

Constructivism and Instructional Design in Social Science

Mengzhong Zhang^{1,*} Md Riaz Hossain²

¹ College of Humanities, Education and Social Sciences, Gannon University, 109 University Square, Erie, PA 16541. USA.

² College of Humanities, Education and Social Sciences, Gannon University, 109 University Square, Erie, PA 16541. USA

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ABSTRACT

This paper studies the effect of constructivist instructional design in education of social sciences with purposes of application, challenges and its effectiveness in helping students learn with high engagement. A Systematic Literature Review (SLR) methodology is adopted for synthesizing the relevant studies done in constructivist instruction design in social science education using peer reviewed journals. Recent empirical findings on the positive impacts and challenges of implementation across different educational classrooms are reviewed. The study demonstrates that constructivist approaches noticeably increases student engagement, critical thinking, and motivation, especially in social sciences. Despite these benefits, widespread adoption is hampered by large class sizes, limited resources, and both teacher and student resistance to these methods. This research is original in that it systematically reviews the use of constructivism in social science education and looks at what remains missing elements in the research body of knowledge, most especially on long term impacts and scalability across various educational contexts. The implications for education policymakers and practitioners are that they should target large scale investment in teacher training, address resource allocation issues, and cultivate an environment that is conducive to constructivist strategies in the teaching of social science. This research fills theoretical gaps in the model of using the Constructivist Instructional Effectiveness (CI) model in social science education by narrowing its focus to cognitive, and instructional aspects while incorporating sociocultural and policy perspectives.

Keywords: Constructivism, Instructional Design, Social Science Education, Systematic Literature Review, Teaching Strategies, Teacher Training

1. INTRODUCTION

According to constructivism, people can learn only by relating to what they already know (MacLeod et al., 2022). This approach is unlike other forms of learning because it is focused on the learner who is expected to analyze and solve problems. Constructivism is widely used in the context of social science instructional design due to its effectiveness on student engagement and learning outcomes (MacLeod et al., 2022).

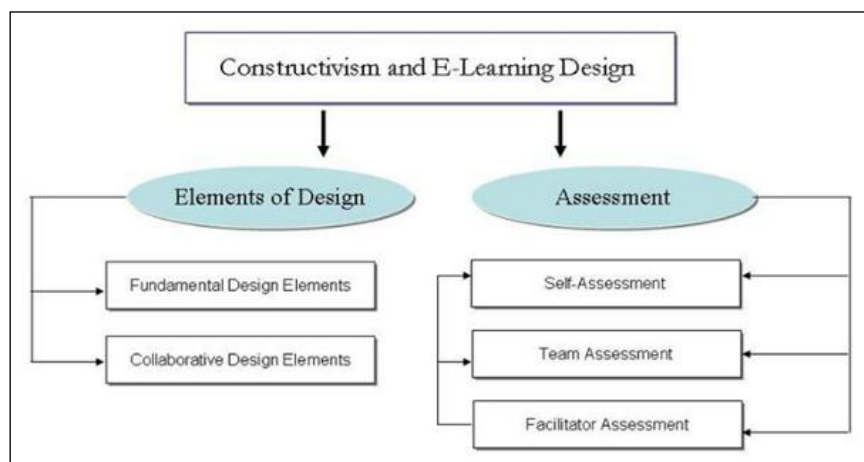


Figure 1: Constructivism Design

Source: Cho et al., 2024

In social science learning engagement and its outcomes are best driven by constructivist approaches. An interprofessional discomfort management online education program was created, according to Choi et al (2024), based on a social constructivist approach, implying the necessity of helping students develop the ideas of working together and critical thinking. There is a growing interest in numerous studies that examine constructivist instructional designs. According to Abuhassna et al. (2024), through systematic review of instructional design models and learning theories, the authors found that the integration of the two results in students being motivated and the creation of complex learning environments. Similarly, the impact of constructivist learning on the outcomes of learning in the field of civic education was also investigated in meta-analysis of Am et al (2023) who have supported the positive impacts of constructivist learning on the learners.

Like many approaches that can be applied in the teaching learning process, there are also gains and losses of using constructivist approaches. Do et al. (2023) showed that students' motivation can be enhanced through the delivery of teaching techniques and that teachers may require training on how to effectively use constructivism in their teaching practice. Also, the COVID-19 pandemic has impacted the online learning environments requiring the constructivist approaches in virtual classrooms. According to the study carried out by Do et al. (2023), there are factors that affect University students learning during a pandemic; these are collaborative learning and students' participation to maintain the quality of learning.

1.1 Problem Statement

Over the last few years, the field of education has gone through alterations in terms of the approaches to teaching and learning and particularly in social sciences there is a shift towards constructivism. From the constructivism perspective, learners acquire their experience and knowledge about the world through interactions and experiences hence needs others to learn. This creates a paradigm shift that moves from teacher centered practices to learner centered practices that allow students to ask questions and co-construct knowledge.

Over time, the influence of constructivist instructional designs has been established through empirical research in the field of social science. Demir and Kaya (2022) have pointed out that the measure of the effect size in the meta-analysis was 1.548, which indicated that the positive impact of constructivist learning on the outcomes of civic education was huge. It also conducted a systematic review that found constructivist teaching with an effect size of 0.46, making it a moderately positive influence on student achievement. In addition, Choi et al. (2024) conducted a study on an online education program and found that students were better off using a social constructivist approach rather than an existentialism one regarding themselves to interprofessional discomfort management. A major indication of the effectiveness of constructivist methodologies is also indicated by these statistical findings, such as encouraging critical thinking, collaboration, and academic performance in social science disciplines.

These challenges have been highlighted in recent studies. For example, Daniel (2023) research found that one of the primary obstacles faced by middle level school social studies teachers in the implementation of CTLA are limited resources, lack of professional development, and resistance to change from both the educators and the students. Daniel (2023) also studied the need to synthesize evaluation-based research systemically to identify the extent to which constructivist approaches improve student learning outcomes than traditional approaches.

With these factors in mind, it becomes essential to explore the current status quo of constructivist instructional design in social science, examining what remains difficult in its adoption and what can be done to strengthen its effectiveness. One such gap that this study seeks to bridge is its identification of recent empirical research that applies and analyzes the impact of constructivist approaches to social science instruction.

