

knowledge. These changes affect teachers, and there is a need to fully understand the complexities of their changing roles (Dole et al., 2016). Teachers must create a constructivist learning environment in which students have more control over what they are learning. (Anagün, 2018). According to Anagün (2018), teaching 21st century skills necessitates a constructivist approach to teaching in which teachers understand their new roles and how to structure the learning environment to meet students' needs.

Dewey (1916) encourages the teacher to be a guide so that students could create meaning for themselves by working experientially. The role of the teacher is to support and indicate to students in a very gentle manner any problems that they may be encountering when gaining new experience. Prawat (2008) strongly encouraged teachers to use more

Besides, teachers require adequate preparation in student-centered approaches to exhibit content mastery and creativity in designing learner-centered activities (Otara et al., 2019). Teachers face the challenge of selecting the best way to engage their students (Ward, 2016). In the traditional classroom, teachers disseminate their knowledge to the students, and the teachers do everything, while the students play a passive role in their learning (Ward, 2016). In the traditional classroom, the role of the teacher is to indoctrinate students by passing on information using a textbook, reference book, lesson plans, and chalk, and talk (Xu & Shi, 2018).

SCL strategies to support students' learning.

However, in the SCL environment, teachers are co-learners and should let students see how they learn and share their failures with students. In an SCL classroom, students should not engage in activities because the teacher said to do so, but students

understand the relevance that the material has to their lives (Jacobs & Power, 2016).

Jacobs and Power (2016) further stated that teachers should encourage their students to make more decisions in assessing the success of the objectives of a lesson at the end of the class. Additionally, students should have an input in the materials used in-class activities, as well as linking class activities to their real-life. Omotayo and Adeleke (2017) posited that if teachers were not well trained to implement the constructivist-based method of teaching, students would not benefit from the learning strategies.

Acim (2018) pointed out that the teacher's role should be more of an observer and facilitator. The teacher should observe students' success after they ask the students higher-level thinking questions using the Socratic seminar (Acim, 2018). Acim (2018) stipulated that the Socratic seminar enables students to think deeply and develop analytical skills. Buchanan, Harlan, Bruce, and Edward (2016) mentioned that inquiry-based learning, which is an SCL strategy, is in helping to support students' learning. Similarly, Deci and Ryan (2016) specified that when teachers give students the autonomy to engage in their learning, they are more motivated to learn.

Student-Centered Learning Strategies in Middle School

The application of student-centered learning in middle schools received minimal coverage in prior studies to determine its influence on students' academic performance. Arseven, Sahin, and Kiliç (2016) posited that the adoption of student-centered education depended on whether the institution is a primary, middle, or high school. Additionally, the adaptation of student-centered education declined from primary school to high school (Arseven et al., 2016). Therefore, compared to middle school teachers, elementary

school educators are more likely to adopt such strategies.

Challenges in SCL Implementation

Borda et al. (2017) emphasized that the implementation of SCL has brought about many challenges for teachers. This pedagogical methodology requires a unique set of teaching skills to enable students to face the challenges that occur as a result of the instructional change (Ji-Hye, Ho Soo Kang, Kuusinen, & Kyoungho, 2017). However, some veteran teachers believe that the student-centered approach to teaching creates chaos and disruption in the classroom environment (Ndirangu, 2017). Although constructivists suggest learner-focused classrooms, it is a challenging pedagogy for some teachers (Kemp, 2013).

Researchers have argued that while there are benefits to be derived from SCL strategies, teachers encounter challenges such as inadequate teaching materials, not enough time, and multiple topics to be cover with limited time, and insufficient resources (Ramnarain & Hlatshwayo, 2018). According to Mahmood and Iqbal (2018), in a mixed-method study to explore the type of pedagogies used in the classroom, new teachers faced challenges implementing SCL strategies in their classrooms. The challenges were the lack of proper facilities, the instructional needs, students' behavior, and support from administration (Mahmood & Iqbal, 2018). Schwartz, Hinesley, Chang, and Dubinsky (2019) stressed the challenge teachers face in preparing students to meet the standardized testing demands, cover the curriculum, and implement SCL strategies, like flipped teaching, change how teaching activities occur. Teachers must devote a considerable amount of time in planning and developing video lessons (Lai, Hsiao, & Hsieh, 2018).

PBL, another SCL strategy, causes teachers to face challenges in developing prompts to lead students to engage in meaningful activities that can enhance their analytical skills (Ruslai, & Salam, 2016). A study conducted in Pakistan explored the challenges that teachers encountered in making their classrooms more student-centered. The result indicated that the participants experienced challenges in creating interactive classrooms because resources were unavailable, classrooms were overcrowded, the courses were too long with limited time, and they lacked support from the administrators.

Edwards (2017) mentioned that some teachers face logistical issues, lack of planning time, support, and the inability to hold students accountable. According to Marbach-Ad and Hunt Rietschel (2016), teachers feel vulnerable when students have control of their learning, and they are concerned about how much learning transpires. The lack of time and the pressure of standardized examinations are challenging concerns that reduce the effectiveness of student-centered learning and often force teachers to resort to direct instruction for the sake of time (Johnson Caswell & LaBrie, 2017). Although students are actively engaged in their learning, teachers must prepare daily lessons with the desired learning outcomes and ensure that students are learning (Yew & Dawood, 2016).

School administrators expect teachers to implement SCL, but the educators do the opposite due to various challenges (Onurkan Aliusta & Özer, 2017). Many teachers find it challenging to have the students take the lead in the class because the teachers lack confidence in students' abilities and insufficient knowledge to play the teachers' role. Onurkan Aliusta and Özer (2017) explained that the use of lecturing, explaining,

demonstrating, questioning, and seat work is prevalent in SCL classrooms. Onurkan Aliusta and Özer (2017) posited that teachers tend to teach how they received their training. Teachers' training should incorporate critical reflection, inquiry, collaboration, and action research.

Educators frequently misunderstand SCL, and they need to understand the benefits to influence the teaching and learning of the pedagogy (Krahenbuhl, 2016). Krahenbuhl (2016) claimed that there is still a doubt as to whether SCL is the best approach because many educators think that the constructivist theory focuses on students having fun during their learning experiences and engaging in physical activity. Furthermore, Krahenbuhl (2016) emphasized that the constructivist theory has a tremendous impact on teachers' evaluation, so teachers reluctantly use SCL strategies in their teaching.

Teachers' understanding of constructivists' thinking influences their support for teacher-focused or learner-focused strategies of teaching (Kemp, 2013). While constructivists suggested that teachers make a shift to more learner-focused classrooms, teachers who teach mathematics and science find it difficult to practice (Kemp, 2013). There needs to be a better understanding of student-centered teaching for teachers to embrace the pedagogy (Kemp, 2013).

Teachers' Motivation and Resistance to Change

The effective implementation of change is a major area of concern for 21st

Century educational leaders (Snyder, 2017). A teacher's motivation does not come from mere compliance (Arnett, 2019). According to Arnett (2019), for teachers to effect

changes in their teaching practices, they must have the right conditions to motivate them to change. Morrison (2017) emphasized the importance of change implementation in ensuring a school's ongoing success in the ever-evolving and competitive educational environment. However, educators, especially veteran teachers, tend to present unique challenges, including the greatest resistance to change (Snyder, 2017). Although some educators may readily accept positive change, through adaptability, others tend to resist change (Collie & Martin, 2016).

Teachers may be motivated to change based on their recognition of such a change as being an integral aspect of their professional development (Cohen, 2017). According to Cohen (2017), teachers must embrace the constancy of change linked to the evolving world. For instance, technological changes and policies shifts related to educational standards, tests, and accountability are some of the key factors influencing educators' acceptance of change (Cohen, 2017). These aspects require teachers to embrace change without necessarily feeling overwhelmed.

Additionally, educators are motivated to accept change due to their desire to serve as change agents (Bourn, 2016). According to Callahan (2016), the idea of making a difference in a child's life inspires teachers to promote meaningful reforms.

Consequently, teachers appreciate their important role as facilitators of change who can contribute to societal advancement by educating the youth (Callahan, 2016). As a result, teachers are motivated to change with the view of improving their practices to facilitate optimal student achievement.

The motivation to change is also linked to teachers' objective to transform their

beliefs to become more autonomous and supportive to students (Reeve & Cheon, 2016). According to Tam (2015), the educational sector is experiencing various transformations, which require teachers to adopt a collaborative culture in their practices. This implies that educators interested in attaining optimal students' performance are motivated to accept meaningful change in their schools (Tam, 2015). Tam (2015) posited that Professional Learning Communities provided teachers with an important platform to explore the need for change, thus improving their capacity to overcome their initial challenges. These views align with Callahan's (2016) argument indicating that the mentoring of new teachers to embrace change is essential to enhance their retention.

Despite the acceptance of change, some teachers tend to resist change (see Snyder, 2017). According to Valoyes-Chávez (2019), teachers' resistance to change undermines reforms in schools. For instance, teachers may be unwilling to change due to their failure to recognize the need for change (Snyder, 2017). Consequently, without an adequate understanding and appreciation of the necessity for change in their school settings, educators may fail to challenge the status quo (Morrison, 2017). Additionally, Snyder (2017) argued that teachers tend to resist change due to the increased curricular expectations linked to such transformations. For example, teachers may consider the changes as extra tasks that can negatively affect their relationships and autonomy (Snyder, 2017). Accordingly, when introducing change in schools, administrators should highlight the key benefits associated with the reforms and provide the support mechanisms needed to promote change implementation. These strategies are essential in encouraging teachers to embrace change in their instructional activities, leading to

optimal educational achievements.

Summary and Conclusions

The literature review focused on prior studies related to the challenges teachers encountered in implementing SCL strategies to support and promote students' learning. Key areas addressed include the conceptual framework in which Schlossberg's transitional theory was explored to demonstrate its relevance in examining middle school teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently to support students' learning. The model encompasses 4S's-situation, self, support, and strategies provided the basis for investigating the inconsistencies observed in teachers' implementation of SCL strategies to foster learning. Besides, core concepts, variables, and learning theories aligned with the study topic were covered. The major learning theories addressed included behaviorism, cognitivism, constructivism, and social learning theory. The impact of the constructivist perspective on SCL strategies was also addressed to explore its influence on instructional activities. The model focused on teachers' practices and how knowledge development occurred. Additionally, the benefits of SCL in supporting students' learning, teaching strategies, and teachers' motivation and resistance to change were addressed to develop a strong foundation of exploring teachers' perceptions of SCL implementation.

However, more research is needed to understand middle school teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently to support students' learning. Some of the studies explored indicated that the adoption of student-centered education decreased from primary school through middle

school to high school. The extensive examination of such a topic was essential to address the barriers hindering middle school teachers from implementing SCL effectively to enhance students' academic achievement.

Chapter 3: Research Method

The purpose of this study was to examine teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently to support students' learning in Seasons Middle School located in the Northeastern United States. I used the patterns observed in participants' responses to develop recommendations applicable to local and international schools to foster students' optimal learning. Additionally, I used purposive sampling to recruit participants from social media, referrals, district websites, and emails. The instrument used to collect data was open-ended interviews. I manually coded, categorized, and analyzed the data extensively to identify patterns existing in the participants' responses, thus generating key trends indicating how middle teachers' perceptions of their implementation of SCL influenced their use of the strategy. The remainder of this chapter covers the nature of the research, the research design, the researcher's role, methodology, participant selection, instrumentation, procedures for recruitment, participants, data collection, data analysis plan, trustworthiness, and ethical procedures.

Research Design and Rationale

A basic qualitative study design was used to address the problem related to the barriers that teachers are experiencing in implementing SCL strategies consistently in Seasons Middle School, located in the Northeastern United States. I chose a basic or interpretive qualitative design because I was seeking to uncover and interpret meaning, and my study was framed by a model or theory (see Merriam & Grenier, 2019). While all qualitative researchers are interested in understanding how people make sense of their

experiences, there are various types of qualitative research and variations in the design of a study (Merriam & Grenier, 2019). Therefore, I selected a basic qualitative study to develop an understanding of the meaning that participants make of instructional practice. The study focused on addressing the following research question: What are middle school teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently to support students' learning? Qualitative researchers collect information at the site where the participants experience the problem under investigation by viewing documents, observing behavior, or interviewing participants (Creswell & Poth, 2018). Creswell and Poth (2018) emphasized that qualitative research is suitable when a problem needs exploration and detailed understanding.

Qualitative research allows the researcher to inquire about participants' everyday activities to bring relevance to understanding their experiences (Ravitch & Carl, 2016). As a result, the adoption of a basic qualitative design was vital in facilitating data collection to explore middle school teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently to support students' learning.

Additionally, using qualitative research to investigate a problem allows the researcher to interact with the participants through dialogue, enabling the researcher to be flexible and responsive to what is occurring during the study (Ravitch & Carl, 2016). Burkholder, Cox, and Crawford (2016) noted that research designs outline the plans for answering research questions. As a result, it was pertinent that I selected the most suitable research design.

Qualitative research was suitable for this study because it is nonexperimental and

is often used to explore human behaviors and examine a study problem (see Edmonds & Kennedy, 2017). As indicated in the problem statement, this area was of a significant interest based on the barriers that teachers are experiencing in implementing SCL strategies consistently to support students' learning. The realization of this objective brings about positive social change by encouraging middle school teachers' use of SCL to promote knowledge development for socioeconomic progress.

Quantitative research is experimental and designed to infer cause and effect was not appropriate for the study (Edmonds & Kennedy, 2017). In quantitative research methods, the focus is primarily on collecting numerical data (Frey, 2018). According to Creswell (2012), when a problem or issue needs further study, qualitative inquiry is suitable. Qualitative research design identifies variables that cannot be easily measured, and it allows the researcher to obtain a detailed understanding of the issue by talking directly with people (Creswell, 2012). On the other hand, Frey (2018) pointed out that the quantitative research designs, particularly the experimental design, uses independent and dependent variables to examine the cause-and-effect relationship. Consequently, a quantitative research design is inappropriate for this study.

Thomas (2017) emphasized that a quantitative researcher focuses on variables, predicts, explains, deals with things that quantify, and does not permit the researcher to interact with participants in their natural settings to gain their experiences. Whereas, a qualitative researcher is interpretive, focuses on words, thoughts, perceptions, and is an insider interacting with the participants. This research design was suitable for this study because it best helped to understand the participants' experiences and answered the

research question.

Role of the Researcher

My role as a researcher was as an interviewer, which enabled me to closely relate with my participants, the setting, and my data analysis. Additionally, I was a middle school teacher in mathematics and science and used SCL strategies to facilitate students' learning. I sought to create a positive social change in the use of SCL strategies to support students' learning. According to Burkholder et al. (2016), the researcher serves as the primary instrument for collecting qualitative data collection when conducting a qualitative study. This study was crucial as it presented data about the inconsistent implementation of SCL strategies in middle schools. Additionally, it generated information covering middle school teachers' implementation of SCL strategies to improve students' learning. As a result, the study contributed important information to the body of knowledge related to instructional approaches that educators should implement to promote students' active participation in knowledge construction.

As a researcher, I was also cognizant of the bias and positionality represented by my affiliations. I sought to mitigate these through my interpretations and influence that I brought to the research process. I mitigated these biases by asking objective questions, which allowed interviewees to respond exhaustively to the questions posed. I avoided bias by reevaluating respondents' impressions continuously and challenging preexisting hypotheses and assumptions to ensure valid responses. I informed the participants about the purpose of the study and assured them of the confidentiality and anonymity of the process.

Furthermore, I carefully reviewed my analysis to ensure that the information came from the data and not from my predispositions. During my data collection, I tried to make my field notes and memos as factual as possible to avoid my personal opinions.

According to Ravitch and Carl (2016), in qualitative research, the researcher needs to use reflexivity by assessing any subjectivity because it plays an integral role throughout the research process. Consequently, it was imperative as a researcher to be reflective so that I could uncover any prejudices or biases during the research process.

Methodology

Keeping the focus on understanding middle teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently to support students' learning should be consistent with Merriam and Grenier (2019), who stated that understanding and exploring people's experiences in their environment are the main interests of qualitative researchers. Creswell and Poth (2018) emphasized that qualitative research gives details to complex issues by talking directly to the study participants.

Ravitch and Carl (2016) further stated that in a qualitative study, interviews provide an opportunity to gain deep insights into people's experiences, hence addressing a study problem. Moreover, qualitative approach was preferred for this study to facilitate that gathering of extensive information addressing the research topic. The method led to meaningful interactions with study participants to obtain data about their perceptions of the barriers that undermine the consistent implementation of SCL strategies to improve students' learning.

Furthermore, a basic qualitative study examines participants' experiences in their

real-life context, which gives a clearer understanding of their attributes (Burkholder et al., 2016; Yin, 2017). As mentioned previously, a basic qualitative design is derived from constructionism, and it focuses on examining people's experiences. In this basic qualitative study, I interviewed 15 teachers from different middle schools in the United States.

