

Constructivism in Online Learning: A Qualitative Thematic Meta-Synthesis

Rujonel F. Cariaga

Department of Education, Negros Oriental, Philippines
Corresponding Author's Email: ruj@rucariaga.com

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ABSTRACT

Different school settings are used in this meta-synthesis to illustrate how constructivism is applied in real life. The study examines how students and teachers have discussed social constructivism theory and peer-reviewed research to understand how these ideas have been used online. There are four main themes using interpretive thematic analysis. These are how online learning becomes a social space, how important student agency and self-regulation are, how teachers act as pedagogical mediators, and how technology can both help and hurt learning. They show that technology is not the only reason why online learning is valuable. It also depends on how the lessons are planned, how the students connect, and how well they work together to make sense of things. It shows how important it is to match digital tools with constructivist teaching methods to create real learning situations.

Keywords: education, constructivism, online learning, educational technology

INTRODUCTION

Today, online learning is a big part of school because it changes how students connect with teachers, knowledge, and other students from different schools, cultures, and places. Digital spaces are increasingly used in schools for learning. This has led to questions about how well they work and how people learn and understand things in these spaces. It is now one of the most important ideas in online teaching, especially in social constructivism. It views learning as something that is done, affected by society, and set in a particular environment (Allen, 2022; Wang, 2022).

Constructivist theory holds that students are active participants who learn on their own by connecting with others, using cultural and technological tools, and reflecting on what they have learned. Online split classes, joint discussion boards, project-based learning, virtual labs, and learning spaces powered by AI are all examples of these ideas in action. It has been shown that constructivist ideas can help students become more interested, think more critically, and better understand concepts in online classes (Alismail et al., 2022; Robertson, 2022; Fadli et al., 2024; Kim et al., 2022).

Much of the writing about online learning focuses on things that can be measured, such as success, drive, and acceptance of technology. It does not talk much about how students and teachers actually feel about it. Often, quantitative studies find statistically significant effects. However, they do not tell us much about how people interact, make sense of, and feel in places where they learn online (Anderson Jr., 2022; Dahl & Mørch, 2025). We still do not fully understand how constructivism is used and felt in different kinds of internet classes because of this.

This study examines constructivism in online learning and conducts a qualitative meta-synthesis of peer-reviewed literature on the subject. This study draws on experience data from several other studies to show how

constructivist ideas are understood, discussed, and maintained in online settings. It also wants to give people a better understanding of digital learning that goes beyond results-based ratings.

Problem Statement

The idea behind this study is called "social constructivism." This theory holds that language, society, and touch shape how we learn socially. From this point of view, not only does the teacher teach, but students also learn from important social relationships (Allen, 2022; Holbrook et al., 2022). People learn when they work together, talk to each other, and think about what they are doing with tools designed for that setting. Social constructivism emphasizes the importance of using technology to connect with others in online classrooms. Some tools that can help people find shared meanings are discussion boards, joint platforms, mobile learning apps, and virtual or interactive environments (Alismail et al., 2022; Song et al., 2023; Ward et al., 2021). This is because of how teachers choose to teach and what they think about these settings. This, in turn, affects how students see their work, interact with others, and learn (Chen et al., 2022). On the other hand, social and structural boundaries affect how constructivism is used online. Because of uniform lessons, testing methods, platform features, and technological limitations, constructivist ideas and real-life practice cannot always align (Sayaf, 2023; Dahl & Mørch, 2021). Social constructivism tells us that online learning is not passive or the same for everyone. Instead, it is a process that is constantly changing due to broader issues in education, technology, and society.

Research Questions

The following research questions will help lead this study in order to solve the problem that has been identified:

1. What are the experiences of students and teachers with constructivist learning in online settings, as shown in previous qualitative and mixed-method studies?
2. In what ways does social constructivism affect the way online learning is done in terms of society, education, and technology?
3. What topics come up over and over again in studies about student choice, interaction, teacher support, and technological aspects of constructivist learning online?
4. What problems and issues have been mentioned when trying to match constructivist theory with different types of online learning?

MATERIALS AND METHODS

Design

This study used a qualitative meta-synthesis to examine how constructivism is experienced in real life in online learning settings. The research results were taken from peer-reviewed studies. The study used an interpretive method grounded in phenomenology, meaning that the meanings, feelings, and interpretations of the participants were given greater weight than measures or causal links. This method was chosen to bring together experience data from several qualitative and mixed-method studies.

Data Collection

The data came from journal articles reviewed by experts in the field that examined constructivism in online, mixed, mobile, virtual, and AI-supported learning settings. The studies had to follow strict rules: they had to be based on constructivist or social constructivist theory; they had to be about the experiences of students or teachers in online settings; they had to be published in an indexed, peer-reviewed journal; and the full text had to be available in English. The papers were put together from language education, K–12 education, college education, and job learning.

Data Analysis

The facts were analyzed using thematic analysis. Studies were read and the researcher coded the experience data from the chosen studies multiple times to do this. The first codes were generated by aggregating the meanings that kept emerging around technology affordances, social touch, student agency, and pedagogical mediation. These codes improved over time as the studies were compared. They were then grouped into larger themes that showed how people have similar experiences across different places.

Ethical Considerations

There was no direct contact with people in this study because it was a secondary qualitative report. To be moral, the original studies were cited correctly, there were no misunderstandings, and clear source credits were provided.

RESULTS AND DISCUSSION

The mix yielded four ideas linked to each other.

The first idea is that online learning has become a social place in its own right.