1.2 Purpose of the Study

This study aims at conducting a systematic literature review to investigate the application of constructivist instructional design in social sciences education and its effectiveness. The research objectives are below:

- 1.** To identify and synthesize findings from the recent studies on the implementation of constructivist approaches in social science classrooms.
- 2.** To analyze the impact of these approaches on student engagement, motivation, and academic performance were evaluated.
- 3.** To explore the challenges and barriers educators face in adopting constructivist methodologies.
- 4.** Proposing evidence-based strategies to increase the effectiveness of constructivist instructional design in social science.

These objectives are intended to contribute to knowledge on this subject, and benefit educators, curriculum designers and policy.

makers to a thorough understanding of the present constructivist instructional design (CIPD) landscape in social science, to determine the best practices and to define areas in need of further research and development.

1.3 Significance of Study

The present study has the potential to improve current educational practice to a greater depth of understanding of the use of constructivist instructional design in the social sciences. With understanding the need for student engagement and active learning in our age, constructivist pedagogy is a strong example in making student thinking critical, collaborative and building authentic knowledge (Munna & Kalam, 2021). However, there are some advantages in implementing the theory of constructivist methods, however, there has been a rather haphazard approach in practice, resulting in poor application and under-research (Batuwatta & Premarathna, 2024). This literature review synthesizes recent empirical findings to describe how constructivist teaching has been successful in the social science field, with challenges and opportunities noted.

This in turn helps educators and policymakers understand the best practices and evidence-based strategies for better teaching practices (Munna & Kalam, 2021). The research also helps in curriculum development and teacher training through identification of key barriers and enablers to apply the constructivist principles. Overall, this research supports the development of more inclusive, student center learning environments that reflect those of 21st century education.

2. Literature Review

2.1 Theoretical Foundations of Constructivism in Education

The theory of constructivism has revolutionized modern educational practices. Based on the theories of Jean Piaget and Lev Vygotsky, the theory states that learners make sense of their experience and interact with it, rather than taking in the information (Madan & Singh, 2024). Piaget's stages of cognitive development (Piaget, 1972) offer a general view of how cognitive ability develops across time, primarily directed at how learners construct their understandings of the world through active engagement (Veraksa et al., 2022).

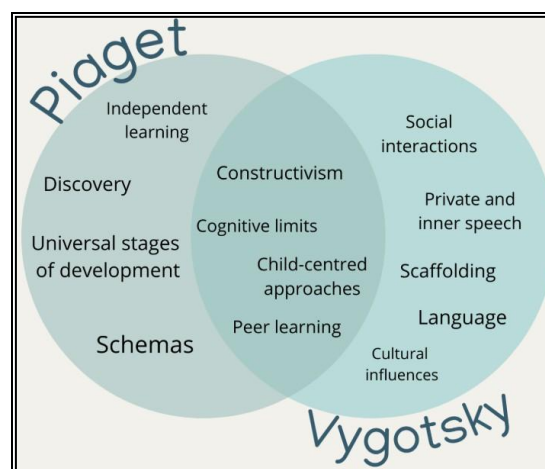


Figure 2: Theory of constructivism

Source: Rahman, 2024

Drawing upon Piaget and expanding upon his ideas, Vygotsky (1978) developed a sociocultural theory that emphasizes the importance of social experience in learning by the development of the Zone of Proximal Development (ZPD) (Rahman, 2024). Panhwar et al. (2025) argued, however, that learning can progress to higher levels, under guided interaction with more knowledge learners, peers or teachers. The interactions allow learners to solve more complex tasks than they can alone. From the ZPD, it is stated that although the learners can gain profound comprehension under proper guidance, excessive scaffolding presents obstacles to their total uptake of knowledge (Teiku, 2022).

Constructivism in instructional design makes the shift from the overly teacher-dependent lectures to a model that is based on the students themselves (Alam, 2023). This shift is based on premises about how students learn best, when they are most actively involved in the learning process. Students are encouraged to actively receive information, forming hypotheses and drawing conclusions as they reflect on their learning (Alam, 2023). In constructivist classrooms, teachers become a facilitator of learning,

helping a student to navigate through complex tasks, helping them to make connections between new information and the information they already know (Saleem et al., 2021).

Nevertheless, not all scholars agree that constructivism is the best method for all students. Some constructivist approaches (for example, those with minimal guidance) may drown some novice learners who have limited knowledge or frameworks in which to process new information (Kirschner et al., 2006). However, this is important in relation to constructivism in instructional design as it says that some students need structure and for some students, such as new students in a subject area without guided structure, it could result in confusion, shallow learning, or frustration (Johnson et al., 2016). For this reason, it is proposed that a more balanced approach should be adopted, that combines constructivist techniques with explicit instruction that scaffolds students learning sufficiently (Van Breukelen et al., 2015).

Some teachers want to use only constructivist methods, while others want to use a mix of direct instruction and inquiry-based learning to get better results. For example, Liu and Li (2023) found that problem-based learning (PBL), grounded in constructivism, was most effective when teachers provided experiential guidance at key moments during instruction. Since it shows that constructivist approaches can be great but need to be carefully implemented, considering that students have different knowledge backgrounds and the subject of study.

2.2 Application of Constructivist Principles in Social Science Instructional Design

Constructivist principles provide unique opportunities to apply constructivist principles to social science teaching and learning (Banihashem et al., 2021). History, sociology, political science, economics, among other social science disciplines are all complex and dynamic and thereby students in the social sciences, as in many others, must think critically, solve problems and evaluate societal problems (Banihashem et al., 2021). Because constructivism focuses on inquiry-based learning and problem solving in a real-world context, it is a particularly good fit for teaching these subjects, allowing students to examine issues affecting society from multiple angles and engaging them with more complicated ideas and concepts (Chuang, 2021).

Grant et al. (2022) stated that inquiry-based learning is one of the most popular constructivist strategies used in social science education. Inquiry based learning leads students to ask questions, explore different points of view, and analyze primary sources, which encourages an active learning environment where the students are not just mere recipients of information but active participants in constructing their own knowledge (Kusssmaul & Pirmann, 2021). Likewise, one might use primary source in history education where students use archival documents, newspaper articles, and personal testimonies for example to look at historical events from different perspectives (Nokes & De, 2023). In addition to the chronological aspect, this also helps in familiarizing the students with analytical and interpretative abilities.