Participant Selection

My plans to work with a participating district to recruit participants who met the study's criteria changed due to the pandemic. Etikan et al. (2016) noted that purposive sampling entails selecting respondents depending on their qualities. The methods used to identify participants who met the inclusion criteria were being a middle school teacher with a teaching experience of at least 5 years. The recruitment resulted in too few participants, so I recruited participants through social media, referrals, emails, and school districts' websites. The teachers were familiar with SCL instructional approaches due to their lengthy teaching experience in various academic subjects and grades. According to Creswell (2012), it is pertinent that all participants have adequate knowledge of the issue under study. At least 5 years using SCL strategies gave the participants enough experience to participate in the study. A sample of 10 -15 participants was adequate to ensure the comprehensive coverage of the research topic. I had a sample of 15 participants. A smaller sample of six or four participants may not provide adequate data for generalization (see Creswell, 2012). The sample of 15 participants was selected based on purposive sampling and the criteria mentioned above. The areas they taught did not matter as SCL can be applied across all subjects. As a result, the selected teachers

responded to relevant interview questions related to their experiences and perceptions of SCL strategies and barriers linked to their implementation.

Teachers' choice with such an experience was based on the rationale of obtaining responses from educators with practical experience and knowledge related to SCL strategies. Although new teachers might be more exposed to SCL in their training programs, their knowledge would be primarily theoretical. As a result, they lacked the hands-on experience necessary to determine their perceptions of SCL implementation to foster students' learning and were not eligible for the study.

Instrumentation

When conducting research that has a substantial impact, the research should be one of high quality, and the research findings must accurately represent the phenomenon under study (Burkholder et al., 2016). I used an interview guide or script to explain the protocols for the interview (see Appendix A). The script that I used included the reason or purpose for the study, an introduction, and a thank you note for the interviewees for participating in the study. The interview guide helped to ensure that the interview format was consistent for all the interviewees.

I used a semistructured interview with nine open-ended interview questions (see Appendix B) that I created. The interviews lasted for no more than 30 minutes. I used the app Temi consistently throughout to audio record and transcribe the interviews. I organized, analyzed, and managed the data meaningfully during the process of coding. I established the interview questions' content validity by using a panel of experts on the research topic (see Appendix C). For instance, one of the interview questions required

participants to explain the barriers that they faced in implementing student-centered learning strategies. Consequently, participants' responses were useful in demonstrating their perceptions of the barriers that prevent SCL strategies from being implemented consistently to support students' learning.

Procedures for Recruitment, Participation, and Data Collection

After receiving approval from the Institutional Review Board (IRB), I looked at school districts' websites, sent emails, and used social media to recruit my participants. Other participants came from referrals from my learning community and personal network. I sent a letter of invitation and a recruitment flyer approved by IRB to the potential interviewees, including the criteria and other guidelines (see Appendix D). The invitation and flyer clearly indicated the study's criteria, so the potential participants could determine whether they were qualified to participate in the study. Furthermore, the invitation email and flyer included a brief description and explanation of the study.

I received text messages and phone calls from participants indicating that they were interested in participating in the study. I answered all questions that the participants had and emailed the prospective interviewees the consent form. I sent a follow-up email to all participants who indicated they were willing to participate in the study, thanked them for their willingness to participate in the study, and indicated that if they were interested in participating, they should carefully read the content of the Informed consent form, and email me the words "I consent". Participants were given the option to interview at times convenient for them, which means that they were free to suggest their availability.

Interviewees' names were replaced by pseudonyms to maintain confidentiality, and I did not identify the participants' names at any point in the study. The setting for the interviews was through virtual methods and telephone interviews due to the Coronavirus pandemic. According to Birt, Scott, Cavers, Campbell, and Walter (2016), member checking, which is also referred to as participant validation, is an important strategy for examining the credibility of study results. The technique involves returning the data to respondents to check its accuracy and alignment with their experiences (Birt et al., 2016). As a result, returning the analysis of the study to the participants for verification was vital in ascertaining the appropriateness of their responses in addressing the research question.

Data Analysis Plan

I used thematic analysis, which generated relevant findings from the study. I familiarized myself with the data by reading the interview transcripts and reflecting on the participants' responses. I recorded pertinent information discussed by the participants during the interview process and aligned them with Schlossberg's transitional theory, the 4S's. I used the app Temi to audio record and transcribe the interviews, and I manually coded, categorized, and formed themes based on participants' statements on the codes during the interviews.

During the coding process, I went through three stages. The first stage was to code using a priori codes. I used the 4S's, *situation, self, support*, and *strategies* to develop the initial codes. The second stage was axial coding, in which I came up with labels for the codes. I grouped similar codes and labeled them according to the relationship or meaning. I used selective coding, which was the core of forming

categories and identifying the themes. I ensured that the themes contained all the essential details to represent the data and analyzed the themes by summarizing the codes' meanings. According to Rubin and Rubin (2012), coding is a critical process to allow the interviewer to recall relevant information during the interview.

Trustworthiness

According to Ravitch and Carl (2016), researchers must assure the readers that the research findings reflect the participants' experiences, so qualitative researchers must adhere to specific standards that the quantitative researchers do not have to follow to assess validity. Therefore, when conducting qualitative research, the research must be one of high quality in which the researcher considers indicators that accurately represent the phenomenon being studied (Burkholder et al., 2016). I ensured that I achieved rigor when conducting my qualitative research to be considered substantial by integrating credibility, transferability, dependability, and confirmability. According to Ravitch and Carl (2016), these are the four main criteria to ensure validity when conducting qualitative research.

I established credibility by using member checking and triangulation to develop my themes. The qualitative researcher could use triangulation in different forms to ensure credibility and member checking (Ellis, 2019). I gave the interviewees an opportunity to ask questions, and to clarify anything that was said during the interview process. I also allowed the interviewees to ask questions and clarify anything that was said during the interview process.

Transferability is referred to as external validity or generalizability (Ravitch &

Carl, 2016). I established transferability by connecting my methods and analysis to theory and generating a detailed description of my study's findings to provide readers with the opportunities to connect the findings to a broader context. By positioning the study within the body of literature, my research could enhance the student-centered pedagogy to bring about positive social change in optimizing students' academic performance.

Dependability is another validity criterion similar to reliability used in quantitative research (Ravitch & Carl, 2016). I established dependability by developing a substantial research design, which was fundamental to achieving dependability, as suggested by (Ravitch & Carl, 2016). By following the procedures stipulated by IRB in my research study and paying careful attention to prevent data discrepancies, I attained dependability in my research.

Confirmability is associated with quantitative objectivity (Ravitch & Carl, 2016). I established confirmability by using peer debriefing with two of my fellow doctoral students. I looked for specific feedback to confirm that the inferences that I drew from my data were valid as I did my data analysis. As a researcher, I kept a detailed record of how the data were collected and included the details in the research so that the readers could check for confirmability. According to Ellis (2019), confirmability is being established when a researcher has details in the research. I satisfied the confirmability criterion since other readers confirmed the data in my research.

Ethical Procedures

Researchers need to be aware of ethical issues that are proper and improper when

conducting a scientific inquiry and guard against the dangers that could psychologically harm the participants (Babbie, 2017). Ravitch and Carl (2016) emphasized that researchers must consider the roles that they play during the research process by being humble and knowing that a good researcher works collaboratively and relationally. I ensured that I followed Walden's Institutional Review Board (IRB) guidelines so that the participants received information about the study's procedures and their rights.

Before scheduling the interviews, I emailed the consent form to the participants, and they emailed the Informed Consent Form by stating, "I consent". Before I conducted the interviews, I informed the participants that they would be audio-recorded, and they had the right to withdraw from the study at any time. These assurances enhanced their comfort and willingness to participate in the interviews. I maintained the confidentiality of all the participants, so their affiliation to any organization was not divulged.

I also conducted interviews in a private home office with locked doors, and no distractions. Additionally, they had the right to withdraw from the study without facing any penalties. Ethical research requires the researcher to discover and address subjectivities during the research process (Ravitch & Carl, 2016). Creswell and Poth (2018) indicated that the researcher must be aware of situations when recording could be intrusive. Hence, the participants were aware that I would take all the necessary measures to maintain confidentiality.

After the interviews, I immediately transcribed the interviews using the app Temi and saved the transcripts on my hard drive, which is password protected. No one else had access to the participants' transcripts. I ensured that I encrypted and used a password to

protect all digital information. Furthermore, all information used to complete my dissertation would be stored for 5 years in a secured location. After 5 years, I will delete all digital files and shred all the hard copies.

Summary

The goal of Chapter 3 was to outline the steps that were taken to answer the research question. A comprehensive view of the research design, methodology, procedures, participants, data collection, issues of trustworthiness, ethical issues, and other specifics of how the study was conducted were discussed in this chapter. A qualitative methodology was used to help establish a theory on the research question. The participants selected contributed to developing a theory on teachers' perceptions of their implementation of SCL strategies to support students' learning. Chapter 4 provides the study results, proving that the procedures and methodology in chapter three were followed.

Chapter 4: Results

The problem that I addressed in this basic qualitative study was that teachers were experiencing barriers in implementing SCL strategies consistently to support students' learning in Seasons Middle School, located in the Northeastern United States. The purpose of this study was to examine teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently in Seasons Middle School to support students' learning. The nature of this study was a basic qualitative approach. According to Merriam (2009), a basic qualitative research design is to uncover and interpret participants' experiences, understand, and make sense of people's experiences. For students, particularly the underserved ones, to make academic progress and develop the skills necessary to prepare them for employment, there must be a willingness to address the structural barriers that prevent SCL strategies (Maas, Jochim, Gross, & Center on Reinventing Public Education, 2018). This study's research question was the following: What are middle school teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently to support students' learning?

In Chapter 4, I present the findings of the data collected for this basic qualitative study. The data were collected through one-on-one, semistructured, open-ended interviews with 15 middle school teachers who used SCL strategies to support students' learning. The interview results are presented in this chapter, as well as a context for the interview findings.

Additionally, I provided a description of the methods I used for collecting, recording, and analyzing the data. This study's results may provide knowledge related to

the implementation of SCL strategies necessary to allow students to engage fully in educational activities to achieve better learning outcomes, which can enable them to master content and develop skills for optimal success in school, career, and civic life. I also reviewed the evidence of trustworthiness in the study. The chapter concludes with a summary of the results and a review of Schlossberg's transitional theory.

Setting

During the time of the study, some participants expressed their concerns about the pandemic and their anxiety about the upcoming school year. The experience of using SCL strategies during the pandemic generated current and relevant information for the study since teachers used more student-centered learning strategies during the pandemic. The participants were four males and 11 females who met the criteria for the study. They were all middle school teachers, who implemented SCL strategies for at least 5 years, and taught various subjects.

I conducted one-on-one interviews with each participant. The interviews contained semistructured and open-ended questions (see Appendix B). I conducted the interviews by phone with the participants who felt comfortable participating in the interview process by phone. I used Zoom for two participants who preferred using the virtual method. I ensured participants' privacy and confidentiality by conducting the interviews in a private room. There were no video recordings. Before I began the audio recording, I used an interview script to ensure that I was consistent in explaining the interview format to each participant, who had an opportunity to ask questions. After I completed the interview, I informed each participant that a copy of the summary of the

findings would be provided through email after completing the analysis. In addition, after the interview, I emailed each interviewee a thank you note and an electronic \$10 Amazon gift card. Each participant was assigned a pseudonym. I conducted the interviews in a consistent manner to ensure reliability and validity of the data.

Demographics

I interviewed 15 middle school teachers: four males and 11 females. Each teacher had at least 5 years of experience and taught various subjects. All the teachers that I interviewed felt that using SCL strategies was essential to support students' learning. Each teacher identified barriers that prevent SCL strategies from being effectively implemented to support students' learning. Table 1 shows teachers, gender, years of experience, and subjects taught.

Table 1
Participants' Information

Teacher	Gender	Subject(s) Taught	Years of Teaching
Evette	F	Math	18
Harry	M	Special Education	13
Tania	F	English	45
Molly	F	Italian and Spanish	22
Nina	F	Multi-Subjects	20
Judy	F	Spanish	25
Nadia	F	Speech	40
Sandy	F	English	26
Frank	M	French	22
Ann	F	Science and Math	6
Stella	F	English	23
Shanelle	F	ENL	5
Dave	M	English	27
Joey	M	Multi-Subject	21
Meagan	F	Math	31

Data Collection

I conducted a basic qualitative study to collect data from interviews with participants. I received IRB approval (08-05-20-0737080) from Walden University on August 5, 2020. I recruited prospective participants through social media, referrals, emailing invitations, professional networks, and districts' websites. I obtained signed consent forms from each participant through email. Most participants used their mobile phones to contact me about questions that they had concerning the process. I answered any questions that participants had regarding the study. Participants signed a consent form via email stating, "I consent" before participating in the study.

I conducted interviews with participants over a 1-month period. I assigned pseudonyms to the participants to maintain confidentiality. Scheduling interviews were not that challenging since many teachers were on vacation. I conducted 13 interviews by phone due to the pandemic. The situation allowed me to maintain participants' confidentiality. Before I interviewed each participant, I printed a copy of the interview questions and created a packet for each. I then wrote each participant's name, the number of years they taught, subject(s) taught, and the pseudonym to represent each participant. While participants spoke, I took handwritten notes on their respective interview packet that I compiled. Creating an interview packet for each participant made it easier for me to obtain the demographic information and any other pertinent notes that I wrote down during the interview to use during the process of coding. Most interviews lasted for no more than 30 minutes. All the participants gave very comprehensive responses to each question, which minimized the number of follow-up questions.

I used the app Temi to audio-record the interviews and another audio recording device for backup. I conducted the interviews in my home office with the doors closed to maintain confidentiality. I transcribed each recording using the app Temi, Microsoft Word, and my notes so that each transcription was an accurate reflection of the interview. After each interview, I ordered each transcript and reviewed it for accuracy. Furthermore, I analyzed the data using thematic analysis coding procedures.

The interview data provided a macroscopic view on teachers' perceptions of the barriers that prevent student-centered learning from being consistently implemented to support students' learning. I gleaned extensive information on teachers' perceptions of their experiences in implementing student-centered learning strategies. During the data collection process, all the participants appeared excited to share their experiences, which resulted in extensive responses to the interview questions. The interview process went as planned without any major occurrences. After I interviewed the 15th participant, I realized that I had reached saturation when I could no longer identify any new themes, hence stopping data collection.

Data Analysis

After I ordered the transcripts and reviewed them for accuracy, I began the analysis of each transcript. According to Saldaña (2016), a code represents short words or phrases of a summative part of data, which could consist of interview transcripts. I first analyzed the data using Schlossberg's transitional theory, which consists of the 4S's. The components of the 4S's are (a) situation (b) support (c) self, and (d) strategies (Schlossberg, 2011). I established a priori codes through Schlossberg's 4S's transitional

theory, which were embedded into the interview questions. The a priori codes were the situation, self, support, and strategies.

To begin the data analysis process, I masked each participant's identity by using a pseudonym. I printed a hard copy of each transcript and read each transcript and made notes in the margins, which comprised of ideas and concepts that appeared in the first reading. During the interview process, I also took notes, which I referred to while coding. I created interview questions that integrated the 4S's, making it easy to identify the components of the 4S's in each participants' responses. I created a table using the 4S's. After completing the coding of each participant's transcript, which took approximately 30 minutes, I placed the codes under the appropriate a priori codes in the table.

I came up with codes on the *situation, self, support*, and *strategies* after coding all the transcripts using a priori codes. After I completed the a priori coding, I looked at the overarching research question, which dealt with middle school teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently to support students' learning. The participants generated many codes about the research questions and in alignment with the conceptual framework. Therefore, I compiled the codes centered on the 4S's that answered the research question, and I narrowed the list of codes based on triangulation into categories. I read each participant's transcript and created a tally to see how often each participant mentioned the code from the list. I used different color highlighters to distinguish the 4S's. By doing so, I came up with resistance and inability, relinquishing control, curriculum and testing, professional development,

technological resources, and overcrowded classroom. To come up with themes, I checked the transcripts to see the statements made by the participants surrounding the ideas or concepts from which I derived the codes.

Ten participants mentioned that one of the barriers to implementing SCL consistently to support students' learning was students' inability to be active learners and their resistance to the pedagogy. Students' resistance and inability affect the situation in the context of teachers implementing SCL strategies. Therefore, I came up with students' inability and resistance as a theme. I repeated the same process for the rest of the categories relinquishing control, curriculum and testing, professional development, resources, and overcrowded classroom. Relinquishing control has to do with the *self* in the 4S's. In this instance, the *self* deals with teachers' ability to cope with the change or show resilience.

Four participants indicated that they were having problems relinquishing control, which impacted their consistent SCL implementation. Curriculum and testing formed another category. There was an emphasis on curriculum and testing based on participants' statements. Ten participants claimed that curriculum and testing were barriers. After reading the statements, I came up with the theme pressure on curriculum and testing, affecting teachers' level of stress in consistently implementing SCL. The theme pressure on curriculum and testing was aligned with the situation in the 4S's model. If 10 teachers felt overwhelmed by the pressure on curriculum and testing, their ability to consistently implement SCL strategies to support students' learning affects their situation in the 4S's model.

Twelve participants stressed the need for professional development. While reading the participants' transcripts, I checked their statements, and they focused on the need for quality professional development to enhance their skills to implement SCL strategies more effectively. As a result, I came up with the theme lack of quality professional development. Professional development may help teachers to cope with the pedagogical change, so, it aligns with Schlossberg's 4S's transitional model *strategies*.

The other theme was the lack of technological resources. Technological resources fall under *support* in the conceptual framework. Seven participants indicated the lack of technological resources as a barrier to consistently implement SCL to support students' learning. As a result, I constructed the theme based on the participants' responses, which entailed the lack of technological resources. The final theme developed was the overcrowded and noisy classroom, which fits under the situation's auspices in Schlossberg's transitional theory. The situation of having an overcrowded and noisy classroom had a negative impact on six participants to implement SCL strategies consistently to support students' learning. Table 2 shows the triangulation of codes and Figure 1 shows the six themes.