In every study, people who learned online saw it as a social space where students could connect and learn, not just acquire knowledge. Many students, especially those in college or learning a language, said that discussion boards, group projects, and shared digital tools helped them make sense of things (Le & Nguyen, 2024; Quoc & Van, 2023; Zhang, 2022). It is clear from these points that constructivist learning online is social and rests on having chances to talk and work together to understand.

Self-control and student control are the second theme.

People thought that constructivist online places were strong and hard to use. Because they were given freedom and flexibility, learners felt like they were in charge of their own learning. This got them more excited and interested. Do et al. (2023) and Almulla (2023) said that to do well in these less-structured situations, students needed to be able to control themselves, manage their time effectively, and have a natural drive to succeed. This is why the agency came across as a complicated idea that included both choice and task.

The third theme is the teacher's role as an educational mediator.

They were in different places, but they still needed to talk to their teachers in order to learn. This changed how constructivism was used in online settings because teachers planned tasks, listened to talks, and helped students understand (Chen et al., 2022; Robertson, 2022). Learners said that constructivist learning worked best when teachers were clear about what to do and also let students talk and explore.

The fourth theme is how technology can help and hurt us.

With digital tools such as virtual labs, AI-powered tools, mobile learning, and virtual reality (Fadli et al., 2024; Kim et al., 2025; Ward et al., 2025), it is easier to be real, try new things, and get lost. People who used the tool, however, also said that it was not always easy to use and that the way institutions work can make it harder for people to connect and be open (Sayaf, 2023). In this way, technology was seen as a way to help people learn rather than a way to judge how well they learned.

Implications

Online Learning as a Social Space

Remember that online learning is a social setting when you plan your online lessons. Instead of focusing solely on distributing information, learning tools and course frameworks should emphasize ways for students to connect in meaningful ways, such as peer feedback systems, discussion forums, and group projects. For constructivist ideas to make sense, designers and teachers should make social learning opportunities that promote discussion and group problem-solving. Social presence is not just a nice-to-have in constructivist online learning, as this result shows.

What does Learner Self-Regulation denote?

Learning with learner agency makes students feel strong and challenged. This demonstrates how important strong support systems are for freedom and constructivism online. Freedom and power for the learner can interest and inspire students. Helping them learn self-regulation skills like planning their time, making goals, and using mindful learning methods is also important. Hence, schools and teachers should use scaffolding tools like clear goals, formal feedback, and self-monitoring to assist students in getting used to settings with less order. Finding the right mix between freedom and pedagogical help is key to protecting students' autonomy. Online constructivist learning depends on the teacher being present, which is related to Theme 3: The Teacher as Pedagogical Mediator. Effective online teaching involves more than just learning a lot about the topic. It also involves helping, mentoring, and making connections with students.

As part of their professional growth, teachers need to be able to help students more by making sure they have the right assignments, keeping talks on track, and giving extra help as needed. Making constructivist learning work online seems to depend on giving students clear directions and chances to explore. In relation to Theme 4, which talks about how technology can both help and hinder, technologies like virtual labs, AI tools, and interactive environments can make things seem more real and interesting, but only if they are simple to use, available to everyone, and supported by institutions. Additionally, schools should put money into systems that allow students to connect and be flexible, and they should also fix any technology issues that make it hard for people to engage. Because of this, it is clear that teachers need to be involved in making online classes where students can work together and do tasks.

This meta-synthesis of qualitative themes shows that constructivist online learning is a lived and negotiated experience shaped by technology, social touch, and how teachers guide it. As Allen (2022) and Holbrook et al. (2022) note, social constructivism holds that people learn best when they participate, talk, and reflect on what they have learned, without doing anything else. This shows that technology alone does not guarantee that learning will be helpful. How well constructivism works depends on how well the teaching methods, teachers' views, and processes for helping students all work together.

Freedom and direction can be at odds. This shows how important it is to carefully plan lessons that give students both, especially when they are learning online and are expected to take on more responsibility. By focusing on how events matter across different learning situations, this study adds to our understanding of constructivism in online learning. This study goes beyond outcome-focused reviews by examining how both students and teachers feel about constructivist practices. It also gives people who make online learning settings ideas for making places that help people learn in a real, social way. Later, more basic qualitative studies could be conducted to build on this work and better understand how people make sense of things in changing digital learning settings.

Conclusion and Recommendations

This qualitative meta-synthesis shows that constructivist online learning is a socially managed experience shaped by how technology, teachers' guidance, and students' freedom work together. Some schools thought that learning meant more than just memorizing facts. They also thought that it meant making sense through talking, connecting, and thinking. They show that online classes can be practical learning environments when students are encouraged to work together, make their own choices, and connect with teachers and other students in a planned way. This supports the idea of social constructivism. This shows that being fluid and having a set framework are constantly at odds, so teachers need to be careful about how they use technology if they want constructivist learning to work around the world.

Since these results were found, it is suggested that teachers and instructional designers intentionally integrate digital tools with constructivist teaching principles. They should focus on contact, guidance, and building knowledge together instead of just sharing information. To help their kids learn and have fun at the same time, teachers should receive professional development support. This is especially important for teachers who work online, where there is less structure. Schools should also address technology and building issues that get in the way through helpful contact points and rules that support open teaching. If researchers want to learn more about how students and teachers understand constructivist practices in changing digital environments, such as AI-powered and interactive learning spaces, they should use phenomenological or ethnographic methods as their primary research methods.

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Conflict of Interest

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