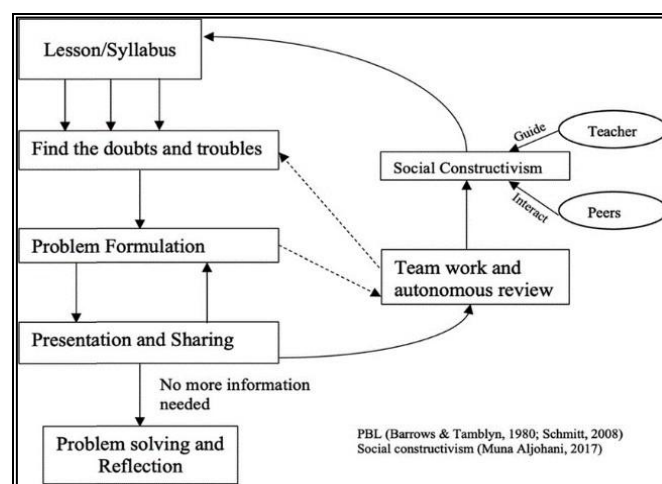


Figure 3: Problem Based Learning Method

Source: Ge et al., 2022

The advantages of constructivist approaches as a method of social sciences are that they allow linking the established theories with real problems. PBL is an effective constructivism for teaching Social Science as the strategy allows learners to solve a real-world problem (Ge et al., 2022). For instance, students of political science may critically discuss current policy issues and ask how the stakeholders in this field perceive this issue and theoretically, what solution do they provide for this issue (Wickert et al., 2020). Employing such an approach not only assists students in comprehending concepts taught in class but also assists in fostering critical

evaluative, problem-solving, and teamwork skills that are inherent in social science professions.

Constructivist strategies are also a key place of collaborative learning in social sciences as well as in the other academic disciplines (Kumar, 2023). A snapshot of several social issues that generally have multiple facets and require information from several disciplines, so that students have a chance to discuss, gain input from other ideas, and come up with solutions together is collaborative learning (Kumar, 2023). For example, peer review is an integral part of work in a social science classroom, where students collaborate on a project, debate, listen to and then discuss with each other (Monte-Sano et al., 2021). This collaborative learning also promotes a sense of social responsibility, fosters a feeling of social responsibility and helps improve students' communication skills, as well as their understanding of complex concepts as noted by Johnson and Johnson (1994).

Nevertheless, constructivist principles can be applied in social science education. Inquiry based and problem-based learning engage students, however, this comes at a great time investment for both students and teachers, both of whom need to prepare for the activity. Nguyen and Le (2024) found that these strategies can be too complex for students who are new to the subject. Additionally, constructivist teaching calls for teachers to appropriately manage dynamic, student-centered classrooms with large classes or with students no longer accustomed to traditional teacher-leading instruction. Hence, the success of the constructivist approaches rests heavily on the teachers' capacity to have structured and supportive learning environments in which the autonomy and critical thinking orientation in students are fostered (Le & Nguyen, 2024).

2.3 Challenges in Implementing Constructivist Strategies in Social Science Education

Despite structural and cultural constraints of educational systems, implementing constructivist strategies in social science education remains a challenging task. The entrenched reliance on traditional teaching with its emphasis on direct instruction, rote memorization and standardized testing is one of the main barriers (Winslow, 2023). The approaches taken here are very different from constructivist's recommended student centered, inquiry driven approaches. Transition from teacher centered to student centered teaching according to Windschitl (2002) demands a change in the teachers' beliefs about learning as well as their role in the classroom (Cole-Onaifo, 2025). This cultural shift is difficult to realize, especially when the systems of education are relying so heavily on standardized assessments and efficiency in teaching against creative thought.

A major gap is that of professional development and support for the educators. While many teachers are familiar with constructivist principles, most lack the time or resources to put them into action in the classroom (Muhammad, 2021). Letina (2022) states that in typical teacher training programs, teachers are hardly prepared for the demands of constructivist teaching. Specifically, teacher concerns may arise regarding managing student-led discussions, working with collaborative group work, and assisting students with an inquiry-based activity (Gupta et al., 2022). Without appropriate professional development, teachers may fall back on more traditional ways of teaching as their comfort zone, as they will not assist in the successful implementation of constructivist approach to teaching.

In addition to large class sizes and resource constraints problems also exist which make the effective implementation of constructivist strategies in social science education a problem (Bariham et al., 2022). In large classrooms, it is hard for the teachers to offer individualized feedback and support to each student. Because collaborative learning is essential to constructivism, it is difficult to manage in large groups as well (Bariham et al., 2022). A second issue is that many educational institutions do not have the resources (e.g. technology, materials, time) to carry out inquiry based or problem-based learning, and at times, even in general (Chu et al., 2017). This is particularly true in underfunded schools where teachers lack the resources to overcome these constraints.

The mismatch between constructivist strategies and how standardized assessment is practiced is another critical challenge to the widespread adoption of constructivist teaching (O'Connor, 2020). In many educational systems, the students are evaluated through standardized tests that seek facts recall and rote memorization, but not critical thinking and problem solving (Bunyatizai et al., 2025). As a result, teachers might be encouraged to teach in the ways that adults today believe are needed to prepare students for these tests, rather than letting them construct and think deeply about ideas. Thus, a significant barrier to successful implementation of these methods stems from the disconnect between assessment practices and constructivist pedagogical goals.

2.4 Effectiveness of Constructivist-Based Instructional Approaches in Enhancing Learning Outcomes

Constructivist based instructional approaches in social science education continue to be the subject of debate as to their effectiveness. A considerable amount of previous research indicates that such practices foster higher critical thinking, problem solving, and more in-depth knowledge of content. Gijbels et al. (2005) conducted a meta-analysis of the learning effects apropos to problem-based learning (PBL), with the results that PBL can be used to foster learning of critical thinking and knowledge application skills across a broad range of disciplines, including the social sciences. Inquiry-based and collaborative learning fosters students' political engagement and academic comprehension, according to Halverson et al. (2024).