Table 2
Codes and Triangulation

Codes	Evette	Harry	Tania	Molly	Nina	ı Judy	y Nadia	a Sandy
Resistance	X		X	X	X	X	X	
and Inability								
Relinquishing			X					X
Control								
Curriculum		X	X		X		X	X
and Testing								
Professional	X	X	X	X	X			X
Development								
Technological	X	X		X		X	X	
Resources								
Overcrowded						X	X	X
Classrooms								
Codes	Frank	Ann	Stella	Shane	elle]	Dave	Joey	Meagan
Resistance and	X			X		X		X
Inability								
Relinquishing	X		X					
Control								
Curriculum		X		X		X	X	X
and Testing								
Professional	X		X	X		X	X	X
Development								
Technological		X					X	
Resources								
Overcrowded		X				X		X

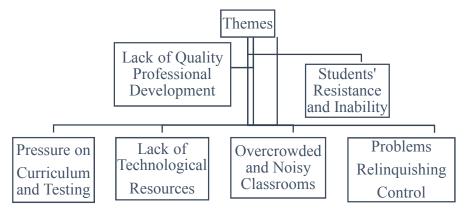


Figure 1. Themes

Results

The purpose of this study was to examine teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently in Seasons Middle School to support students' learning. This study's research question was the following: What are middle school teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently to support students' learning?

The results and findings from the data analysis process produced six themes that aligned with the research question and the conceptual framework of Schlossberg's transitional theory. Themes and theme statements are found in the table below. As demonstrated in Table 3, the themes comprised of phrases that summarized what participants emphasized in the interviews.

Table 3
Theme and Theme Statements

Theme and Theme Statements	m ~ ·			
Theme	Theme Statement "Barriers that prevent the consistent implementation of SCL strategies in Seasons Middle School are evident when"			
Students' Resistance and Inability	Students are unwilling to participate in SCL activities. Some students prefer learning alone instead of working with their peers			
	in groups. Other students have behavioral and emotional difficulties, which			
	contribute to their resistance to SCL implementation. They tend to seek their peers' attention, thus influencing them negatively			
	from achieving SCL goals.			
	Students demonstrate different motivation levels, which affect their ability to participate in interactive SCL activities.			
	Some students lack the flexibility and self-discipline needed to engage in SCL activities.			
	They also feel overwhelmed due to the many available learning options.			
Problems Relinquishing Control	Some teachers are concerned about relinquishing control to ensure			
	students' active participation in their learning.			
	They are not ready to free their control as that would weaken their classroom management approaches.			
	Concerns are raised about having faith and trust in students' ability to			
	work by themselves.			
	Some educators prefer exercising control in the classroom due to tradition and ego.			
Pressure on Curriculum and Testing	Curriculum and testing lack appropriate wording, such as "discover," to			
	signify students' responsibility in knowledge construction through SCL			
	approaches.			
	The pressure related to tenure undermines teachers' capacity to implement SCL consistently.			
	The curriculum is not parallel with student-centered learning.			
	Curriculum implementation focuses significantly on testing rather than			
	student-centered learning.			
	There is an increasing pressure from administrative officials to enhance			
	data collection and accountability. Some teachers are comfortable with traditional grading approaches,			
	which they consider easier to use and time efficient.			
	There are concerns about restrictions on what to accomplish within a			
	particular amount of time. The lack of structure and planning hinder the implementation of SCL			
	strategies consistently to promote students' learning. Student-centered learning strategies are not streamlined to educational			
	standards.			
	The curriculum is intense, and teachers lack adequate time to experiment with allowing students to take charge of their learning.			
Lack of Quality Professional Development	Teachers are concerned about the lack of adequate professional			
	development opportunities, such as comprehensive workshops.			
	They lack the specialized support they need to familiarize themselves			
	with the system. Professional development is ineffective despite the community's support			
	and resources.			
	The administration does not understand what student-centered learning			
	entails. There are no professional development programs focusing on student-			
	centered learning activities. Concerns have been raised in relation to the involvement of the entire			
	faculty in professional development for SCL implementation.			
	There is no professional development focusing on remote learning,			
	pedagogy, and student-centered learning, especially during this COVID- 19 pandemic.			
	T(table continues			

T(table continues

Theme Statement

Lack of Technological Resources	Subscriptions to particular computer programs hinder access to				
	information, thence preventing SCL implementation. Inadequate access to technology resources in school settings prevents students from facilitating their own learning. Limited Internet connectivity, such as Wi-Fi, and inadequate computers hamper technology use for consistent SCL implementation.				
	Lack of sufficient resources in public schools, compared to their private				
	counterparts, hinders access to technology tools for SCL implementation				
Overcrowded and Noisy Classrooms	Overcrowded classroom sitting arrangement hinders movement and				
	group formation needed to foster SCL implementation. Some teachers are concerned about their classrooms being noisy due to				
	SCL implementation for cooperative and collaborative learning.				
	Students' learning goals tend to vary significantly from one person to				
	another.				
	Smaller classrooms are usually overcrowded.				
	It is difficult to maintain order in an overcrowded, noisy learning				
	environment.				
	More students generate many ideas and opinions, which result in a noisy				
	classroom.				

Components of Schlossberg's Transition Model

Schlossberg's (2011) transition model presents four critical elements underlying individuals' ability to cope with change. The first component involves the *situation*, which focuses on people's experience in times of a transition (Schlossberg, 2011). This element was applied to the current study as teachers found themselves in a situation that required the consistent implementation of SCL strategies to improve students' learning. It relates to all six themes identified above. Such situational factors require teachers' attention to enhance the consistent implementation of SCL strategies. Secondly, Schlossberg's component of *self* focuses on individuals' ability to cope with change based on their sense of optimism (Schlossberg, 2011). It applied to the current study due to the need to address attributes that prevented teachers from implementing SCL strategies consistently.

The third component of support emphasizes the necessity for relevant services to improve transition and adjustment. This study is pertinent due to the need for support systems aligned with effective and consistent SCL implementation. Although the support

component applied to all six themes, it relates closely to the theme on the lack of quality professional development. Accordingly, improving access to workshops and other professional development programs is essential in consistently supporting teachers to implement SCL strategies. Lastly, strategies entail another integral component of Schlossberg's transition model. The aspect stresses the importance of adopting relevant strategies to foster meaningful transitions to change (Schlossberg, 2011). It applied to all six themes based on the need for appropriate strategies to address barriers to SCL strategies' consistent implementation. As a result, Schlossberg's 4S's model gave a strong foundation for examining the issues underlying consistent SCL strategies implementation to support students' learning. These details are summarized in table 4.

Table 4
Themes and Schlossberg's 4S's Model Components

Themes	Situation	Self	Support	Strategies
Students' Resistance and Inability	X	X	X	X
Problems Relinquishing Control	X	X	X	X
Pressure on Curriculum and Testing	X	X	X	X
Lack of Quality Professional Development	X	X	X	X
Lack of Technological Resources	X	X	X	X
Overcrowded and Noisy Classrooms	X	X	X	X

Theme 1: Students' Resistance and Inability

The components of Schlossberg's 4S's Model indicated the importance of the *situation, self, support,* and *strategies* in influencing individuals' capacity to cope with change. In line with such elements, Seasons Middle School teachers must address various thematic areas to foster the consistent implementation of SCL strategies in their classrooms. The theme of students' resistance and inability emerged as one of the key areas perceived by middle school teachers as a critical barrier undermining the consistent implementation of SCL strategies. This theme reflects four components covered in the 4S's model as it focuses on the experiences linked to the change process (Schlossberg, 2011). Additionally, teachers were concerned about the impact of students' responsibility and inability on their capacity to implement SCL strategies effectively for improved learning.

Ten participants cited the above thematic area as one of the barriers preventing

them from implementing SCL strategies consistently to improve students' learning outcomes. The statements provided indicated a major concern about students' capacity to actively engage in SCL activities for optimal learning to take place. For instance, Evette stated,

I think a big barrier would be the inability to being an active learner, you know, just by that itself. They just, they wouldn't go forward, and they cause problems amongst the group, you know, they just have the inability to be an active learner.

Based on the above remarks, students' inability to engage actively in classroom activities is a critical concern for teachers as it hinders them from capitalizing on SCL approaches to foster learning. For instance, the resistance causes challenges as students cannot work in groups or remain active participants in knowledge construction. Tania's statements are closely related to these concerns as she states, "I think the two major barriers were that students really did not have the expertise. Students really could not internalize the idea that a critique was a positive way to help them improve." These statements indicate the teacher's concern about students' lack of expertise to engage in SCL activities as a barrier to the consistent implementation of SCL strategies. Tania adds by stating, "The students who were highly motivated did well. The students who were not highly motivated demonstrated very little change in their level of performance." This sentiment exemplifies the extent to which students' resistance and inability to participate actively in SCL activities is a barrier to the consistent implementation of such strategies.

Moreover, the concerns about students' resistance and inability were evident in the statements made by other teachers interviewed in the study. Molly stated, "One of the barriers that I faced in implementing the student-centered strategies was to get the students to buy into it. The kids were resistant, and so what I've had to do is I've always modeled everything." These remarks demonstrated the teachers' challenge in implementing SCL strategies consistently in a situation marked by students' unwillingness to use SCL approaches in their learning. The high level of resistance compels teachers to model classroom activities, leading to inconsistencies in SCL implementation. Molly added, "The negatives that I've found is that I've always had kids, usually very bright kids who don't like to use to, to participate in these activities." Thus, students' resistance occurs across all groups, irrespective of their academic performance. She further elaborated, "Some of the students are shy, first of all, don't like working with certain kids. So, I've had to figure out who worked well with whom and try to put them together so that we would have a successful learning activity." Therefore, in line with these details, students' resistance and inability is a critical barrier to the consistent implementation of SCL strategies to enhance learning.

Extensive statements made by other participants also support the theme mentioned above. Nina stated,

Sometimes you have to measure the situation because one group may be able to do group work. You know, another group might not work for them. Or an individual student works well with an individual student has not learned to work well with groups...we need to look how we use student-centered learning rather than just one particular strategy.

Judy's responses align with the above statements by indicating that some students

are not willing to work in groups. She stated, "There will be some kids that they don't like to work for all the kids. They like to do the work by themselves, and then there will be kids that will do no work at all." In line with the theme of students' resistance and inability, other participants highlighted key issues emerging as barriers hindering them from the consistent implementation of SCL strategies. Nadia stated,

There are always students who have behavioral and emotional difficulties and are resistant to the implementation of student-centered learning. They often seek the attention of others and therefore they seek to negatively influence the others against meeting student-centered goals.

The above response validated the impact of students' emotional and behavioral challenges on the consistent implementation of SCL strategies. Additionally, Frank identified motivation as a key issue influencing SCL implementation. He stated,

Well, one barrier of course is pairing motivated students with less motivated or academically with logic students. There has to be some kind of balance because of course it's normal to have a student who was very motivated and exceptionally motivated and a student who is less motivated.

Frank added,

Another barrier was, how I teach for 40 minutes, keep them focused and concentrated on the task at hand because of course, then you see it in adults, assist, sustain, I'm sorry, sustain, focus. How do I, know they sustain the focus? These remarks are related to Shanelle's response, which indicated, I think when I think back to that one project that I mentioned to you that

sometimes it was like apathy on the part of the students. Like, you know, if you have a class that's highly motivated, they will definitely, you know, want to follow through and, they'll want to get involved and, and do everything that they have decided to do themselves.

She added,

But, if you have a class where kids are not as motivated where they may have other challenges, or they just don't have a positive outlook on, you know, where they are in the middle school space or the ninth grade space, if they don't have like a positive outlook on that. I think that that can be a really big challenge for getting children motivated to fully participate in student-centered learning.

As mentioned above, the motivation issue is a critical barrier hindering teachers from implementing SCL strategies consistently. Meagan elaborated on such challenge by stating, "Some kids just get overwhelmed. They just can't focus if they have too many options. There's nothing that's going to get everybody on board. No matter what it is that the one kid wants to do." Therefore, the issues raised by the respondents in relation to students' resistance and inability cover various aspects that middle school teachers should address to ensure consistent SCL strategies implementation. As mentioned above, key concerns include students' unwillingness to engage actively in SCL activities. Other issues focus on social, behavioral, and motivational aspects, which shape students' readiness to participate in cooperative learning in student-centered classrooms.

Theme 2: Problems Relinquishing Control

Four respondents were concerned about relinquishing their control in the

classroom. Their responses contributed to the coding and construction of this theme. For instance, Tania stated,

Well, if I'm really, I guess I was almost forced into it. I would like to think I marched in happily, but I realized it was becoming more of an expectation and I did want to engage my students more in classroom activities so that they felt that they were more participants in their education.

Similar concerns were evident in the responses obtained from the other teachers. For instance, Sandy indicated,

So, but I would say the biggest negative is probably, organizing a classroom where you're freeing up your control as the teacher, that's the biggest negative, and having to trust the children in executing the activity for the day you're releasing control and also a negative is not being able to intercept incorrect ideas. Sandy further claimed,

I think the biggest barrier would be myself because I'm somewhat of a control. You know, many teachers are control freaks a little bit. We have to loosen the reins. I had to loosen the reins on, my certain classroom management.

Besides some educators' unwillingness to free their control in classroom activities, others highlighted critical concerns linked to their comfort and tradition. Such responses demonstrated the educators' inclination to adhere to the status quo, which requires them to control classroom activities. For instance, Frank stated,

Obviously you cannot compel someone to do something they're uncomfortable with educators must leave that they must relinquish some of that classroom

control imperative. They have to have faith in their students and they have to be able to work with them, but ultimately have them work with each other.

Stella indicated,

For myself in the beginning, as a teacher, especially in the beginning, as I was learning how to implement it in different ways was my own fear, cause a teacher likes to have control of the classroom. However, I learned the benefit of allowing some noise cause using a child centered classroom, there tends to be more noise, but there's more discussion.

However, Stella highlighted her willingness to relinquish control by explaining the significance of giving students the freedom to shape their learning. She stated,

So I had to go away from having that strict control of, you know, everyone's quiet, everyone is silent versus some noise can be good noise as long as they're engaged and they're working on a given assignment, it's not necessarily a terrible thing. So one of the barriers of myself ego really relinquishing control that it's not all about the teacher, but in the learning process, it's also important to allow kids to be a part of their own learning.

Consequently, the four teachers who cited problems with relinquishing control in their classrooms demonstrated that some middle school educators are unwilling to give students the opportunity they need to guide their learning activities. Although a small number of respondents quoted such issue, it requires attention to foster the consistent implementation of SCL strategies. As a result, relinquishing control is a critical area of concern for teachers interested in implementing SCL strategies consistently.

Theme 3: Pressure on Curriculum and Testing

This theme was derived from the responses of 11 participants. Based on such responses, the key issues highlighted include wording, tenure, lack of a student-centered approach, and emphasis on testing. These areas are observed in the following statements. Evette stated,

I think they should definitely add wording to lessons. Like let's have students discover, you know, instead of two, what do you call it? Talk and chalk, instead of the teacher getting up to the board, it should say promote student discovery because to me that's the student-centered learning. Definitely add group work, you know, like that should be let's, let's do group work, lots of group work and partner projects. So just the wording and how they, you know, make it come across to us.

The above remarks demonstrated the significance of integrating practical strategies into the curriculum and testing to enhance students' learning. For instance, statements incorporating the aspect of discovery, signify a student-centered approach to teaching and learning. Nonetheless, some responses concerning pressure on curriculum and testing focused on other issues, such as tenure, as indicated in Harry's statement, "It affects it. You know, I've been in two schools that have tenure and in schools that had no tenure available. And I spoke to the teachers about these concerns because, it's a true concern." To emphasize such a challenge, Harry elaborated the concerns about tenure by stating the following,

Some of the teachers have told me that they would like to, but they are afraid.

That is their scores are aren't good. That worries them. And you know, it's a tough call because I've seen a lot of teachers be concerned about the scores, getting tied to testing.

Based on the above responses, the pressure related to tenure is a critical issue influencing teachers' ability to implement SCL strategies consistently. Additionally, the lack of parallelism between the curriculum and student-centered learning is quoted as a barrier. Tania stated, "I think perhaps that's part of where the problem is because I think the curriculum doesn't necessarily seem to parallel the students centering." Similarly, concerns were raised about testing. Nina indicated,

I thought we were all working for the benefit of the students, but you know, sometimes it's just like, what works for the test and maybe that's another barrier, but sometimes if your test, you know we've, especially here in New York, we're definitely more for testing. And because we're more for testing, sometimes we can't see how the student-centered learning will really boost the test.

She added,

I think there needs to be more project-based learning more than anything else. I think a lot of times when students get to the middle school there's not a lot of everything right now seems like it's based on group work, even how they seek the students. They're seated in groups, you know, particularly, but there's no level of independent thinking or independent work.

The teacher explained her statements indicating the need to provide students with enough opportunities to develop independent and critical thinking. She also suggested

the necessity for cooperative learning, which allows students to work together. However, she was concerned that,

A lot of times education seems like an individual thing and the individual struggle depending on the school community, you know that individual school may, or that individual teacher may struggle a lot, even if they're a great teacher, because they don't have enough support.

These sentiments demonstrated the teacher's interest in having adequate support for consistent SCL implementation.