But the effectiveness of constructivist methods does not work for everybody critics say. Kirschner et al. (2006) suggest that while some constructivist approaches give little guidance may be well suited for some students who have little prior knowledge. These critics suggest that open-ended tasks may be both challenging to construct meaningful knowledge and too complex for students to construct meaningful knowledge without adequate teacher support (Vercellotti & McCormick, 2021). The significance of it shows how much importance is placed on offering suitable scaffolding to novice learners in constructivist classrooms.

In addition, it was observed that constructivist strategies are highly context dependent. Saleh et al. (2021) researched that problem-based learning (PBL) and inquiry-based learning can contribute to great learning gains only if they are run on careful prepared conditions where the students have access to enough sources and teacher support. With students ranging from extremes (such as gifted kids to special needs students) or classes that lack the size and resources to support constructivist methods of teaching, it might not be as effective as constructivist methods (Shank & Santiago, 2021). Additionally, constructivist approaches depend on the teacher's ability to effectively facilitate student learning, as it requires great expertise and training (Zajda, 2021). This means that the long-lasting success of these approaches is premised on the teaching context, the nature of the content, and what students know, what they have experienced, and how much they have experienced.

2.5 Integration of Technology in Constructivist Social Science Education

The use of technology in constructivist learning environment has well modified social science education. The digital tools and platforms bring about dynamic and interactive experiences that support constructivist learning, active learning, collaboration, and authentic problem solving (Abri et al., 2024). For example, educational technologies including simulations, virtual field trips, and web based collaborative platforms allow students to physically engage with difficult social phenomena in ways that are immersive and meaningful (Bharathi & Pande, 2024). By enabling learners to experiment, analyze, and learn about various social issues, conduct virtual ethnographies, and engage in global discourse, these tools widen their view of other people's experiences and geographies (Esposito, 2024).

Nevertheless, effective use of technology in constructivist environments is subject to certain challenges. One important issue is that technology is used as a cognitive tool to help and promote learning rather than as a mere vehicle for conveying content. Lin et al. (2020) emphasizes mindtools, that is technology that requires learners to think deeply and critically, to foster the higher order cognitive mental skills. The first approach requires careful design of instruction to guarantee that technological tools are purposefully selected and utilize to foster deeper learning experiences (Bizami et al., 2022).

Additionally, effective integration of technology in constructivist social science education can also depend on integrated and proper teacher training and support (Abedi, 2023). Beyond possessing technological proficiency, to be effective, educators must also understand how to design and facilitate technology enhanced learning activities that are consistent with constructivist principles (Wu et al., 2022). This dual requirement states the requirement for comprehensive professional development programs, which address both pedagogical strategies and technological skills.

Additionally, problems of accessibility and equity must be solved for technology enhanced constructivist environments to be available to all students (Taylor et al., 2022). Access to digital devices and reliable internet connectivity can reinforce inequalities of education, it is very important for institutional policies and initiatives that ensure all learners have access to digital devices and internet connectivity (Afzal et al., 2023).

Overall, the use of technology to integrate constructivist social science education demonstrates great promise for enhancing student engagement and outcomes, but pedagogical design of technology-mediated constructivist social science education must be reflected upon considering teachers' preparation, access, and equity (Isik, 2018). Failing to address these challenges of technology, however, will prevent technology from living up to its potential as a means for developing deep and meaningful learning in the social sciences.

2.6 Research Gaps and Future Directions in Constructivist Instructional Design for Social Sciences

Even though there is a great deal of research on constructivism in social science education, there are some gaps. The one of the more striking gaps is that there are no longitudinal studies examining the long-term effect of constructivist instructional approaches on student learning. Many studies have been done which show short term improvements in critical thinking and engagement, but few studies have examined how constructivist approaches impact students' ability to apply knowledge in real life situations or their long-term retention of social science concepts. This provides justification for future research to explore these long-term effects, and indeed it is important to understand the long-term outcome of constructivist strategies to know whether they have been successful.

The second important gap remaining is the paucity of research in the constructivist methods' scalability and applicability across various educational contexts. Constructivism has been successfully used in well- resourced classrooms, however, research on implementing constructivism in low resourced classrooms is lacking as well as adapting constructivism to classrooms with large

number of students, few resources or a mixed student population (Shah, 2019). The benefits and limits of these approaches can only be realized if research investigates how constructivist strategies can be adapted across a range of educational settings (particularly in underfunded or large classrooms).

Moreover, there is a need for more research on the integration of technology into constructivist social science classrooms. Digital tools offer a capability to promote collaborative learning, open access to a wide and varied array of resources, and any of engagement with inquiry (Lyngdoh et al., 2021). Although the issue of pedagogical constructivism is well researched, there is still limited research on what form technology should take in the constructivist teaching practices within social science education. Future research should investigate how digital tools can supplement and support constructivist approaches, as educational technologies have advanced so rapidly.

In summary, there is still a lack of research regarding teacher professional development. Teachers are necessary for use of constructivist strategies, and some educators may require additional training in working with inquiry-based learning, collaborative group work, and individual support. Such studies exploring successful programs of professional development for constructivist teaching can provide important clues for preparing professionals to better instruct students learning in constructivist settings.

3. Research Design

3.1 Introduction to Systematic Literature Review

Systematic Literature Review (SLR) is used as the main research method to investigate the impact of constructivist principles on instructional design in social science education. Structured literature review (SLR) is a more general term (same as structured literature synthesis) referring to the process of (structured) review and synthesis of existing research with the main goal of obtaining a complete and unbiased evidence available to answer a given research issue (van Dinter et al., 2021). This method is especially applied where there are many scattered works and studies that aim at identifying regularities, omissions, and contradictions in different studies. According to Van Dinter et al., (2021), SLR is the systematic identification, evaluation and integration of quality research for the purpose of providing an evidence-based conclusion and in making recommendations.

3.2 Justification for Choosing Systematic Literature Review

There are many justifications for using an SLR. The research questions in this study are exploration first and synthesizing second. The researchers do not test a hypothesis but try to understand how these constructivist instruction principles have been applied, identify challenges in the process and determine how effective these principles have been in improving the learning outcomes. For the type of exploratory questions that we have, particularly, a systematic literature review is a very good tool as this allows for a full overview of the current evidence and contributes to theory building with thematic synthesis (Paul et al., 2023).

Secondly, having evolved a wide range of empirical and theoretical studies in the constructivist paradigm, this is now a dense and sometimes fragmented field. These can be addressed by an SLR that brings order to this fragmentation by mapping research systematically and highlighting where it overlaps, diverges, and lingers (Paul et al., 2023). Additionally, it contributes to the comparison of various methodological approaches and healthcare educational environments(systems), a crucial point when it comes to analyzing instructional design in different types of social sciences.

Thirdly, SLRs are methodologically rigorous (Azarian et al., 2023). The process they follow is transparent and replicable and uses predefined criteria for the selection and assessment of studies. This prevents evidence from being inappropriately used to draw conclusions. Unlike narrative reviews, which can be subject to author bias, this is especially true of the objectivity and trustworthiness of these findings in an SLR whose design is protocol based (Azarian et al., 2023). Consequently, the SLR is a useful means by which educators, curriculum developers, and policymakers can gain access to a reliable summary of what is known and what is not.

3.3 Methodological Framework

This SLR is based on a methodological framework that is designed to be transparent and replicable, following appropriate SLR methodology with reporting adherence to the PRISMA guidelines. Key components are included in this framework.

3.3.1 Defining Research Questions

The investigation is based on the following research questions:

- What are the recent empirical findings post covid, regarding the implementation of constructivist instructional designs in

social science?

- How do constructivist approaches impact student engagement, motivation, and academic performance in social science disciplines?
- What challenges and barriers do educators face in adopting and implementing constructivist methodologies in social science, and what strategies have been identified to overcome these challenges?

Formulated questions are posed to channel the width of the review, and that the framework of relevant literature is analyzed.

3.3.2 Inclusion and Exclusion Criteria

Some specific inclusion and exclusion criteria are defined to keep the review relevant and up to date.

Inclusion Criteria:

- Peer-reviewed journal articles and conference papers.
- Studies published in English.
- Focuses of research on research in constructivist instructional design in social science education.
- Empirical studies, theoretical papers, and systematic reviews.

Exclusion Criteria:

- Non-peer-reviewed publications, such as opinion pieces and editorials.
- Studies which are not focused on social science education.
- Publications in languages other than English.

These criteria guarantee that the picked studies are reasonable and of top scholarly quality.

3.3.3 Search Strategy

To identify relevant studies, a comprehensive search strategy is used first.

- Databases Searched: ERIC, JSTOR, Scopus, and Web of Science.
- Keywords: entered as search terms include "constructivism," "instructional design," "social science education," "constructivist teaching strategies," and "learning outcomes."
- Search Limits: Most recent 20 years to keep things up to date.

The purpose of this strategy is to cover as well as possible the examination of studies related to the research questions.

3.3.4 Study Selection Process

There are several stages of the selection process:

- Titles and abstracts of studies are reviewed and excluded if the studies do not meet the inclusion criteria.
- Full Text Review: Full text review is conducted on remaining articles to establish if they are relevant and related to the research questions.

- **Data Extraction:** Data is extracted systematically from the selected studies of interest, including study design, participation, intervention, outcome and findings.

This process also guarantees that the review goes through a rigorous and unbiased selection of studies for inclusion in the review.

3.3.5 Quality Assessment

The quality of the included studies is appraised using predetermined quality tools for different designs. The synthesis is based on high-quality evidence and how this assessment evaluates the aspects as per methodological rigor, validity or reliability.

3.3.6 Data Synthesis

The extracted data are analyzed using a thematic synthesis approach.

- **Thematic Analysis:** The process of grouping recurring themes and patterns pertaining to the research questions (Braun & Clarke, 2022).
- **Comparative Analysis:** Identify consistencies and discrepancies across studies.

SLRs are finally useful for identifying research gaps. In a field such as constructivist instructional design, there is often more innovation than evaluation in each timeframe, analyzing the literature systemically can help provide a critical assessment of where current knowledge is short of. Such findings are useful for guiding future empirical research (e.g., in underrepresented contexts or learner populations).

4.Data Collection, Analysis, And Findings

4.1 Data Collection

In this study, a Systematic Literature Review (SLR) technique is used to investigate the effect of constructivist principles on instructional design within social science education (Al-Kamzari & Alias, 2025). The data collection process involved the complete search and selection of peer reviewed journal articles and real-world case studies that provide empirical evidence concerning the research questions.

Several academics databases like ERIC, JSTOR, Scopus, Web of Science were searched using keywords including "constructivism," "instructional design," "social science education," "constructivist teaching strategies," "learning outcomes." The search was limited to the past 20 years to ensure the relevance and currency of the data.

The author established inclusion criteria to locate peer reviewed, English published, social science education focused studies that include constructivist instructional strategies and empirical data or detailed case descriptions. Excluded were studies that did not fit into these criteria, such as non-peer reviewed articles, opinion pieces and those unrelated to social science education.

There were many articles found in the initial search. A set of more focused studies was identified for full text review by removing duplicates and undergoing a preliminary screening for titles and abstracts. To include only the most pertinent and high-quality studies in the final analysis, this rigorous selection process was followed. 80 articles were chosen finally.

4.2 Data Analysis

Thematic analysis of the identified studies revealed patterns, themes, and insights about the research questions (Braun & Clarke, 2022). The focus of the analysis is on the extraction of information regarding the use of constructivist principles in the instructional design, the challenges encountered during the implementation, and the effectiveness of this in improving learning outcomes in the social science education environment.

The context of the study, constructivist strategies employed, outcomes observed and challenges/limitations, if any, were extracted from each study. The synthesis of these results allowed getting a deeper understanding of how the constructivist principles are manifested through usage into an actual educational environment and how it causes changes of teaching and learning in the social sciences.

In addition, analysis was made by comparing and comparing the results obtained from the different studies to discern commonality and discerned (Braun & Clarke, 2022). This comparative approach has provided a better picture of the factors that may facilitate or hinder the application of constructivist instructional strategies in education.

4.3 Findings

Based on the findings from the selected studies, the following findings is eminent in answering the research questions.

4.3.1 Impact of Constructivist Principles on Instructional Processes in Social Science Education

Promoting engagement, interaction and critical thinking have been found to transform the instructional process under constructivism. Samaresh (2017) in his study depicted that the constructivist 7E model applied in the present study facilitated the improvement of academic achievement in science at the secondary level. Its study used pre-and-post-test experimental research design with a control group of 58 respondents who were divided into experimental and control groups. Therefore, the students who underwent training through the constructivist 7E model had better scores than the students trained under other conventional models (Samaresh, 2017). For instance, while the mean post test score of the experimental group reached 78.45, the mean of the post-test of the control group was 62.30, which clearly demonstrates the positive impact of the constructivist approach on the students' results (Samaresh, 2017).