Some of the respondents also named administrative issues related to the theme of pressure on curriculum and testing. For instance, Nadia stated,

There's been increasing pressure from administrative officials to increase data collection and accountability while at the same time conduct lessons and a creative inventive format integrating the mainstream curriculum. This strategy while idealistic is difficult, it's impractical and it doesn't necessarily improve student outcome or a goal setting.

Further responses show that some educators were comfortable with the traditional instructional approaches. For instance, Sandy indicated,

I think another challenge is the grading ... traditional grading approaches we have become so comfortable with. So when you are trying to grade students based on student-centered approach, a lot of times it's left up to discretionary approach or using rubrics or checklists, depending on how important that grade is or what you're trying to assess, whether it's summative or formative.

She added,

I would say 60% of what I do is student-centered, and that number has been going up slowly because the other 40% is where I'm tackling those parts of the curriculum that are more assessment based, those skills that have to be addressed. Another respondent identified some limitation linked to the above thematic area. Ann stated,

There should be less restriction on what is supposed to be done during a certain amount of time. Yeah. I also will emphasize, like, we're working with human beings, we're working with people now that need us and we affect them, could be for the rest of their lives. If we really want to impact their life in a positive way, we need to first have everything that we need to see the student as a whole.

Some respondents supported these claims by indicating the need for a clear structure for SCL implementation. Shanelle stated,

I think you still have to have some sort of structure like you can't, you know, because we have to satisfy certain standards. You still have to sort of narrow the choices and structure it so that they're able to make an appropriate choice. Shanelle also indicated the need for planning. She posited, So I think that it still requires a fair amount of planning and, you know, thoughtfulness on the part of an instructor on the part of a teacher even for student-centered learning. Give them the choices that they need so that they can feel like they're actually a stakeholder in something that is done by design.

Moreover, other curriculum issues were addressed to indicate their impact on SCL

implementation. For instance, Dave highlighted, "I had a discussion last year with the principal whose goal for teaching English was to tighten the curriculum, and to me that, that wasn't pulling, like, you know, that restricts." He added, "So, I mean, a student-centered approach requires a lot of planning. It does require giving students different activities." These responses show that planning and focusing on students' learning are essential to ensure consistent SCL implementation.

Dave elaborated further,

You know, so it does require risk taking from, from the teacher to implement in our setting, in my opinion another negative then is in the administrative setting.

Again, I keep focusing on the admin because our evaluations are such an important part of our educational profile.

Joey's response supported the above views by stating,

You know, the greatest way I think that I could, you know, be able to use student-centered, strategies within the classroom is have them more streamlined to standards and you know, maybe, some of the core items that are required in learning in a particular subject.

Meagan's statements align with the above-mentioned remarks. She stated, "Sometimes the curriculum is really, really intense and there's not as much time to experiment, especially in letting the kids sort of walk me through it. So that's a little difficult." She added,

I think that algebra should go back into the high school and we should let kids learn math that they need for their everyday lives. It's middle school. They don't

need to be doing sectors and things like that's not really what you need to know.

Theme 4: Lack of Quality Professional Development

The theme on the lack of quality professional development was the most prevalent concern for the participants. Twelve respondents identified such an area as a critical factor influencing their ability to implement SCL strategies consistently. The following statements made by the participants exemplify such concerns:

Evette stated,

Well, would be helpful if just like with anything else, what more workshops, you know, professionals who have seen this really work and just give tips and people could share what hasn't worked, what has worked, I'm always into change, you know, let me know something that works and I will try it. So, I think workshops, professional development.

Harry reinforced the response with the following remarks,

So the bottom line I'm going to say is that we should be offered additional support where maybe perhaps a mentor teacher would come by, even, even teachers that have been teaching for five, six, seven years, if they're not familiar with the system, they may need something.

Harry added,

Absolutely. Yes. And then I'll tell you why. And I've seen this when student, student-centered learning, I've seen teachers that have they have an idea, they know how to do what they have experienced, but they need a little support. Like for instance, last year I was asked to help out one, one of the other associates.

Harry explained further,

So I think a little live support every once in a while, usually helps because the other thing is it will cut down on frustration where teachers, not every answer comes up on Google. You know, it's, it's a real world. So, if you're talking to someone who has more experience and many more training sessions, perhaps that person would be a vital tool on the campus because that, that would be effective. You know, little things that maybe these teachers aren't, aren't doing such as the check for understanding.

Tania argued,

The workshops and courses I took later really did not prepare me. I feel I walked away with maybe one or two ideas, but I didn't feel like they really adequately prepared me. There were workshops and there were professional development sessions, but they really were not very thorough.

Molly highlighted,

I always thought that some professional development to get everybody on board would be more effective. They brought somebody in to talk about it, but she did not give us any examples of how to use these strategies. And so what, what we suggested then was that they would actually show us, like, give us examples of how to do this, how to implement all the different strategies that Actfell, came up with.

She added the following,

I mean, even though, you know a lot of the school community things that they are

providing resources in terms of professional development, sometimes the professional development is really not that effective of what's happening is we have some real, you know, effective professional development is we actually have, you know, that word community is, you know, used as though, you know, we actually do have one, we need to establish a community, you know, where we, we really do kind of work together. And if we start working together as a community, then the students would learn to see what that really looks like. She explained further,

You know I do know a school that, that, you know, a couple of schools where they actually have used some really great ways of student-centered learning and to see them do that. Usually starts from the top and, you know, it starts from the, the professional learning community, actually working together as a community and trickling into the classrooms.

Nina indicated, "I think, you know, honestly, I really don't see that they were, you know, they were providing anything. Maybe the most would be some professional development." She added the following,

You know, I think mainly it's that they don't really know what to do. You know, sometimes administration doesn't really, you know, they, they really don't know what student-centered learning is. The administration themselves, the professional learning community struggles with what it is that they want to do for students, you know, and how to get that done. So then sometimes rather it being us coming together as a community, it's more combative.

She explained further,

I could have probably done that better. Maybe I should do this better, you know, but it's like, there's a backlash for, you know, for just being a new teacher, like you could, you know, it's almost like, yeah, you're a new teacher, but you you're supposed to come in knowing everything and knowing what best to do and not really having any real connection with sometimes even the, the older teachers or the master teachers. Cause the master teachers are so overwhelmed by playing so many different roles. They don't have time to really connect with you unless it's an intentional thing.

Sandy posited,

From my personal situation, I really don't find myself, needing more support. I think that I wouldn't mind getting more, PD professional development that targets that is about, excuse me, that is actually about student-centered learning. So, if we're going for a writing PD, it'll be mixed in like that use as an approach, but I wouldn't mind a one-hour training or presentation about student-centered approaches.

Frank asserted the following,

I would like to see of course more done in terms of working with the entire faculty. During our monthly sessions in for example, have, have us behave like the students and actually physically put this, show us how it's done and then let us do it, let the educators do it themselves instead of spending an hour talking and writing things that really aren't productive.

He added,

What I would do is get the educators together and demonstrate, instead of talking about it, you demonstrate what I want them to understand. You cannot, you have to see it in action. You have to become comfortable with something. It's not always a question of modification of the exterior, as much as it is, as it is in modification of the interior, whether it's human or machine, because usually quite often, it's the interior that needs some kind of rectification or realignment, not the exterior. It's almost like a reinvention of the wheel. The wheel doesn't need to be reinvented the way it rotates, maybe the inner mechanisms. If you, if you allow them to, to see, to actually do what it is that you're talking about, be then become more aware of it, more comfortable with it and are more to buy into it.

Stella identified issues related to the pandemic as a challenge undermining SCL implementation. She posited,

I guess more professional development that will expose me to more, currently with the time that we're in was remote learning, different apps or a PD professional element. That's going to expose me to, how do I incorporate my pedagogy and, student-centered learning in a time period where it's about safety and keeping people six feet apart. How do I keep kids safe, but not completely tying them away from, being able to benefit from working together and sharing ideas. So, am finding out what, what other, apps are out there in the age of COVID. What other, I guess learning styles I can incorporate in a classroom where we have hybrid, and if you keep six feet apart, how can we still work to get

anywhere? Enclosed in plexiglass and people are wearing a mask, I just have to, it was just all about thinking outside the box and figuring out, figuring out how to get back to where I was before COVID or somehow being creative and how that can still be implemented at this point. I'm stumped, but I understand why. Shanelle argued,

Well, I would say workshops, you know, professional developments. They, I'm trying to think back. They had, you know, professional development on project-based learning. And I do believe they discussed student-centered learning, you know, within the professional development, workshop, but I really don't think it was suitable. I don't think it was adequate enough because you know, I think student-centered learning is, is a topic that has a lot of depth to it. And I, you know, it's like, I really felt largely, like I was sort of on my own to figure out what, what does that mean? And what does it look like? You know? So, I think it was, it was, it was a professional development opportunity where they, you know, they, they touched on it.

She added,

So I just think like, you know, having maybe more support from the administrators in that regard would be good. And also like really having some examples, like concrete examples of what does this look like for my discipline? What is the successful, what does a successful student-centered learning assessment look like for an ENL class for the sixth-grade or the seventh-grade? Like what does it look like? I would really like, you know, to, to have more

support from the administrators in terms of like maybe professional developments or a chance to go to another school and observe people in action who really, you know, who've really been successfully implementing those types of projects. I think that that would be great.

She elaborated further,

Oh, you know, one question I would have though is from a physical perspective, for example you know, I would want to see like how should one organize their classroom setting even so that it's, you know, more amenable to student-centered learning, like, is there even a classroom layout or design that is more conducive to that, you know, this of course would be like sort of post COVID-19, but I would want to know those types of things, like, you know, is there something that you can do with the physical space in a classroom, or is there something that you could do with the timing of a lesson? Like, should there be breakout, you know, more breakout groups you know, things of that nature, I guess, would just strictly speaking, like, you know, what would that look like?

Dave argued,

I believe in student-centered approach, but I also think that a lot of us as teachers think that we are student-centered teachers. Right. And, I have a feeling that we're probably coming up short in a lot of areas because the more professional articles I read about it, the more I see that I'm not doing, if you like. PD is a nasty word when it's taking time away from the work you need to do. I think it is such an important part of our professional development.

Joey supported the above remarks by saying,

I think, you know, just in general, you know, to go back, I think what I had said, or the second question, or no, number three, what were the barriers that I faced in implementing? I think I I've seen that in younger teachers as well. And that may be because how we come into education, perhaps, you know, we have this job to do, and I am going to be the source of the learning, you know, for the kids. And they have to demonstrate what I'm teaching them to do. I wonder if an emphasis in using student-centered, instructional strategies at the college level, you know, or at least even, you know, either whether it's a specific course or something that's demonstrated in, you know, student teacher, role. I think that would be great because maybe if you got that experience early, then it doesn't sound like this foreign scary thing. How can I trust the students and, you know, with their own learning?

Lastly, Meagan posited,

Well, I, when I do professional development, I kind of like going out of the school to learn something new, go see other, how other people teach. A couple of years ago, I went down into the elementary schools to see how they were teaching Singapore math, because they were coming up to the middle school with completely different ideas of how to do even fractions. And I was like, wait a second. I don't understand. Well, let me go down and learn. And that's the kind of professional development I really like where I can go observe somebody teach and learn through observation. That was fantastic. I mean, I went to two different

elementary schools. I went to where the little, little kids are kindergarten, second grade. And I sat in on five different teachers in one day and everybody had a different teaching style and I picked up something from every single person I watched. Then I went down to the third to fifth grade and that was fantastic. They were on a whole another planet from me and I worked more, like I said, I learned more in those couple of days about different techniques. Then I would spend the whole day listening to somebody teach me how to use the textbook. That was a great type of professional development observation. Okay, great. She added,

I don't like it when it's, Oh, we got a new textbook and we're going to have somebody come in and teach us how to use the textbook. That's not great professional development. In the last couple of years, we've been doing more teacher circles where, you know, we all help each other, which is fantastic. I really liked that and much better than, you know, having somebody come in and just tell us what we're doing.

Theme 5: Lack of Technological Resources

Five participants supported the construction of the theme on the lack of technological resources. They raised critical issues undermining access to such resources for effective and consistent implementation of SCL strategies. For instance, Evette stated, "I guess, subscriptions to certain computer programs." Harry's statements supported these remarks. He indicated,

The barriers would be in certainly my school where the resources were a little

limited. So, I wasn't able to get any of those programs for the students to learn and help facilitate their own learning. So that was a little bit of a snag. It was a lot of extra work initially. Another problem would have been again, being able to access proper web and, educational websites and something that was trusted and valued, you know, so you had, it was a lot more work for me at that point, but as the years have gone on and schools started some of, some of the schools, I went to encourage that, and then they made more websites.

He added,

I would choose a specific program that I, you don't have to pay for them to release the key, because they're just so wonderfully designed. Like there's one called Archaeus and it's just wonderful tool for them to use, but you have to pay. And the other thing I think would be if the students actually could own, if we could get a program, like a good video making program, because a lot of times they all helped to make this video seven, eight grade, and the tech talks and whatever, and everything else and YouTube, they have their own channels and people watch each other play these games. So, one of the, if we had good programs that we could use to change things up and add the graphics to it, I just think that would totally enhance what these students already love. And then we can integrate that into our, you know, our way of learning.

Moreover, issues related to Internet connectivity were raised in the responses. For instance, Judy stated,

Well, the barriers that I say was the first thing is that technology, the Wi-Fi was

very poor and the school at the beginning, when they started implementing this program, the student-centered learning the Wi-Fi, the internet was very poor. And also with the Chrome laptops, we don't have enough in my school district. We have to sign up online when we need to borrow these carts. And then you have to probably do it way in advance, like a month or two months in advance in order for you to have this set of carts, they to set up carts in the classroom for the students to work. That's the only thing I would say that there is that I find in, you know, complicated in my district because of the carts, which you have more than that, or at least the kids should have at least one laptop per student and not to borrow it, you know, and to sign up online.

Judy also elaborated her remarks by stating, "We need the technology because the students will be able to research whatever subject or whatever topic to get them to work within the group. So, the technology is one of the big things." Nonetheless, some teachers cited differences in technology access between public and private schools. Ann posited,

I had the opportunity to work in a private and public school. In the private school, I had everything such as a touch screen, but in the public school, I do not even have construction paper. I came up with a crazy or really creative ideas to provide the kids with what they need. I have to kind of create it.

She added the following,

So, I don't have what I need. Sometimes you just want to buy it yourself too, to make sure that students have what they need. So even when I ask, they definitely

do whatever they can, but there's just as much as they can do. And the rest comes from me. And obviously I want the best for my students. And I want them to understand what I'm doing, the best way that I can.

Additionally, institutional factors were highlighted as some of the factors contributing to the lack of technological resources for SCL implementation. Joey stated, Well, again, since we're a small school, our resources are very limited. So, as you know, really any, I am the resource to a certain, degree. A lot of what we have as far as budgeting, you know, we'll go to textbooks and other expenses. It's self-generated. I, you, I meet with the other teachers and we discuss ideas. And, I'm always looking to see if different ways of doing a project that maybe the kids, you know, have done before when they were younger, but how can I maybe, impress them when they're in the older grade and to do something along those lines, but differently. So, there's a lot of reinvention of ideas as well.

Theme 6: Overcrowded and Noisy Classrooms

Seven participants provided responses that supported the building of the theme on overcrowded and noisy classrooms. They were particularly concerned about classroom organization and management. For instance, Molly posited,

Some of the barriers include the way the classroom was laid out as we usually have kids sitting in rows. So getting them to move next to each other, to form small groups, you know, that was something that was a barrier that had to be overcome because a lot of, you know, a lot of times you waste an awful lot of time just getting them to sit together, you know, whether it's a pair activity or a

group activity.

She added,

I would recommend setting up the classroom in such a way that it's easier to implement student-centered learning. For instance, I, one of the suggestions that I made last year was that they should really like refurnish the foreign language classrooms in such a way that it would make student-center edlearning a lot easier to implement. So they've already done this at some of the, some of the classrooms at the high school where they have, you know desks that move, that have fails and, and the kids can move around and they have you have different seating arrangements where kids can get together and work on something and try to master something that they're working on. And that was that's one of the things that I think should be done.

Other teachers were concerned about the noise linked to working in groups and high number of students in the classroom. For instance, Judy stated, "It gets a little noisy because the kids are working, you know, in the groups." Similarly, teacher Nadia posited,

I am required to address specific goals for each student, which naturally differ from student to student. So faced with caseloads of 25 to 30 individual students entering my class each day, a substantial amount of lesson planning, data collection and report writing is necessary to meet the needs of my students.

Other respondents made similar sentiments addressing the identified theme.

Sandy stated, "I am a teacher who would like the room quiet, but of course that does not happen with student-centered approaches when you're doing a lot of cooperative or

collaborative work." Ann was concerned about the student population in smaller settings. She indicated, "I think there's a lot of students, so smaller classrooms. I mean a number of students definitely, I cannot interact with." Dave supported these views by stating, "Maintenance of order kind of goes out the window because there has to be a noisy work atmosphere. Some administrators don't get this." Meagan's sentiments indicated critical concerns attributed to overcrowded and noisy classrooms. She stated,

Now I have 30, 32 kids. So, the more kids, the more problems, the more opinions that the children have and opinions can change the way they look at things. If they have too many options and it makes the classroom really noisy, can annoy my neighbors.