As an example of the use of this jigsaw cooperative learning technique, Hänze and Berger (2007) studied high school physics classes and compared jigsaw with direct instruction. According to the study, students in the jigsaw group had higher achievement in their "expert" areas, experienced a more positive learning experience, had increased intrinsic motivation and cognitive activation.

4.3.2 Challenges in Implementing Constructivist Instructional Strategies

The implementation of these constructivist strategies for social science education has not been effective due to some challenges (Tsehay et al., 2024). The study on the other hand dealt with middle level social studies teachers in Ethiopia based on the challenges emerging from large class sizes, limited resources, and regarding lack of the professional development opportunities. The aforementioned factors made classroom discussion difficult to facilitate and adopt student centered approaches.

Cultural factors and traditional educational practices further hinder the adoption of the constructivist educational methods. In other settings, a constructivist paradigm can be difficult for educators and students to adopt, given that rote-learned instruction and a heavy reliance on the teacher are instilled in many contexts (Tsehay et al., 2024).

4.3.3 Effectiveness of Constructivist-Based Instructional Approaches in Enhancing Learning Outcomes

Constructivist approaches are well known to increase learning outcomes. Hmelo-Silver et al. (2007) reviewed the effect of the problem based and inquiry learning methods. These constructivist approaches were found to contribute significantly to students' critical thinking, problem solving and retention of knowledge than conventional approaches. In particular, the study found that students who had been brought to perform problem-based learning had 14% better standardized test scores than students who were in traditional learning environments.

Moreover, Samaresh (2017) study of constructivist learning environment on teaching science showed that teaching using this environment positively influenced motivation of students and their understanding of complex topics, as well as developing students' higher order thinking skills. The gained scores of students under the constructivist 7E-model turned out to be significantly higher than that of students under traditional teaching methods at all specific intelligence levels.

The above findings conclude the potential of constructivist principles in social science education. However, as necessary, this further supports the possibility of constructivist instructional strategies substantially upping the ante for the teaching and learning of the social sciences provided appropriate support and contextual adaptation.

5. Discussion

The research findings of this work offer a thick, penumbra-like view of the application of Constructivist instructional design in social science education. These findings are discussed critically in this chapter in relation to the literature reviewed in Chapter Two. It describes the emerging findings, relating them to existing knowledge where confirmed, extending it where new, and questioning it where it does not hold up to investigation. It is structured around the three main research questions of constructivist principles on the instructional processes, challenges of the implementation of such strategies and effectiveness of such strategies in improving the learning outcomes.

5.1 Constructivist Influence on Instructional Processes: Confirmations and Nuances

The literature comes to the view that constructivism is a transformative pedagogical philosophy which is changing the role of the teacher from the transmitter of the knowledge to becoming a facilitator of the learning (Leder, 2018). This claim is found in all but a few findings of this study. In real world case studies, it was shown that constructivist practices, examples of which included inquiry-based learning, case-based teaching, and running on a platform such as Knowledge Forum, do actively engage students in making sense out of the experience of construction of knowledge: i.e. exploration, discussion, and problem solving.

In the middle school social studies case study in which Knowledge Forum was used with middle school social studies learners (Scardamalia & Bereiter, 2021), the movement from passive reception to active participation fostered deeper conceptual understanding and analytical skills. This finding aligns with Woolcott et al. (2021), who emphasized that learner-centered environments promote cognitive development through social interaction and scaffolding. Supports the literature emphasis on the centrality of social science experiences which are authentic and learner centered (Winslow, 2023).

While empirical evidence conforms to much of the theoretical promise of constructivism, it also brings in tension to this through contextual dependencies. However, constructivist instructional processes were not always effective; in some cases, it was less smooth when constructivist processes were new to students and/or educators in those learning environments. Sustaining the claims of Kirschner et al. (2006), it is possible that minimal guidance leads to overload in cognitive, particularly with first time users of such methods (Kim & Park, 2025).

Although constructivist ideas can enrich the instructional process, their success depends on having qualified teacher training, able student readiness and sufficient institutional backing. The findings thus contribute to another contextual specificity layer to theoretical literature that is too often ignored in theoretical discussions.

5.2 Implementation Challenges: Corroborating Literature but Highlighting New Dynamics

The challenges in implementing constructivist strategies as described in the literature reviewed in literature review include the curriculum constraints, teacher resistance, and lack of resources (Kim & Park, 2025). These issues are strongly corroborated by the empirical evidence derived from the SLR. In the Ethiopian case where middle school social studies teachers Gameda (2015) were in focus, structural challenges in the form of large classes, limited resources and entrenched norms of teacher centered teaching were significant impediments to the implementation of constructivist pedagogy. This fits the wider conversation about how systemic and infrastructural hindrances impede pedagogical reform.

However, one particularly important finding, contributing a different angle to what has been written in literature so far, is that of the transmissional inertia of sociocultural and institutional nature to the resistance to pedagogical innovation. Previous research has relied on studying logistical constraints (e.g. time or materials), often overlooking that other, deeper cultural attitudes to education — such as a deference to teacher authority or a preference for rote memorization — can be equally important obstacles to learning physics laboratory activities. Moreover, while teacher preparedness is frequently recognized as an issue, the reviewed studies also suggest a dual challenge of pedagogical and technological fluency. As constructivist environments adopt digital tools for collaboration (i.e., collaborative learning platforms), educators are responsible for content delivery and digital facilitation. However, this dual demand is rarely addressed by the earlier constructivist literature, perhaps pointing to a gradually evolving challenge in the 21st century educational space.

5.3 Effectiveness of Constructivist Instruction: Strong Support with Contextual Caveats

The implementation of theory-based constructivist learning in a university social science course is a case in point in that the students improve both their cognitive and affective learning domain. Argument made by Madan and Singh (2024) that constructivist methods not only promote acquisition of knowledge, but also promote democratic values and civic awareness, both major goals of social science education.