Overall, the explored themes are linked to the key areas that middle school teachers perceive as barriers hindering them from implementing SCL strategies consistently to improve students' learning. The thematic areas were coded from the responses obtained from 15 teachers drawn from the United States. They align closely with Schlossberg's 4S's transitional model based on their coverage of the issues related to the *situation*, *self*, *support*, and *strategies* pertinent to the consistent implementation of SCL strategies. Therefore, the themes provided the basis for exploring the specific concerns that middle school teachers should address to improve their capacity to implement SCL approaches consistently for improved students' learning.

Evidence of Trustworthiness

Trustworthiness is an important element that underlies the quality of a qualitative research. It encompasses four criteria: credibility, transferability, confirmability, and

dependability (Chowdhury, 2015). The elements of trustworthiness in a qualitative study are comparable to validity, reliability, generalizability, and objectivity in a quantitative study (Chowdhury, 2015). Each of the trustworthiness criteria was established in the data collection and analysis processes to generate quality, credible outcomes addressing the study topic.

Firstly, credibility is an essential aspect of a study aimed at ensuring the truthfulness of study findings. According to Korstjens and Moser (2018), credibility, which is equivalent to internal validity, entails the truth-value of a study. Various approaches are used to ensure credibility. They include prolonged engagement, member checking, and triangulation (Korstjens & Moser, 2018). The study topic focused on exploring middle school teachers' perceptions of barriers that prevent them from implementing SCL strategies consistently to improve students' learning. I used the above three approaches to maintain the credibility of the study findings. For instance, I capitalized on a prolonged engagement by conducting extensive interviews, which allowed participants to provide comprehensive responses addressing the research topic. Additionally, member checking involved using analytical categories and conclusions drawn to ensure credibility (Korstjens & Moser, 2018). Similarly, triangulation was essential for data coding, analysis, and interpretation (Korstjens & Moser, 2018). The use of these techniques helped in yielding credible data addressing the research problem.

Secondly, transferability is an integral attribute necessary to ensure the study's trustworthiness. Transferability in a qualitative study is comparable to the quantitative study's external validity (Chowdhury, 2015). It focuses on the extent to which the

research data is applicable to similar settings or contexts (Korstjens & Moser, 2018). The primary approach used to enhance transferability of qualitative data involves the thick description of the research process and participants (Korstjens & Moser, 2018). I adopted this strategy by giving thick descriptions of the study settings and data collection, analysis, and interpretation techniques. Such thick descriptions focused on the thematic areas indicating the barriers hindering the consistent implementation of SCL strategies in middle school. Consequently, based on the thick descriptions, the study findings are transferable to similar middle school contexts as that explored in the study.

Confirmability is the third criterion used to ensure quality study outcomes. This component focuses on verifiability of study findings by other researchers (Korstjens & Moser, 2018). I used relevant approaches to ensure the confirmability of the data. They include triangulation to eliminate possible, acknowledging the study's potential limitations, and an in-depth description of the study methodology (Chowdhury, 2015). For instance, whereas triangulation involved exploring thematic areas covered by the respondents, in-depth descriptions imply that the study methodology can be used to verify the findings obtained.

Lastly, dependability is essential to ensure the stability of data over time. It emphasizes the use of the data as received from the respondents to facilitate the evaluation and interpretation of findings to generate relevant recommendations (Korstjens & Moser, 2018). I developed transparent descriptions of all the steps taken from the start of the study to the recording of responses addressing the research questions. The in-depth descriptions of the research method allow its repetition

(Chowdhury, 2015). As a result, by addressing the explored trustworthiness criteria, the study generated quality data related to middle school teachers' perceptions of barriers undermining the consistent implementation of SCL strategies.

Summary

Chapter 4 presented key findings obtained from interviewing 15 middle school teachers. The purpose of this study was to examine teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently in Seasons Middle School, located in the Northeastern United States, to support students' learning. Data coding and thematic analysis were used to identify six significant themes related to the research question: What are middle school teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently to support students' learning?

Chapter 5 focuses on data discussion and interpretation while generating the study's main conclusions in the following section. Additionally, I explored the study's limitations and developed recommendations for future studies. The chapter ends with potential implications for positive social change aligned with the study topic. Finally, recommendations for further steps and a conclusion are developed.

Chapter 5: Discussion, Conclusions, and Recommendations

The implementation of student-centered learning strategies has a significant impact on students' academic performance. Research conducted by Dong, Wu, Wang, and Peng (2019) indicated that SCL compels students to make more effort to gain a deeper understanding of the content. Such an active learning process allows students to retrieve information more readily when completing tasks (Dong et al., 2019). The purpose of this study was to examine teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently in Seasons Middle School to support students' learning. The study's research question was What are middle school teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently to support students' learning? The nature of the study was a basic qualitative study design used to address the problem related to the barriers that teachers are experiencing in implementing SCL strategies consistently in Seasons Middle School. A basic or interpretative qualitative study focuses on uncovering and interpreting meaning by collecting data related to participants' experiences (Merriam & Grenier, 2019). As a result, the design was appropriate to facilitate the exploration of middle school teachers' perceptions of barriers that hinder them from implementing SCL strategies consistently to improve students' learning.

The conceptual model involved Schlossberg's (2011) transitional theory, which encompasses 4S's related to transition to and coping with change. The data collected from the interviews were coded based on the 4S's to generate six themes indicating the key issues that middle school teachers consider as barriers to the consistent

implementation of SCL strategies. The generated thematic areas are listed below:

- Students' resistance and inability
- Problems relinquishing control
- Pressure on curriculum and testing
- Lack of quality professional development
- Lack of technological resources
- Overcrowded and noisy classrooms

The study involved collecting data from 15 teachers recruited from middle schools in the United States. They met the inclusion criterion of having a teaching experience of at least 5 years. The teachers taught different subjects, thus providing vital information indicating that SCL implementation is not restricted to a specific subject area. Consequently, the responses generated from the interviews are relevant to the study topic, leading to a better understanding of the key issues affecting the consistent implementation of SCL strategies in middle school.

The findings support prior and existing literature related to the implementation of SCL strategies to promote students' learning. They also support the need to address the thematic areas underlying the consistent implementation of SCL strategies to foster optimal learning. The findings may enhance positive social change by encouraging the consistent use of SCL strategies to promote students' learning.

Interpretation of the Findings

As explored above, the findings were consistent with prior studies demonstrating the inconsistent use of SCL strategies in schools. For instance, the implementation of

SCL strategies is a challenging task based on the teacher's need to be competent in developing courses, using technology, assessing students, and demonstrating competence in classroom management (Kebaetse & Sims, 2016). Additionally, the findings obtained in the study align with those of Bayram-Jacobs and Hayırsever (2016) indicating that teachers are concerned about their loss of control in the classroom as that may undermine the capacity to guide students. These issues are raised in some of the thematic areas, thus requiring comprehensive view with the objective of addressing them to enhance consistent SCL implementation in middle school settings.

The findings gathered in the study indicated major trends in middle school teachers' perceptions of the barriers preventing them from implementing SCL strategies consistently to improve students' learning. For instance, the lack of quality professional development was the leading concern emphasized by 12 respondents. This was followed closely by the theme on pressure on curriculum and testing, which was highlighted by 11 participants. Ten teachers were also concerned about students' resistance and inability to engage actively in SCL activities. Other areas were pointed out by less than a half of the respondents. They included the overcrowded and noisy classrooms, which was a concern for 7 respondents; lack of technological resources stressed by five participants; and problems relinquishing control as mentioned by four teachers. These thematic areas provide critical information indicating the key barriers that middle school teachers perceive are hindering them from implementing SCL strategies consistently.

Data collection and analysis focused on answering the research question. The study participants shared extensive information indicating their experiences and beliefs of

the key issues they considered as barriers to the consistent implementation of SCL strategies to enhance students' learning. Data coding and analysis were based on Schlossberg's transition model, leading to the use of 4S's, namely, *situation*, *self*, *support*, and *strategies*, to generate six thematic areas. The interpretation of the study findings is based on six themes and relevant supporting literature.

Theme 1: Students' Resistance and Inability

Schlossberg's (2011) transitional theory emphasizes the significance of the *situation, self, support*, and *strategies* in shaping individuals' capacity to cope with change. This theme reflects the 4S's based on the need to address the *situation, self, support*, and *strategies* necessary to minimize students' resistance and inability to participate actively in SCL activities. The *situation* focuses on addressing experiences associated with the change process to foster individuals' ability to cope (Schlossberg, 2011). From the study, 10 participants were concerned about the impact of students' responsibility and inability on their capacity to implement SCL strategies effectively for improved learning. Some educators were concerned about students' preparedness to guide their learning activities.

The findings agree with literature by indicating the need for educators to address issues undermining students' active participation in classroom activities to ensure optimal performance. According to Tharayil et al. (2018), teachers are unwilling to change their instructional approaches due to various reasons, such as concerns about students' resistance to active learning. The findings obtained in the study relate closely to these viewpoints as they cite students' resistance and inability to engage in SCL activities as a

major barrier underlying the inconsistent implementation of SCL strategies.

Additionally, the findings are supported by literature, which covers the various factors hindering students' active engagement in SCL activities. For instance, students' expertise to use SCL strategies is a critical concern in the implementation of such approaches. According to Tharayil et al. (2018), students' resistance to active learning is linked to their inability to participate in activities, low course evaluations, and complaints about the activity. These perspectives are closely related to the findings based on the responses suggesting that SCL activities may be overwhelming for the students.

Consequently, the issue of students' resistance and inability to engage in SCL activities was identified as a major barrier undermining middle school teachers' capacity to implement SCL strategies consistently to improve students' learning. Accordingly, educators must address issues related to course assessments, complaints, and students' inability to engage in SCL activities to ensure consistent SCL implementation.

Theme 2: Problems Relinquishing Control

The findings indicated that four respondents were concerned about relinquishing their control in the classroom. Their responses are relevant to the 4S's model based on the necessity to address the classroom situation, mitigate self-issues, develop support, and adopt strategies needed to free control in the learning settings to improve SCL implementation. Similarly, some of the educators were unwilling to free up their control in classroom activities as they were concerned about comfort and tradition.

The four participants who indicated concerns about relinquishing control in their classrooms mentioned that some middle school teachers are not prepared to allow

students the opportunity to guide their learning activities. Despite the small number of respondents who mentioned the issue, relevant strategies are necessary to address it with the view of improving SCL implementation. The main issue linked to classroom control involves the capacity to organize and manage learning settings to enhance students' achievement. According to Soleimani and Razmjoo (2016), classroom management is critical to ensuring a successful teaching career. It encompasses wide-ranging activities and steps to create a supportive learning environment, enhance the smooth learning of lessons, and mitigate behavioral problems and disruptions in the classroom (Soleimani & Razmjoo, 2016). Nonetheless, despite the significance of classroom control, middle school teachers must be willing to free up such control to enhance SCL strategies' consistent implementation.

Theme 3: Pressure on Curriculum and Testing

The findings discovered that 11 teachers were concerned about pressure on curriculum and testing. As mentioned previously, their responses raised pertinent issues, including wording, tenure, lack of a student-centered approach, and emphasis on testing. For instance, to emphasize the impact of pressure on curriculum and testing on SCL implementation, the findings suggest the need for instructional strategies aimed at promoting discovery and cooperative learning instead of stressing on testing.

The findings are supported by literature, which highlights the importance of incorporating practical strategies into the curriculum and testing to enhance students' learning. According to Harris et al. (2015), students must engage in authentic practices and learn from high-quality curriculum to ensure success. As a result, the findings that

emphasized the aspect of discovery suggested the need for a student-centered approach to enhance performance. Other results highlighted key issues, such as tenure, which influences teachers' ability to implement SCL strategies. Consequently, the pressure linked to tenure is a critical issue influencing teachers' readiness to consistently implement SCL strategies. Equally, the issue linked to the lack of parallelism between the curriculum and SCL was identified as an area of concern.

Moreover, the findings indicated the need for enough opportunities to enhance students' independent and critical thinking. The comments also suggested the necessity for cooperative learning. Gillies (2016) indicates that cooperative learning is linked to higher achievements and meaningful relationships among peers. Accordingly, the literature supports the findings obtained in the study by requiring teachers to implement SCL strategies that can promote interactive learning activities. The effective and consistent execution of such approaches is critical to enhancing students' academic performance.

In the findings, some of the respondents highlighted administrative issues as being critical factors underlying the theme of pressure on curriculum and testing. For instance, pressure from administrative officials to increase data collection and accountability was a major factor influencing teachers' readiness to implement SCL strategies consistently. Therefore, addressing administrative challenges is critical to enhancing consistent SCL implementation. Furthermore, the results showed that some educators were comfortable with the traditional instructional approaches. Such areas aligned with the desire to maintain the status quo, which is a major hindrance to attaining meaningful change.

Curtin, Stewart, and Cole (2015) indicated the need for intersectional awareness aimed at challenging the status quo. This viewpoint supports the findings by suggesting the necessity for educators to initiate reforms, such as SCL strategies, aimed at improving students' learning outcomes. Consequently, teachers should be ready to embrace change as a necessary aspect of consistent SCL implementation.

The results specified that other curriculum issues were raised to indicate their effect on consistent SCL implementation. For instance, the findings show that planning and focusing on students' learning are essential to ensure consistent SCL implementation. Consequently, middle school teachers should emphasize adequate planning to foster the effective and consistent implementation of SCL strategies to improve students' learning.

Theme 4: Lack of Quality Professional Development

The results indicated that the lack of quality professional development was the most prevalent concern for the participants. Such an observation is linked to 12 respondents who identified lack of professional development as a critical factor influencing their ability to implement SCL strategies consistently. Teachers need to engage in professional development to explore new pedagogical approaches by accepting and implementing them in the classroom (Girvan, Conneely, & Tangney, 2016). The responses obtained from the study suggested that professional development is a major area that requires significant attention. Consequently, the findings are supported by literature, which emphasizes the need for educators to participate in professional development platforms for improved SCL implementation. Opportunities for professional growth and development may include workshops and online learning

communities, which allow participants to share information and experience related to best practices in SCL implementation.

As mentioned in the results section and exemplified above, the study participants were concerned about engaging in relevant professional development activities targeted at enhancing their capacity to improve SCL implementation. Teachers can engage in informal online communities and other networks aimed at improving shared learning, reflection about teaching experience, and receiving emotional support (Macià & García, 2016). Accordingly, the literature supports the findings by demonstrating the importance of offering educators the opportunities required for their consistent professional development. For example, besides workshops, teachers may need to work with mentors and coaches who can guide them in developing the knowledge, skills, and experience necessary for the effective and consistent implementation of SCL strategies. Therefore, enhancing middle school teachers' participation in professional development workshops and other programs is vital to improving their capacity to implement SCL strategies consistently.

Theme 5: Lack of Technological Resources

The study results outlined that five participants were concerned about the lack of technological resources. Their responses discussed critical issues undermining access to such resources for effective and consistent implementation of SCL strategies. Moreover, issues related to Internet connectivity were raised in the responses. However, some respondents highlighted differences in technology access between public and private schools.

The findings are supported by literature, which highlights variations in schools' access to the resources needed for optimal implementation of SCL strategies. For instance, the area of technological resources has been addressed in prior research based on its role in influencing students' learning. According to Delgado, Wardlow, McKnight, & O'Malley, (2015), despite the presence of disparities in access to technology, many students in the United States can access the Internet from their schools or homes.

Accordingly, teachers who identified lack of technology as a barrier must focus on acquiring relevant technological infrastructure and instruments to promote SCL implementation. Schools should invest extensively in emerging technologies and other resources to create supportive environments for the effective implementation of SCL strategies. The failure to install the necessary strategies may lead to the persistent disparities in access to digital resources across different schools.

Theme 6: Overcrowded and Noisy Classrooms

The results indicated that seven participants were concerned about overcrowded and noisy classrooms. The major issue raised involved concerns about classroom organization and management. Such study findings are adequately supported by literature. According to Aliakbari and Bozorgmanesh (2015), teachers must focus on preventing disruptions in their classrooms while managing and correcting students' behaviors to encourage and motivate positive behavior. These perspectives demonstrate the necessity for educators to adopt best practices in classroom organization with the view of promoting SCL implantation.

Moreover, the findings indicate that some respondents were concerned about the

noise associated with students working in groups and overcrowded classrooms. Equally, the study generated similar responses to indicate the need for effective classroom management. Such findings are supported by literature, which emphasizes the importance of effective classroom management skills in encouraging student-centered learning activities. According to Sieberer-Nagler (2016), teachers should transform classroom management challenges into opportunities for meaningful change while fostering positive interactions. Accordingly, these viewpoints are closely aligned with the study findings as they demonstrate the necessity for educators to focus on managing their classrooms effectively to promote students' engagement in active learning. The adoption of these strategies would be critical in ensuring the consistent implementation of SCL strategies for optimal students' performance.

Consequently, the six themes have demonstrated the important areas that the participants perceived as barriers preventing them from implementing SCL strategies consistently to improve students' learning. The areas align closely with Schlossberg's (2011) 4S's transitional model as they address challenges linked to the *situation*, *self*, *support*, and *strategies* applicable to the consistent implementation of SCL strategies to enhance students' learning. Consequently, middle schools should address the issues raised to enhance the consistent implementation of SCL strategies to improve students' learning.

Limitations of the Study

The first major limitation involved interviewing middle school teachers with an experience of at least 5 years. This approach excluded newly employed teachers, thus

undermining the collection of their views with the to enhance the widespread implementation of SCL strategies by all teachers. Based on such an inadequacy, the study may not apply to novice teachers who have not encountered the six themes' barriers.