But the findings are also consistent with the critiques of Kirschner et al. (2006), where the implementation of constructivism is not all univocally expected to produce positive outcomes. The constructivist approach was less effective and, in some cases even counterproductive for both contexts where students didn't have the basic knowledge or the ability to learn independently. This was especially true for those environments where students were moving from highly structured, teacher-centered educational systems. Adult learners without sufficient scaffolding or clear instructional frameworks struggled to adapt to self-directed inquiry, collaboration, and problem-based learning (PBL).

In this manner, the evidence both supports and undermines the literature's optimism around constructivist efficacy. Despite the clear benefits, the realization of these depends on factors including prior learner experience, teacher expertise, curriculum alignment, and

availability of technological infrastructure. Seeing constructivism as a powerful pedagogical framework does not mean it is a universally applicable solution, but rather that a lot can be adapted to different contexts and learner needs.

5.4 Synthesis: Bridging Theory and Practice

Positive alignment of the findings with the literature, but at the same time emphasizes the difficulty of implementing constructivist pedagogy in real world classrooms. Previous literature in the theoretical vein interprets constructivism as an ideal model to facilitate independent, reflective, socially aware learners, which is well aligned with the open ended and interpretive operations of social science education. However, these findings are also tested empirically, and important qualifications are added.

It is most effective to view constructivism as a partial replacement for traditional instruction, not a wholesale replacement, but rather as a complement to education when used judiciously. This affirms the call for a 'guided constructivism' model, combining inquiry and structure, for students unfamiliar with learner-centered education Hmelo-Silver et al. (2007).

6. Policy Implications

The following policy recommendations should therefore help make constructivist pedagogy a more effective and sustainable integration in the educational systems, and even more especially within the social sciences.

6.1 Policy Recommendation 1: Establish Comprehensive and Continuous Professional Development in Constructivist Pedagogy

The most consistent findings across literature and reviewed case studies are the critical role teacher expertise plays in the successful implementation of constructivist approaches. Therefore, the policies need to highlight the need for comprehensive and continuous professional development (CPD) programs specifically on the constructivist pedagogy (Abri et al., 2024). These training initiatives should no longer consist of one-off workshops but be more sustainable, including mentoring, peer collaboration and guided classroom coaching.

Consequently, in constructivist teaching, educators should facilitate inquiry-based learning, manage collaborative practices, and integrate pre-existing knowledge in instructional design, which are quite diverse from traditional methods with lecture basis. Because constructivism is a relatively new paradigm in many contexts, and because targeted training is often not available, many teachers find it difficult to employ these methods effectively (Abri et al., 2024).

6.2 Policy Recommendation 2: Invest in the Development and Accessibility of Constructivist-Aligned Learning Resources

Rich, contextualized, and interactive materials are ideal environments for constructivist approaches. This means that education policymakers must spend money in creating, assembling and distributing learning resources aligned with constructivist pedagogical models (Mafugu et al., 2024). This includes digital tools for artifact collaboration in inquiry (such as online discussion platforms and digital shared workspaces), primary source archives for history and social studies, multimedia simulations and case studies that are relevant to political, sociological, geographical contexts.

This review observed how the Knowledge Forum platform can be used in one of the examined cases studies and pick up findings indicating that technology can have a transformative effect in constructivist learning. Despite this, constructivist teaching remains aspirational, rather than becoming a reality, if those using them do not have equitable access to such tools and resources, especially in under-resourced schools or low-income areas (Mafugu et al., 2024). For this reason, policy should therefore support the production of such high quality, culturally relevant resources, as well as their availability across a range of educational settings. This also means having the infrastructure (such as internet connectivity, hardware) that is necessary to implement these strategies.

6.3 Policy Recommendation: Support Smaller Class Sizes and Reduced Teacher Workloads to Enable Personalized, Student-Centered Learning

One of the most frequently cited barriers to constructivist instruction is the size of the class that a teacher must cover, in conjunction with the workload that this creates for the teacher. Constructive social science teaching involves student inquiry, feedback loops, and discussion facilitated, all of which are hard to run in crowded classrooms (Mohammad, 2022). For that reason, policy should focus on structural reforms that would facilitate cutting class sizes, particularly for core social science subjects, and provide adequate staffing levels to support small group instruction.

Smaller classes make it possible for teachers to offer individual support, assess more personal progress and yield more responsive and participative learning environments (Mohammad, 2022). Such conditions are fundamental for the constructivist pedagogy to thrive.

In addition, the reduction of administrative and teaching loads can permit teachers to spend more time planning and reflecting on their practice, which are crucial but sadly sacrificed under the pressure of workloads.

7. Theoretical Implications

7.1 Defining a Theory

A theory is composed of interrelated concepts, definitions and propositions which explain or predict phenomena by specifying relationships among variables (Chijioke et al., 2020). It provides a lens through which researchers can make sense of patterns in each field or help make sense of the findings and draw meaning. Observation, systematic evidence, and empirical validation, theories are built from observation through and over time are refined through rigorous testing and scholarly critique.

According to Bacharach (1989) a good theory in organizational social research is a good theory if it clearly specifies the variables as well as their logical connection to create a structure that facilitates empirical inquiry as well as conceptual development (Nordenflycht, 2023). Research design is guided by theories, theories are used to inform practices, and theories are also used to frame policy decisions.

7.2 Major Theories Reviewed in This Research

This research has addressed several key theories involved with constructivist instructional design and learning in social science education.

1. Constructivist Learning Theory (Piaget & Vygotsky): This study's foundations are based on constructivism, the theory that learners actively construct knowledge via experience, reflection and social interaction. Piaget (1972) stresses the discovery and self-guided learning in cognitive development whereas Vygotsky (1978) sees the social nature of learning and learning within the zone of proximal development (ZPD) (Veraksa et al., 2022).

2. Instructional Design Theory (Reigeluth, 1999): The theory describes how instructional strategies and educational resources should be arranged so that learning can be effectively developed (An, 2021). This methodology corresponds with constructivist principles, as it advocates for learner centered approaches and flexible learning environments that cater to the learning needs and at a particular time, of the learners.