Additionally, the study's restriction to middle school teachers is a critical limitation as the findings may not reflect the use of SCL by teachers in other contexts, such as elementary and high school levels. SCL strategies are beneficial for all students irrespective of their academic levels. Consequently, this limitation undermines the study's generalization to other educational settings besides middle school.

Moreover, I am currently a middle school teacher who used SCL strategies at the time of study. This issue has a potential impact of causing a confirmation bias. According to Del Vicario, Scala, Caldarelli, Stanley, and Quattrociocchi (2017), confirmation bias entails the tendency to process new information to confirm preexisting conceptions and avoid contradiction with prior belief. As a result, my experience with SCL implementation had the potential of influencing how I interpreted the participants' responses. However, I mitigated such a bias by adhering to the semistructured interview questions to generate findings addressing the research topic. I analyzed the responses based on Schlossberg's (2011) 4S's Model to generate thematic areas aligned with the research purpose.

Besides, the study was limited to the U.S. context, which excluded the collection of extensive data from educators in other parts of the world. This limitation indicates that

the study outcomes may not be readily transferrable to contexts outside the United States. Nonetheless, the thick descriptions of study methods and data were geared toward addressing such a limitation to enhance the study's generalizability to other middle school settings.

Furthermore, the participants' perceptions were limited to students' engagement in group work and the use of technology. By focusing on such two areas, other critical elements, such as project-based learning and inquiry-based learning, which are vital in SCL implementation, were not addressed. Another critical limitation is linked to many participants who came from wealthy school districts, thus generating skewed data. The sample of educators from a higher social class did not reflect the dynamics of the society and middle school contexts. Consequently, addressing the explored limitations is critical to enhancing the study's coverage of wide-ranging issues influencing the consistent implementation of SCL strategies to improve students' learning.

Recommendations

Relevant recommendations are identified to enhance meaningful research outcomes. Based on the identified limitations, further research should include teachers with varying experiences, such as the newly employed and those with an extensive teaching experience. This approach is essential to replicate the study and generate findings that can be generalized to diverse classroom contexts to improve students' learning. Additionally, this recommendation is based on the goal of generating comprehensive data to address the research purpose, which was to examine teachers' perceptions of the barriers that prevent SCL strategies from being implemented

consistently in Seasons Middle School, located in the Northeastern United States, to support students' learning. Additionally, the inclusion of participants with different experiences is closely based on the objective of promoting positive social change, which the study intended to achieve. According to Bourn (2016), teachers are key agents of social change. Such ideas indicate the necessity to equip all educators, irrespective of their teaching experience, the information and knowledge necessary to promote social change through effective and consistent SCL implementation.

Future studies should include teachers from elementary and high school levels to gather comprehensive data related to SCL strategies' consistent implementation. A study by Reif, Shultz, and Ellis (2016) indicated that seven out of eight traditional high schools were implementing SCL strategies moderately. However, the implementation varied significantly depending on the teacher and classroom (Reif et al., 2016). As a result, future studies should include teachers from elementary and high school levels to examine their perceptions of the barriers influencing the consistent implementation of SCL strategies to promote students' learning.

Another essential recommendation involves middle school teachers' inclusion from global contexts to ensure the study's relevance internationally. This approach is necessary to promote diversity, which is an integral aspect of social change. According to Marimuthu and Cheong (2015), teachers should develop the ability to handle diversity, thus supporting social transformation by changing current thinking approaches.

Consequently, further studies should examine the implementation of SCL strategies internationally to ensure the study's transferability to any middle school across the world.

Such transferability makes the study beneficial to global social change by fostering the consistent implementation of SCL strategies to promote students' learning.

Future studies should seek to specify the student-centered learning strategies used by teachers to support students' learning to avoid a narrow focus or emphasis on areas on group work and technology use. Despite being essential to SCL activities, group work and technologies should be accompanied by other strategies, including project-based learning to enhance optimal knowledge building. Kokotsaki, Menzies, and Wiggins (2016) posited that project-based learning is an active component of student-centered instruction encompassing students' autonomy, goal setting, communication, constructive inquiries, and reflections involving real-life cases. As a result, the study's expansion to incorporate varied perspectives of other elements besides group work and technology is necessary to ensure comprehensive data collection on the barriers that prevent middle school teachers from implementing SCL strategies consistently to support students' learning.

Furthermore, further studies should include teachers from different socioeconomic backgrounds. Educators should have clarity on the impact of teaching methodologies on social justice and social change (Bourn, 2016). Based on this perspective, the collection of data from teachers drawn from different socioeconomic backgrounds is vital to ensure that the study outcomes reflect of societal dynamics. Such a strategy is crucial as teachers must be aware of their students' diverse backgrounds to enhance effective SCL strategies to improve students' learning.

Implications

The study has significant implications for teachers in middle schools. Educators should address the explored thematic areas to enhance consistent SCL implementation for optimal students' learning. The failure to address such issues would undermine students' academic performance.

Additionally, the study has a major implication for positive social change through the consistent implementation of SCL strategies to improve students' learning. As mentioned above, teachers are agents of social change who should promote global learning in their schools (Bourn, 2016). This viewpoint indicates the need for teachers to implement SCL strategies consistently to foster learners' achievement. Bourn (2016) stated the necessity for professional development and practical support, resource accessibility, and accreditation opportunities for enhancing the teachers' role as practitioners for global learning. Consequently, the study generates relevant data that teachers can use to improve their SCL implementation to promote social change through SCL strategies that allow students to remain active in the construction of knowledge.

Moreover, the study has a major implication for teachers based on the need to develop innovative teaching and learning platforms that can support students' active engagement in learning. The innovative strategies should focus on integrating relevant digital resources into the learning context to ensure consistent knowledge construction even in times of pandemics. For instance, Stella was concerned on "How do I keep kids safe, but not completely tying them away from, being able to benefit from working together and sharing ideas. So, am finding out what, what other, apps are out there in the

age of COVID." These concerns are important areas of consideration for today's teachers who must implement SCL strategies consistently to improve students' learning. Poveda (2016) argued that increased Internet access and the development of programs covering basic information communication technology (ICT) skills based on critical pedagogy allowed students to gain self-confidence and technical skills necessary to address practical needs. Such skills are essential to achieve meaningful social change by enhancing students' participation in real-life activities. Therefore, the study has wideranging implications for teachers, as it covers major barriers influencing SCL implementation to improve students' learning.

Conclusion

The purpose of this study was to examine teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently in Seasons Middle School, located in the Northeastern United States, to support students' learning. The research question focused on: What are middle school teachers' perceptions of the barriers that prevent SCL strategies from being implemented consistently to support students' learning? The study has adequately addressed these areas based on the extensive themes explored above. Overall, the consistent implementation of SCL strategies is vital to improving students' learning.

In line with the basic qualitative research, I used a semistructured interview with nine open-ended interview questions (Appendix B). Subsequently, I used the app Temi to audio record and transcribe the interviews. The data coding and analysis processes generated six thematic areas that were extensively explored to address the study purpose.

The findings indicated that students' resistance and inability were a key area perceived by 10 participants as a critical barrier undermining SCL strategies' consistent implementation. Additionally, four respondents were concerned about relinquishing their control in the classroom. Similarly, 11 participants highlighted issues related to the theme of pressure on curriculum and testing. They identified various issues, including wording, tenure, lack of a student-centered approach, and emphasis on testing. Twelve respondents identified the lack of quality professional development as a critical factor influencing their ability to consistently implement SCL strategies. Five participants were concerned about the lack of technological resources. Lastly, seven participants raised concerns related to overcrowded and noisy classrooms. Therefore, these areas were adequately covered to indicate critical issues that should be addressed to enhance middle school teachers' consistent implementation of SCL strategies to improve students' learning.

References

- Acim, R. (2018). The Socratic method of instruction: An experience with a reading comprehension course. *Journal of Educational Research and Practice*, 8(1), 41-53. doi:10.5590/JERAP.2018.08.1.04
- Al Chibani, W., & Hajal, P. (2017). Investigating the teachers' perception and application of different constructivist learning approaches in the American context and the technology use in classrooms: A multiple case study.

 **ICICTE Proceedings*, 370–377. Retrieved from https://www.researchgate.net/publication/319311153
- Aliakbari, M., & Bozorgmanesh, B. (2015). Assertive classroom management strategies and students' performance: The case of EFL classroom. *Cogent Education*, 2(1), 1012899. doi:10.1080/2331186X.2015.1012899
- Anagün, Ş. S. (2018). Teachers' perceptions about the relationship between 21st-century skills and managing constructivist learning environments.

 International Journal of Instruction, 11(4), 825–840.

 doi:10.12973/iji.2018.11452a
- Andersen, I. G., & Andersen, S. C. (2017). Student-centered instruction and academic achievement: Linking mechanisms of educational inequality to schools' instructional strategy. *British Journal of Sociology of Education*, *38*(4), 533-550. doi:10.1080/01425692.2015.1093409
- Arnett, T. (2019). What creates the motivation to change: 2 key factors influence

- teachers' willingness to modify their practice. *Learning Professional*, 40(1), 55–58. Retrieved from https://eric.ed.gov/?id=EJ1205908
- Arseven, Z., Sahin, S., & Kiliç, A. (2016). Teachers' adoptation level of student centered education approach. *Journal of Education and Practice*, 7(29), 133-144.

 Retrieved from https://files.eric.ed.gov/fulltext/EJ1118805.pdf
- Asiksoy, G., & Ozdamli, F. (2017). An overview to research on education technology based on constructivist learning approach. *Cypriot Journal of Educational Sciences*, *12*(3), 133–147. doi:10.18844/cjes.v12i3.2444
- Baeten, M., Dochy, F., Struyven, K., Parmentier, E., & Vanderbruggen, A. (2016).

 Student-centered learning environments: An investigation into student teachers' instructional preferences and approaches to learning. *Learning Environments*Research, 19(1), 43-62. doi:10.1007/s10984-015-9190-5
- Bandura, A. (1977). Social learning theory. doi:10.1177/105960117700200317.
- Bass, R. (2018). The impact of technology on the future of human learning. *Change*, 50(3-4), 34–39. doi:10.1080/00091383.2018.1507380
- Bayram-Jacobs, D., & Hayırsever, F. (2016). Student-centered learning: How does it work in practice? *Journal of Education, Society and Behavioral Science*, 1-15. doi:10.9734/BJESBS/2016/28810
- Bechter, B. E., Dimmock, J. A., & Jackson, B. (2019). A cluster-randomized controlled trial to improve student experiences in physical education: Results of a student-centered learning intervention with high school teachers. *Psychology of Sport & Exercise*, 45. doi:10.1016/j.psychsport.2019.101553

- Berger, D., & Wild, C. (2017). "Forgotten Lore": Can the Socratic method of teaching be used to reduce the attainment gap of black, Asian and minority ethnic students? *Higher Education Review*, 49(2), 29–55. Retrieved from https://eric.ed.gov/?id=EJ1151055
- Bhowmik, J., Meyer, D., & Phillips, B. (2019). Using blended learning in postgraduate applied statistics programs. *Turkish Online Journal of Distance Education*, 20(2), 64–77. doi:10.17718/tojde.557739
- Bingham, A. J., Pane, J. F., Steiner, E. D., & Hamilton, L. S. (2018). Ahead of the curve: Implementation challenges in personalized learning school models. *Educational Policy*, 32(3), 454–489. doi:10.1177/0895904816637688
- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, 26(13), 1802-1811. doi:10.1177/1049732316654870
- Borda, E. J., Boudreaux, A., Fackler-Adams, B., Frazey, P., Julin, S., Pennington, G., & Ogle, J. (2017). Adapting a student-centered chemistry curriculum to a large-enrollment context: Successes and challenges. *Journal of College Science Teaching*, (5),8. doi:10.2505/4/jcst17 046 05 8
- Bourn, D. (2016). Teachers as agents of social change. *International Journal of Development Education and Global Learning*, 7(3), 63-77. Retrieved from https://files.eric.ed.gov/fulltext/EJ1167813.pdf
- Brigati, J., England, B. J., & Schussler, E. (2019). It's not just for points: Teacher

- justifications and student perceptions about active learning. *Journal of College Science Teaching*, 48(3), 45–55. doi:10.2505/4/jcst19 048 03 45
- Bright, D. S., Caza, A., Turesky, E., Putzel, R., Nelson, E., & Luechtefeld, R. (2016). Constructivist meta-practices: When students design activities, lead others, and assess peers. *Journal of Leadership Education*, *15*(4), 75. doi:10.12806/V15/I4/R6
- Brown, R., Ernst, J., Clark, A., DeLuca, B., & Kelly, D. (2017). Best practices:

 Technology education courses and classrooms naturally lend themselves to providing active learning opportunities for students. *Technology & Engineering Teacher*, 77(2), 30–34. Retrieved from https://www.questia.com/library/journal/1G1-512776458/best-practicestechnology-education-courses-and-classrooms
- Buchanan, S., Harlan, M. A., Bruce, C., & Edward, S. (2016). Inquiry based learning models, information literacy, and student engagement: A literature review. *School Libraries Worldwide*, 22(2), 23–39. doi:10.14265.22.2.03
- Burkholder, G. J., Cox, K. A., & Crawford, L. M. (Eds.). (2016). *The*scholar-practitioner's guide to research design. Baltimore, MD:

 Laureate Publishing.
- Callahan, J. (2016). Encouraging retention of new teachers through mentoring strategies. *Delta Kappa Gamma Bulletin*, 83(1), 6-11. Retrieved from https://www.semanticscholar.org/paper/Encouraging-Retention-of-New-Teachers-through-Callahan/60827ca4a908d205ccd6720f6fb7e09d2f2757ce

- Carminati, L. (2018). Generalizability in qualitative research: A tale of two traditions. *Qualitative Health Research*, 28(13), 2094-2101. doi:10.1177/1049732318788379
- Çevikbas, M., & Argün, Z. (2017). An innovative learning model in digital age:

 Flipped classroom. *Journal of Education and Training Studies*, *5*(11), 189–200. doi:10.11114/jets.v5i11.2322
- Chen, Y. (2018). Perceptions of EFL college students toward collaborative learning.

 Canadian Center of Science and Education, 11(2), 1–4.

 doi:10.5539/elt.v11n2p1
- Chiang, C. L., & Lee, H. (2016). The effect of project-based learning on learning motivation and problem-solving ability of vocational high school students.

 International Journal of Information and Education Technology, 6(9), 709-712. doi:10.7763/IJIET.2016.V6.779
- Cho, M., & Kim, M. Y. (2019). Outcomes and influential factors applying flipped learning methods in a clinical adult nursing practicum. *International Journal of Nursing Practice*, 25(2). doi:10.1111/ijn.12724
- Chowdhury, I. A. (2015). Issue of quality in a qualitative research: An overview. *Innovative Issues and Approaches in Social Sciences*, 8(1), 142-162.

 doi:10.12959/issn.1855-0541.IIASS-2015-no1-art09
- Clark, K. R. (2018). Learning theories: Cognitivism. *Radiologic Technology*, *90*(2), 176–179. Retrieved from http://www.radiologictechnology.org/content/90/2/176.extract

- Cohen, D. B. (2017). Managing change—before it drives you out of teaching. *Educational Leadership: Gearing up for Change*, 74, 34-38.

 Retrieved from http://www.ascd.org/publications/educational-leadership/summer17/vol74/num09/Managing-Change%E2%80%94Before-It-Drives-You-Out-of-Teaching.aspx
- Collie, R. J., & Martin, A. J. (2016). Adaptability: An important capacity for effective teachers. *Educational Practice and Theory*, 38(1), 27-39. doi:10.7459/ept/38.1.03
- comCorkin, D. S., Coleman, S. L., & Ekmekci, A. (2019). Navigating the challenges of student-centered mathematics teaching in an urban context. *Urban Review*, *51*(3), 370-403. doi:10.1007/s11256-018-0485-6
- Costes-Onishi, P., & Caleon, I. (2016). Generalists to specialists: Transformative evidences and impediments to student-centered practices of primary music and art teachers in Singapore. *International Journal of Education & the Arts, 17*(7). Retrieved from http://www.ijea.org/v17n7/.
- Creswell, J. W. (2012). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Curtin, N., Stewart, A. J., & Cole, E. R. (2015). Challenging the status quo: The role of intersectional awareness in activism for social change and pro-social intergroup attitudes. *Psychology of Women Quarterly*, *39*(4), 512-529.

- doi:10.1177/0361684315580439
- Deci, E. L., & Ryan, R. M. (2016). Optimizing students' motivation in the era of testing and pressure: A self-determination theory perspective. *Building Autonomous Learners*, 9-29. doi:10.1007/978-981-287-630-0 2
- Del Vicario, M., Scala, A., Caldarelli, G., Stanley, H. E., & Quattrociocchi, W. (2017).

 Modeling confirmation bias and polarization. *Scientific Reports*, 7, 40391.

 Retrieved from https://www.nature.com/articles/srep40391?source=post_page
- Delgado, A. J., Wardlow, L., McKnight, K., & O'Malley, K. (2015). Educational technology: A review of the integration, resources, and effectiveness of technology in K-12 classrooms. *Journal of Information Technology Education*, 14. doi:10.28945/2298
- Deming, D. J. (2017). The growing importance of social skills in the labor market.