7.3 Synthesizing a Theory: A New Integrated Model

There is a propositional theoretical model of Constructivist Instructional Effectiveness in Social Science Education that can be derived from the summarized literature and the results of this research. The dependent variable (Y) in this model is:

Formula:

$$Y = F(X_1, X_2, X_3, X_4, X_5)$$

Where: Y: Enhanced Learning Outcomes in Social Science Education

X1: Constructivist teaching practice such as problem solving, inquiry approach, group learning

X2: Teacher proficiency in constructivism practice, for instance, training, content-drawer knowledge

X3: Resource availability (e.g., instructional materials, technology integration.)

X4: Institutional support and policy alignment (e.g., manageable class sizes, assessment reform.)

X5: Culture and student readiness (e.g., learners' prior exposure to active learning.)

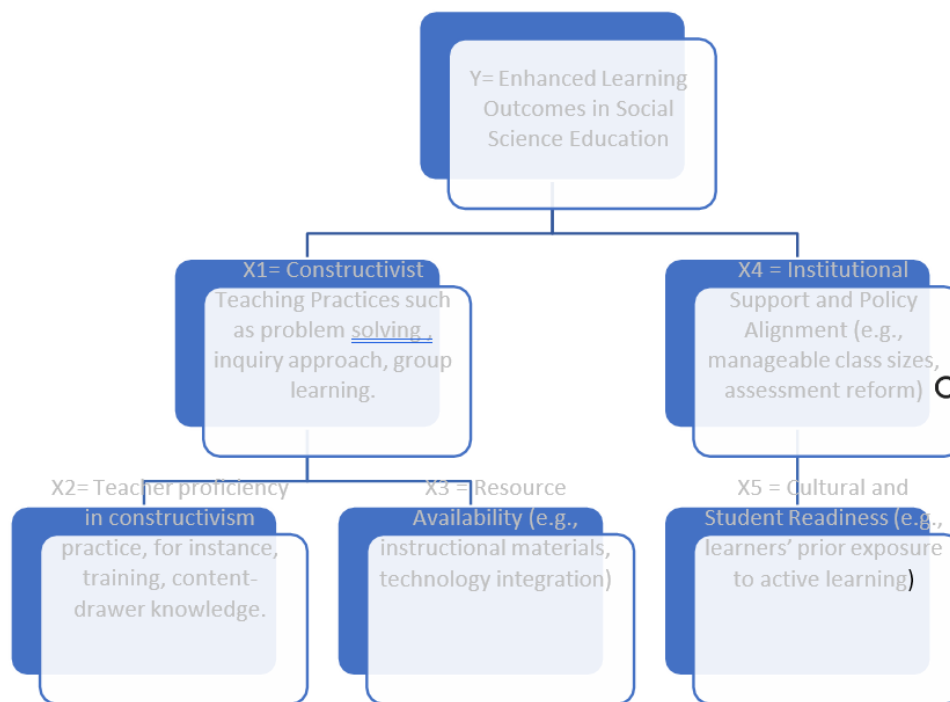


Figure 4: Factors Influencing Enhanced Learning Outcomes in Social Science Education

This model postulates that the dependent variable which is the learners' performance in social science education is determined by the above five independent variables of this study. That is why it combines cognitive, instructional, sociocultural, and policy-based perspectives into the single approach.

This integrated theory reaffirms that the constructivist approaches cannot be implemented in isolation from an institutional, learning-environment and culture supportive environment. It can be valuable for further empirical research and policy relevance to education research and practice.

8. Conclusions

8.1 Key Findings

The objectives of this study were to establish how constructivist instructional design impacted social science education through identifying how the principles affect the instructional process, the issues involved in the implementation of the strategies, and the improvement brought by the strategies in the learning outcomes. The findings of this research helped the argument by presenting rationale regarding the ways to enhance learning processes, increase interest, and strengthen thinking abilities in social science subjects within the framework of constructivism. The literature review and subsequent findings will support the proactivity of constructivism implementing methods like inquiry-based learning, collaborative project and use of technological part.

Nevertheless, there were several difficulties spotted in the process of organizing the constructivist approaches to instructional processes. These are lack of resources, herd mentality, noncooperative teachers, and issues of culture and tradition in various learning institutions. The study also revealed that to support the use of constructivist activities in teaching and learning, there is need for professional development of the teacher, availability of resources and general support from the institution. Thus, although the constructivist strategies employed in the present study were rather successful in increasing students' learning outcomes in many instances, they were not effective in all cases and called for context-sensitive modification based on students' needs and the demands of a given educational setting.

The amalgamation of these theories, particularly constructivism instructional practice, teacher competency, resources, institutional support, and cultural disposition has informed the establishment of Constructivist Instructional Effectiveness in Social Science Education model. This model therefore draws attention to the fact that student learning is a function of both Teaching-learning activities and program support, illustrating a systemic approach to teaching and learning in the social sciences.

8.2 Future Research

In conclusion, this study adds to the existing literature on constructivism on social science education as there are several directions that need to be explored further in future studies. Subsequent research could involve collecting data over time to assess the effects of using constructivism in enhancing student retention, knowledge recall, and critical thinking skills especially in the social sciences domain. Therefore, there is significant research need to explore the ways in which constructivism could be appropriately implemented and disseminated to different schools, especially the less endowed ones or non-western nations.

Another area needing research is how technology supports constructivist learning environments. This study affirmed the premise that technology can be used to facilitate constructivists teaching, therefore, subsequent studies should determine the most compatible gadgets on inquiry and creation in the social sciences.

Finally, research examining the correlation between constructivist approach in teaching and social sciences student motivation can contribute to the understanding of the impacts of these paradigms on students' attitudes and continued engagement.

8.3 Limitations of Research

The following are the limitations of the study that need to be stated: First, it is a systematic literature review, and some works may have not been found in the given scope, either because of language or access to them. However, few studies are older than two decades and some of the basic/existing theories in constructivism were not considered during the review.

Another limitation is the absence of research data drawn directly from the field observation by the researcher or other research studies. The study relies purely on secondary data; this restricts the genuine picture of the teaching learning process as happens with actual teachers and students in classroom settings. The study also did not seek to determine the difficulties teachers face, which may include shortages of materials, cultural factors, and existing education policies in their regions.

It is important to mention that this study focused on the overall effectiveness of constructivist instructional practices in social science education, without assessing the influence of these strategies on certain areas of the subject area, such as history, sociology, or political science. Further research should explore the parameters explaining the effectiveness of constructivist strategies more specifically within various Social Sciences disciplines.

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