 *Quarterly Journal of Economics, 132(4), 1593-1640. doi:10.1093/qje/qjx022
- Department of Education, E. O. of E. T. (2017). *Reimagining the role of technology in education: 2017 National Education Technology Plan update*. Retrieved from https://tech.ed.gov/files/2017/01/NETP17.pdf
- Dev, M. (2016). Constructivist approach enhances the Learning: A Search of Reality.

 **Journal of Education and Practice, 7(25), 59–62. Retrieved

 https://files.eric.ed.gov/fulltext/EJ1115872.pdf
- DeVries, R. (2008). Piaget and Vygotsky: Theory and practice in early education. In T. L. Good 21st century education: A reference handbook (Vol. 2, pp. I-184-I-193). doi:10.4135/9781412964012.n20

- Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education*. New York, NY: The FreePress. Retrieved from https://s3.amazonaws.com/arena-attachments/190319/2a5836b93124f200790476e08ecc4232.pdf
- Dole, S., Bloom, L., & Doss, K. K. (2017). Engaged learning: Impact of PBL and PBL with elementary and middle grade students. *Interdisciplinary Journal of Problem-Based Learning*, 11(2). Retrieved from https://core.ac.uk/download/pdf/204611624.pdf
- Dole, S., Bloom, L., & Kowalske, K. (2016). Transforming pedagogy: Changing perspectives from teacher-centered to learner-centered. *Interdisciplinary Journal of Problem-Based Learning*, 10(1). Retrieved from https://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1538&context=ijp bl
- Dong, Y., Wu, S. X., Wang, W., & Peng, S. (2019). Is the student-centered learning style more effective than the teacher-student double-centered learning style in improving reading performance? *Frontiers in Psychology*, 10. doi:10.3389/fpsyg.2019.02630
- Edmonds, W. & Kennedy, T. (2017). Qualitative methods. In Edmonds, W., & Kennedy, T. *An applied guide to research designs* (pp. 141-144). Thousand Oaks, CA: SAGE Publications, Inc. doi:10.4135/9781071802779
- Edwards, S. (2017). Like a chameleon: A beginning teacher's journey to implement active learning. *Research in Middle Level Education Online*,

- 40(4), 1-11. doi:10.1080/19404476.2017.1293599
- Ellis, P. (2019). The language of research (part 20): Understanding the quality of a qualitative paper (2). *Wounds UK*, *15*(1), 110–111. Retrieved from https://www.wounds-uk.com/journals/issue/570/article-details/language-research-part-20-understanding-quality-qualitative-paper-2
- Enríquez, J. A. V., de Oliveira, A. M. P., & Valencia, H. G. (2018). What mathematics teachers say about the teaching strategies in the implementation of tasks. *English Language Teaching*, *11*(1), 65–79. Retrieved from https://files.eric.ed.gov/fulltext/EJ1163275.pdf
- Eryaman, M. Y., & Genc, S. Z. (2010). Learning theories. In C. Kridel (Ed.), *Encyclopedia of curriculum studies* (pp. 535-537). doi:10.4135/9781412958806.n289
- Esahaque, S. K. (2017). Education as an instrument of social change. *International Research Journal of Multidisciplinary Studies*, *3*(6). Retrieved from https://www.semanticscholar.org/paper/Education-as-an-Instrument-of-Social-Change-Sk/bfdb6e0dcaa4c4a56883519736890b6246c1bd24
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, *5*(1), 1-4. doi:10.11648/j.ajtas.20160501.11
- Frăsineanu, E. S., & Ilie, V. (2017). Student-centered education and paradigmatic changes. *Revista de Stiinte Politice*, (54), 104–117. Retrieved from http://cis01.central.ucv.ro/revistadestiintepolitice/files/numarul54_2017/9.pdf

- Frey, B. (2018). The SAGE encyclopedia of educational research, measurement, and evaluation (Vols. 1-4). doi:10.4135/9781506326139
- Gillies, R. M. (2016). Cooperative learning: Review of research and practice. *Australian Journal of Teacher Education*, *41*(3), 3. Retrieved from https://ro.ecu.edu.au/cgi/viewcontent.cgi?article=2902&context=ajte
- Girvan, C., Conneely, C., & Tangney, B. (2016). Extending experiential learning in teacher professional development. *Teaching and Teacher Education*, *58*, 129-139. doi:10.1016/j.tate.2016.04.009
- Glowa, L., & Goodell, J. (2016). Student-centered learning: Functional requirements for integrated systems to optimize learning. Vienna, VA.:

 International Association for K-12 Online Learning (iNACOL).

 Retrieved from https://aurora-institute.org/wpcontent/uploads/iNACOL_FunctionalRequirementsForIntegratedSyste ms.pdf
- Gordy, X. Z., Jones, E. M., & Bailey, J. H. (2018). Technological innovation or educational evolution? A multidisciplinary qualitative inquiry into active learning classrooms. *Journal of the Scholarship of Teaching and Learning*, *18*(2), 1–23. Retrieved from https://files.eric.ed.gov/fulltext/EJ1182845.pdf
- Gounari, P. (2016). Student-centered learning opportunities for adolescent English learners in flipped classrooms. *Nellie Mae Education Foundation*. doi:10.13140/RG.2.1.1682.0082
- Hall, A., & Miro, D. (2016). A study of student engagement in project-based

- learning across multiple approaches to STEM education programs. *School Science & Mathematics*, *116*(6), 310–319. doi:10.1111/ssm.12182
- Harris, C. J., Penuel, W. R., D'Angelo, C. M., DeBarger, A. H., Gallagher, L. P.,
 Kennedy, C. A., ... & Krajcik, J. S. (2015). Impact of project □ based curriculum materials on student learning in science: Results of a randomized controlled trial. *Journal of Research in Science Teaching*, *52*(10), 1362-1385.
 doi:10.1002/tea.21263
- Holmes, Y. M., Collins, J., & Rutherford, J. (2017). Active learning and generation next perceptions of engagement and motivation: An attribution theory approach. *Journal of Higher Education Theory & Practice*, *17*(7), 111–114. Retrieved from http://www.nabusinesspress.com/JHETP/HolmesYM_abstract.html
- Idowu, O. (2016). Criticisms, constraints and constructions of case study research strategy. *Asian Journal of Business and Management (ISSN: 2321–2802)*, *4*(05), 184-188. Retrieved from https://www.ajouronline.com/index.php/AJBM/article/view/4166/2218
- Jacobs, G., & Power, M. A. (2016). Student Centered Learning An approach to fostering democracy in schools. *Beyond Words*, (2), 79. Retrieved from https://media.neliti.com/media/publications/231673-student-centered-learning-an-approach-to-3014e1d6.pdf
- Jaiswal, P. (2019). Using learner-centered instructional approach to foster

- students' performances. *Theory & Practice in Language Studies*, 9(9), 1074–1080. doi:10.17507/tpls.0909.02
- Ji-Hye, K., Ho Soo Kang, Kuusinen, C. M., & Kyoungho, P. (2017). Exploring the relationship between teacher collaboration and learner-centered instruction. *KEDI Journal Of Educational Policy*, *14*(1), 3-24. doi:10.22251/jlcci.2019.19.8.685
- Johnson Caswell, C., & LaBrie, D. (2017). Inquiry based learning from the learner's point of view: A teacher candidate's success story. *Journal of Humanistic Mathematics*, 7(2), 161-186. doi:10.5642/jhummath.201702.08
- Jones, A. C. (2016). *Leading the charge in changing times: 21st Century learning and leading* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMINo. 10242235). Retrieved from https://ecommons.luc.edu/cgi/viewcontent.cgi?article=3797&context=luc diss
- Kang, J., & Keinonen, T. (2018). The effect of student-centered approaches on students' interest and achievement in science: Relevant topic-based, open and guided inquiry-based, and discussion-based approaches. *Research in Science Education*, 48(4), 865–885. doi:10.1007/s11165-016-9590-2
- Kaput, K., & Education Evolving. (2018). Evidence for student-centered

 learning. Education Evolving. Retrieved from

 https://www.educationevolving.org/content/evidence-for-student-centered-learning
- Kebaetse, M. B., & Sims, R. (2016). Using instructional consultation to support

- faculty in learner-centered teaching. *The Journal of Faculty Development,* 30(3), 31-40. Retrieved from https://www.questia.com/library/journal/1P4-1907272787/using-instructional-consultation-to-support-faculty
- Kemp, S. J. (2013). Exploring the use of learner-focused teaching approaches in different academic disciplines. *Journal of Further and Higher Education*, *37*(6), 804–818. doi:10.1080/0309877X.2012.684041
- Kenney, C. (2018). How will you contribute? A look at an instructional strategy to improve student-centered learning. *Networks: An Online Journal for Teacher Research*, 20(1). Retrieved from https://files.eric.ed.gov/fulltext/EJ1171084.pdf
- Kettler, K., Guthrie, K. T., & Omelchenko, N. (2017). Active learning approach is a key component of effective education. *Proceedings of the West Virginia Academy of Science*, 89(1). Retrieved from http://pwvas.org/index.php/pwvas/article/view/185
- Kokotsaki, D., Menzies, V., & Wiggins, A. (2016). Project-based learning: A review of the literature. *Improving schools*, 19(3), 267-277.doi:10.1177/1365480216659733
- Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part

 4: Trustworthiness and publishing. *European Journal of General Practice*, *24*(1),

 120-124. doi:10.1080/13814788.2017.1375092
- Krahenbuhl, K. S. (2016). Student-centered education and constructivism:

 Challenges, concerns, and clarity for teachers. *Clearing House*, 89(3),

- 97-105. doi:10.1080/00098655.2016.1191311
- Kretchmar, J. (2018). Social Learning Theory. *Social Learning Theory Research Starters Education*, 1, 1. doi:10.30707/ETD2019.Minniti.A
- Lai, H.-M., Hsiao, Y.-L., & Hsieh, P.-J. (2018). The role of motivation, ability, and opportunity in university teachers' continuance use intention for flipped teaching. *Computers & Education*, *124*, 37–50. doi:10.1016/j.compedu.2018.05.013
- Lear, J. L., Bridges, D., Van Horn, B., & Hodge, K. A. (2019). Teaching strategies that promote learning for the 21st Century student. *NACTA Journal*, *63*(2), 127.

 Retrieved from https://www.nactateachers.org/index.php/vol-63-2-apr-oct-2019/2845-2019-08-05-14-27-40
- Lee, E., & Hannafin, M. (2016). A design framework for enhancing engagement in student-centered learning: Own it, learn it, and share it. *Educational Technology**Research & Development, 64(4), 707-734. doi:10.1007/s11423-015-9422-5
- Louca, L. T., & Zacharia, Z. C. (2015). Examining learning through modeling in K-6 science education. *Journal of Science Education and Technology*, 24(2–3), 192–215. doi:10.1007/s10956-014-9533-5
- Macià, M., & García, I. (2016). Informal online communities and networks as a source of teacher professional development: A review. *Teaching and Teacher Education*, 55, 291-307. doi:10.1016/j.tate.2016.01.021
- Mackey, T. (2016). Problem-based learning. In S. Danver (Ed.), *The SAGE*encyclopedia of online education (pp. 912-913). Thousand Oaks, CA: SAGE

 Publications, Inc. doi:10.4135/9781483318332.n290

- Mahmood, N., & Iqbal, Z. (2018). Challenges faced by prospective teachers during teaching practice: Connecting theory to practice. *Bulletin of Education and Research*, 40(2), 113–136. Retrieved from https://files.eric.ed.gov/fulltext/EJ1209790.pdf
- Marbach-Ad, G., & Hunt Rietschel, C. (2016). A case study documenting the process by which biology instructors transition from teacher-centered to learner-centered teaching. *CBE Life Sciences Education*, *15*(4). doi:10.1187/cbe.16-06-0196
- Marimuthu, S., & Cheong, L. S. (2015). Inclusive education for social transformation. *Procedia-Social and Behavioral Sciences*, *172*, 317-322. doi:10.1016/j.sbspro.2015.01.370
- McHaney, R., Reiter, L., & Reychav, I. (2018). Immersive simulation in constructivist-based classroom E-learning. *International Journal on E-Learning*, *17*(1), 39-64. Retrieved from https://eric.ed.gov/?id=EJ1164437
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Merriam, S. B., & Grenier, R. S. (2019). *Qualitative research in practice:*Examples for discussion and analysis. John Wiley & Sons.
- Meyer, K., & Wurdinger, S. (2016). Students' perceptions of life skill development in project-based learning schools. *Journal of Educational Issues*, *2*(1), 91–114.

 Retrieved from https://pdfs.semanticscholar.org/823b/9ffa5d0f351d416b9b02bf25cdd3a8216347.

pdf

- Mills, A. J., Durepos, G., & Wiebe, E. (2010). Encyclopedia of case study research.

 Thousand Oaks, CA: SAGE Publications, Inc.
- Moon, A., Wold, C., & Francom, G. (2017). Enhancing reading comprehension with student-centered iPad applications. *TechTrends: Linking Research & Practice to Improve Learning*, 61(2), 187–194. doi:10.1007/s11528-016-0153-1
- Morrison, A. R. (2017). Beyond the status quo setting the agenda for effective change. *Educational Management Administration & Leadership, 46*(3), 511–
 529. doi:10.1177/1741143216682500
- Muhammad, A. J., Mitova, M. A., & Wooldridge, D.G. (2016). Utilizing technology to enhance learning environments: The net gen student. *Journal of Family & Consumer Sciences*, 108(2), 61–63. doi:10.14307/JFCS108.2.61
- Murphy, C., Abu-Tineh, A., Calder, N., & Mansour, N. (2019). Changing from a traditional approach to learning: Teachers' perceptions of introducing WebQuests into mathematics and science classrooms in Qatar. *Teachers and Curriculum*, 19(1), 9–16. doi:10.15663/tandc.v19i1.333
- Ndirangu, C. (2017). Teachers' attitude towards implementation of learner-centered methodology in science education in Kenya. *Educational Research And Reviews*, *12*(20), 996-1007.

 doi:10.5897/ERR2017.3326
- Netcoh, S., & Bishop, P. A. (2017). Personalized learning in the middle grades: A case study of one team's successes and challenges. *Middle Grades Research Journal*,

- (2), 33. Retrieved from https://eric.ed.gov/?id=EJ1178378
- New York State Education Department. (2019, Jan. 17). *State education department announces new school accountability determinations*. Retrieved from http://www.nysed.gov/news/2019/state-education-department-announces-new-school-accountability-determinations
- New York State Education Department. (2019). Retrieved from http://www.nysed.gov/common/nysed/files/programs/crs/culturally-responsive-sustaining-education-framework.pdf
- Nicol, A. A., Owens, S. M., Le Coze, S. S., MacIntyre, A., & Eastwood, C. (2018).
 Comparison of high-technology active learning and low-technology active
 learning classrooms. *Active Learning in Higher Education*, 19(3), 253–265.
 doi:10.1177/1469787417731176
- Ocak, G., Ocak, İ., & Boyraz, S. (2017). Evaluation of constructivist learning approach through experimental studies. *Participatory Educational Research*, 1–8.

 Retrieved from https://dergipark.org.tr/en/download/article-file/776613
- Omotayo, S. A., & Adeleke, J. O. (2017). The 5E Instructional Model: A constructivist approach for enhancing students' learning outcomes in mathematics. *Journal of the International Society for Teacher Education*, 21(2), 15–26. Retrieved from https://eric.ed.gov/?id=EJ1176946
- Onurkan Aliusta, G., & Özer, B. (2017). Student-centered learning (SCL): Roles changed? *Teachers & Teaching*, 23(4), 422-435. doi:10.1080/13540602.2016.1205014

- Osmanoglu, A., & Dincer, E. O. (2018). Prospective mathematics teachers' perceptions on and adaptation of student-centered approach to teaching.

 International Journal of Progressive Education, 14(1), 75.

 doi:10.29329/ijpe.2018.129.6
- Otara, A., Uworwabayeho, A., Nzabalirwa, W., & Kayisenga, B. (2019). From ambition to practice: An analysis of teachers' attitude toward learner-centered pedagogy in public primary schools in Rwanda. *SAGE Open*, *9*(1). Retrieved from https://journals.sagepub.com/doi/full/10.1177/2158244018823467
- Patton, L. D., Renn, K. A., Guido, F. M., & Quaye, S. J. (2016). Student development in college: Theory, research, and practice. Hoboken, NJ: John Wiley & Sons.
- Ponticell, J. (2006). Learning, theories of. In F. W. English (Ed.), *Encyclopedia of Educational leadership and administration* (Vol. 1, pp. 605-607). doi:10.4135/9781412939584.n338
- Poveda, S. C. (2016). How can digital inclusion promote social change? Exploring two

 Brazilian case studies. In *Proceedings of the Eighth International Conference on Information and Communication Technologies and Development*, 7, 1-11.

 doi:10.1145/2909609.2909672
- Prawat, R. (2008). Constructivism. In N. J. Salkind (Ed.), Encyclopedia of educational psychology (Vol. 1, pp. 183-183). Thousand Oaks, CA: SAGE Publications, Inc. doi:10.4135/9781412963848.n51
- Ramnarain, U., & Hlatshwayo, M. (2018). Teacher beliefs and attitudes about inquiry-based learning in a rural school district in South Africa. *South*

- African Journal of Education, 38(1). Retrieved from https://files.eric.ed.gov/fulltext/EJ1173201.pdf
- Ravitch, S. M., & Carl, N. M. (2016). *Qualitative research: Bridging the conceptual, theoretical, and methodological.* Thousand Oaks, CA: Sage Publications.
- Reeve, J., & Cheon, S. H. (2016). Teachers become more autonomy supportive after they believe it is easy to do. *Psychology of Sport and Exercise*, *22*, 178-189. doi:10.1016/j.psychsport.2015.08.001
- Reif, G., Shultz, G., & Ellis, S. (2016). *A qualitative study of student-centered learning*practices in New England high schools. Nellie Mae Education Foundation.

 Retrieved from https://www.issuelab.org/resources/25815/25815.pdf
- Rubin, H. J., & Rubin, I. S. (2012). *Qualitative interviewing: The art of hearing data*.

 Thousand Oaks, CA: Sage Publications.
- Ruslai, N. H., & Salam, A. (2016). PBL triggers in relation to students' generated learning issues and predetermined faculty objectives: Study in a Malaysian public university. *Pakistan Journal of Medical Sciences*, *32*(2), 324–328. doi:10.12669/pjms.322.9248
- Sabah, S., & Du, X. (2018). University faculty's perceptions and practices of student centered learning in atar. *Journal of Applied Research in Higher Education*, 10(4), 514-533. doi:10.1108/JARHE-11-2017-0144
- Saldaña, J. (2016). The coding manual for qualitative researchers. Sage.
- Salkind, N. J. (2008). Teaching strategies. In *Encyclopedia of educational psychology* (Vol. 1, pp. 963-968). Thousand Oaks, CA: SAGE Publications, Inc.

- doi:10.4135/9781412963848.n267
- Schlossberg, N. K. (2011). The challenge of change: The transition model and its applications. *Journal of Employment Counseling*, 48(4), 159–162. doi:10.1002/j.2161-1920.2011.tb01102.x
- Schreiber, J. (2017). Universal design for learning: A student-centered curriculum perspective. *Curriculum and Teaching*, *32*(2), 89-98. doi:10.7459/ct/32.2.06
- Schwartz, M. S., Hinesley, V., Chang, Z., & Dubinsky, J. M. (2019). Neuroscience knowledge enriches pedagogical choices. *Teaching & Teacher Education*, 83, 87–98. doi:10.1016/j.tate.2019.04.0
- Sieberer-Nagler, K. (2016). Effective classroom-management & positive teaching. *English Language Teaching*, 9(1), 163-172. doi:10.5539/elt.v9n1p163
- Singh, K., Bharatha, A., Sa, B., Adams, O. P., & Md. Majumder, A. A. (2019). Teaching anatomy using an active and engaging learning strategy. *BMC Medical Education*, (1), 1. doi:10.1186/s12909-019-1590-2
- Snyder, R. R. (2017). Resistance to change among veteran teachers: Providing voice for more effective engagement. *International Journal of Educational Leadership**Preparation, 12(1), n1. Retrieved from https://files.eric.ed.gov/fulltext/EJ1145464.pdf
- Soleimani, N., & Razmjoo, A. (2016). Classroom management challenges: An account of EFL teachers at private language institutes. *Anatolian Journal of Education*, *I*(1), 51-69. doi:10.29333/aje.2016.114a
- Soysal, Y., & Radmard, S. (2017). An exploration of Turkish teachers' attributions to

- barriers faced within learner-centered teaching. *Educational Studies*, 43(2), 186-209. doi:10.1080/03055698.2016.1248903
- Talbert, E., Hofkens, T., & Wang, M. T. (2019). Does student-centered instruction engage students differently? The moderation effect of student ethnicity. *The Journal of Educational Research*, *112*(3), 327-341. doi:10.1080/00220671.2018.1519690
- Tam, A. C. F. (2015). The role of a professional learning community in teacher change:

 A perspective from beliefs and practices. *Teachers and Teaching*, *21*(1), 22-43.

 doi:10.1080/13540602.2014.928122
- Tharayil, S., Borrego, M., Prince, M., Nguyen, K. A., Shekhar, P., Finelli, C. J., & Waters, C. (2018). Strategies to mitigate student resistance to active learning. *International Journal of STEM Education*, *5*(1), 7. doi:10.1186/s40594-018-0102-y
- Thomas, G. (2017). *How to do your research project. A guide for students* (3rd ed.) Thousand Oaks, CA: Sage.
- Tomlinson, C. (2015). Teaching for excellence in academically diverse classrooms. *Society*, *52*(3), 203-209. doi:10.1007/s12115-015-9888-0
- Trester, E. F. (2019). Student-Centered Learning: Practical application of theory in practice. *About Campus*, *24*(1), 13–16. doi:10.1177/1086482219859895
- Valoyes-Chávez, L. (2019). On the making of a new mathematics teacher: Professional development, subjectivation, and resistance to change. *Educational Studies in Mathematics*, 100(2), 177-191. doi:10.1007/s10649-018-9869-5

- Vygotsky, L. S. (1978). *Mind in society: The development of higher*psychological processes. Cambridge, MA: Harvard University

 Press
- Walkington, C., & Bernacki, M. L. (2018). Personalization of instruction:

 Design dimensions and implications for cognition. *Journal of Experimental Education*, 86(1), 50–68.

 doi:1080/00220973.2017.1380590
- Ward, C. (2016). Active learning. In S. Danver (Ed.), *The SAGE encyclopedia* of online education (pp. 53-53). Thousand Oaks, CA: SAGEPublications, Inc. doi:10.4135/9781483318332.n19
- Worthington, T. A. (2018). Letting students control their own learning: Using games, role-plays, and simulations in middle school U.S. history classrooms. *Social Studies*, *109*(2), 136–150. doi:10.1080/00377996.2018.1460791
- Xie, H., Chu, H.-C., Hwang, G.-J., & Wang, C.-C. (2019). Trends and development in technology-enhanced adaptive/personalized learning: A systematic review of journal publications from 2007 to 2017. *Computers & Education*, *140*. doi:10.1016/j.compedu.2019.103599
- Xu, Z., & Shi, Y. (2018). Application of constructivist theory in flipped classroom—Take college English teaching as a case study. *Theory & Practice in Language Studies*, 8(7), 880–887. doi:10.17507/tpls.0807.21
- Yew, T. M., & Dawood, F. K. (2016). Stimulating deep learning using active learning techniques. *Malaysian Online Journal of Educational Sciences*, 4(3), 49-57.

Retrieved from https://files.eric.ed.gov/fulltext/EJ1106447.pdf

- Yin, R. K. (2017). Case study research and applications: Design and methods. Sage publications.
- Zimmer, S. (2019). Blended Learning. In *Salem Press Encyclopedia*. Retrieved from https://www.salempress.com/

Appendix A: Interview Script

Good Morning/Good Afternoon	

Thank you for volunteering to be a participant of my doctoral study.

The purpose of the study is to examine middle school teachers' perceptions of the barriers that prevent student-centered learning from being consistently implemented to support students' learning.

I will be asking you nine interview questions, and some follow up questions, which should last for 30-45 minutes.

Your participation is voluntary, which means that you may stop at any time.

Please be advised that this interview will be audio-recorded.

Appendix B: Interview Questions

- 1. What triggered you to use student-centered learning as a pedagogical strategy?
- 2. What are your positive and negative experiences in using the strategies?
- 3. What were the barriers that you faced in implementing student-centered learning strategies?
- 4. How were the barriers to implementing student-centered learning addressed in your professional learning community?
- 5. From your experience, how did the implementation of student-centered learning influence students' academic performance?
- 6. What resources does your school provide to support student-centered learning?
- 7. How does the use of student-centered learning strategies align with your educational philosophy?
- 8. How do you think the curriculum could be revised in middle schools to support student-centered learning?
- 9. Going forward, what support would you like to receive to enhance your ability to use student-centered strategies more effectively?

Appendix C: Responses from Content Experts

Responses from Content Experts after I restructured the Interview Questions

- 1. To what extent have you implemented student-centered learning strategies in your classroom? This question is valid due to the fact that its response is central to the discovery of the middle school teacher's perceptions of SCL. If said teacher is positive to the strategy and has found it useful, it would be natural to implement it to a greater extent than if negativity exists.
- 2. What triggered you to use student-centered learning as a pedagogical strategy? (Situation) The response to this question would be valuable in terms of content as well as perception, as the middle school teacher may have modeled instruction after a trusted colleague, learned techniques from professional inservice, or conducted personal research. By contrast, if the teacher was formally directed to use the strategy rather than by choice, barriers to effectiveness may be brought to light.
- 3. What are your positive and negative experiences in using the strategies? I found this to be a very reliable question to the premise of the research. Depending upon the degree of positive or negative events surrounding the implementation, the teacher's experiences would therefore have a direct relationship to their perception of the entire SCL strategy as a whole. Furthermore, responses to this question would provide information on how perception would influence capacity to employ such strategies to support student learning.
- 4. What were the main barriers that you faced in implementing student-centered

learning strategies? This question is valid, as it is central to the exploration of barriers to implementation of various SCL strategies and their influence on capacity of implementation. In addition, this question may assist in analyzing the effectiveness of various strategies.

- 5. How were the barriers to implementing student-centered learning addressed in your professional learning community? (Strategies) I found this question to be valid in that its response would be helpful in determining if the middle school teacher could explore options to reduce or alleviate barriers by addressing these in a collegial setting.
- 6. From your experience, how did the implementation of student-centered learning influence students' academic performance? This is a reliable question, as a positive response from the teacher regarding their students' academic performance would contribute to positive social change by achieving the educational goals to which they are working toward. Therefore, the strategies of student-centered learning would be perceived as effective by that teacher.
- 7. What resources does your school provide to support student-centered learning? (Social Support) This question is valid as its response is central to determination of the middle school teacher's capacity to implement SCL strategies, through provision of practical, technological, and educationally supportive measures.
- 8. How does the use of student-centered learning strategies align with your educational philosophy? (Self) This question is reliable in determining overall perception of SCL as a whole as well as to whether alignment is helpful to

- implementation or conversely, nonalignment to barriers in implementation.
- 9. How do you think the curriculum could be revised in middle schools to support student-centered learning? This question is valid to determination of the middle school teacher's perception of the value of SCL and the degree to which that educator desires and/or feels that it can realistically become a central part of the curriculum.
- 10. Going forward, what support would you like to receive to enhance your ability to use student-centered strategies more effectively? This question is valid is determining which category of supports (social, practical, technological, educational) are most necessary to the middle school teacher to increase and/or emphasize the value of SCL within his or her classroom and school environment. Comments:

As a special educator specifically trained in speech pathology who has focused on student-centered learning for over thirty years, it is my opinion that the preceding questions allowed for the exploration necessary to fully discover middle school teacher subject perceptions and related barriers. This subsequently provides the critical review necessary for recommendation of necessary SCL approaches for maximum implementation and effectiveness. Although I specifically noted specific questions which could lead to many follow-ups, it is my opinion that ALL of the questions could reveal a wealth of relevant information from the middle school teacher participants.

Please be so kind as to review specific notes I made as I read the abstract:

- Interview questions 1 and 2 could be switched, as the "trigger" serves as an introduction to the topic of SCL.
- Question 4 could lead to many useful follow-up questions in terms of the
 "types" or "categories" of barriers to implementation faced by the teacher.
- Question 6 could also lead to many useful follow-up questions, such as
 "Was any data collected to assess student performance before vs. after
 SCL strategy implementation?" "What form did it take anecdotal,
 formal?" etc.

Dear Mrs. Plaisir,

As an educator who has used student-centered learning for over 18 years, I think that the following questions will answer your research questions:

- Q1: This is a valid and reliable question because it will address the aspect of the comprehensiveness in the use of student-centered learning (SCL).
- Q2: This is a valid and reliable question because it fulfills the curiosity of knowing why the participant decided to use SCL.
- Q3: This is a valid and reliable question because it allows for feedback.
- Q4: This is a valid and reliable question because without acknowledging the barriers, you cannot have an effective implementation. I would like to change the question to address all of the barriers observed rather than just the main ones.
- Q5: This is a valid and reliable question that can promote student learning once the barriers are addressed. Q6: This is a valid question that allows for reflection through

observation so that optimal learning can take place.

- Q7: This is a valid and reliable question that acknowledges the resources that are necessary to keep the program running efficiently.
- Q8: This is a valid and reliable question because the abstract states that the implementation of SCL varies upon each educator's perception.
- Q9: This is a valid and reliable question because positive social changes occur often and over time and curriculum should reflect that whenever possible.
- Q10: This is a valid and reliable question because if there is anything further needed to improve the SCL program, it can help the students to being that much closer to mastering content.

As an educator for at least 5 years, I find the interview questions below to be both valid and reliable. The questions are valid as they appear to align with the objective of the Research Question presented. Additionally, I find the interview questions to be reliable as they appropriately probe research subjects in a way that would yield the data necessary to determine middle school teachers' perceptions of SCL strategies and related barriers. Interview Questions

- 1. To what extent have you implemented student-centered learning strategies in your classroom? VALID / RELIABLE helps determine perception SCL by the subject
- 2. What triggered you to use student-centered learning as a pedagogical strategy? (Situation) VALID / RELIABLE
- 3. What are your positive and negative experiences in using the strategies? VALID / RELIABLE

- 4. What were the main barriers that you faced in implementing student-centered learning strategies? VALID / RELIABLE
- 5. How were the barriers to implementing student-centered learning addressed in your professional learning community? (Strategies) VALID / RELIABLE
- 6. From your experience, how did the implementation of student-centered learning influence students' academic performance? (suggestion: influence student academic performance outcomes?) VALID / RELIABLE
- 7. What resources does your school provide to support student-centered learning? (Social Support) VALID / RELIABLE
- 8. How does the use of student-centered learning strategies align with your educational philosophy? (Self) VALID / RELIABLE directly connected to perception
- 9. How do you think the curriculum could be revised in middle schools to support student-centered learning? VALID / RELIABLE addresses barriers
- 10. Going forward, what support would you like to receive to enhance your ability to use student-centered strategies more effectively? VALID / RELIABLE addresses barriers Good Afternoon Mrs. Plaisir,

I have read your abstract and research questions, and I think questions 4 and 5 (especially 4) are leading questions. The questions imply that the teacher had barriers implementing student-centered learning strategies (what if you are interviewing a teacher that really didn't have any barriers). You can use the answer to question 3 to develop another question that would address any resources that were given to address any negative experiences that were expressed. Also, if you know for certain that your teacher sample

had some kind of barriers implementing student-center learning strategies, then questions 4 and 5 would be perfectly fine.

Have a good day,

Appendix D: Steps Taken to Obtain Content Validity of Interview Questions

I structured 10 research questions and submitted them to two professors who are experts
on student-centered learning, and three teachers with many years of experience in using
the strategies to evaluate my interview questions. I revamped the issues and sent out new
interview questions to the rest of the content experts based on the comments from the
first content expert from Walden University. Below are the comments that I received.
My final interview questions incorporated the final suggestions and recommendations of
the panel of experts.

Lucy

So GREAT to hear from you!

I think that you need to carefully review your interview questions to see if they truly gather data for the two components of RQ1:

Perceptions of SCL strategies

Perceptions of barriers

- 1 okay
- 2 okay (explain might not be the best word)
- 3 ?? why ask this??
- 4 okay (influence is better than affect. Affect implies experiment: cause & effect)
- 5 why use perspective when the RQ is perception? Why go with 2nd hand info of other teachers? Why explain? See #2
- 6 to might be a better word than of
- 7 okay

8 - why start negative (concerns) and why target diverse learners?
9 - okay
10 - okay

Hope this helps.

Appendix E: Letter of Invitation and Recruitment Flyer

Dear Invitee,

My name is Lucy J. Plaisir. I am a doctoral student at Walden University, specializing in Curriculum, Instruction, and Assessment.

I am kindly requesting your participation in a doctoral research study that I am conducting titled: Perceptions of Middle School Teachers' Experiences with Student-Centered Learning Strategies.

The intention is to examine middle school teachers' perceptions on the barriers that prevent SCL strategies from being implemented consistently to support students' learning.

I am inviting middle school teachers with at least 5 years of teaching experience in using student-centered learning strategies to be in this study. The study consists of answering nine semistructured interview questions. Participation is completely voluntary, and you may withdraw from the study at any time. Your name or any identifying information that you provide will be confidential. If you would like to participate in the study, please telephone me at xxx-xxxx or email me at lucy.plaisir@waldenu.edu.

Your participation in the research will contribute to positive social change by gaining knowledge related to the implementation of SCL strategies, which is necessary to allow students to engage fully in educational activities to achieve better learning outcomes. Thank you for your time and participation.

Sincerely,

Lucy J. Plaisir

Interview Study Seeks Middle School Teachers Using Student-Centered Learning
Strategies

There is a new study called "Perceptions of Middle School Teachers' Experiences with Student-Centered Learning Strategies" that could help to fill a gap in practice by sharing your perceptions on the barriers that prevent student-centered learning strategies from being consistently implemented to support students' learning. For

this study, you are invited to share your experiences using student-centered learning strategies.

This interview is part of the doctoral study for Lucy J. Plaisir, a doctoral student at Walden University. Interviews will take place during August 2020.

About The Study:

- One 30-45 minute phone or online platform like Zoom, audio recorded interview
- You would receive a \$10 gift card as a thank you
- To protect your privacy, the published study will use fake names

Volunteers must meet these requirements:

- Middle school teachers
- At least five years of teaching experience using student-centered learning strategies

To confidentially volunteer, contact the researcher:

Lucy J. Plaisir