

The Teaching and Learning Strategy: Do We Need Classroom to Transfer Knowledge and Values to Our Students?

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ABSTRACT

Classroom learning is extremely important for students, providing a structured environment supporting their academic, social, and emotional development. Classroom learning allows students to interact with teachers in real time; this offers the opportunity for immediate clarification, feedback, and guidance, which is critical for deeper understanding. Building interactions by seeing stimuli and gestures appropriately takes a classroom where interactions occur naturally which can be observed directly. Online classes present fairly short class meetings and do not involve emotional well between teacher and students. Qualitative research with a case study approach in the article reveals the need for direct interaction in the classroom teaching-learning process. 10 respondents were middle school teachers who taught in several schools in Bandar Lampung. Classrooms must be used as fun spaces filled with motivation for students related to critical social values, cooperation, respect, empathy, critical thinking, and responsibility are essential for the student's holistic development.

Keywords:

Classroom; Knowledge; Students; Teaching and Learning; Values.

ABSTRAK

Pembelajaran di kelas sangatlah penting bagi siswa, karena menyediakan lingkungan terstruktur yang mendukung perkembangan akademis, sosial, dan emosional mereka. Pembelajaran di kelas memungkinkan siswa berinteraksi

dengan guru secara langsung, hal ini memberikan kesempatan untuk klarifikasi, umpan balik, dan bimbingan secara langsung, yang sangat penting untuk pemahaman yang lebih mendalam. Membangun interaksi dengan melihat stimulus dan gerakan secara tepat menjadikan kelas sebagai tempat interaksi terjadi secara alami yang dapat diamati secara langsung. Kelas daring menghadirkan pertemuan kelas yang cukup singkat dan tidak melibatkan emosi yang baik antara guru dan siswa. Penelitian kualitatif dengan pendekatan studi kasus dalam artikel ini mengungkap perlunya interaksi langsung dalam proses belajar mengajar di kelas. 10 responden dari guru sekolah menengah yang mengajar di beberapa sekolah di Bandar Lampung. Kelas harus digunakan sebagai ruang yang menyenangkan yang penuh dengan motivasi bagi siswa terkait dengan nilai-nilai sosial yang kritis, kerja sama, rasa hormat, empati, berpikir kritis, dan tanggung jawab yang penting bagi perkembangan holistik siswa.

Kata kunci:

Ruang Kelas; Pengetahuan; Siswa; Belajar dan Mengajar; Nilai-Nilai.

1. Introduction

Instructional activities in the learning process should be prepared concerning the curriculum and learning objectives that the teacher has prepared (Schneider, 1994); Anbiya & Asyafah, 2020), therefore teachers must be prepared with the ability to manage classes, analyze, professionalism, and inspire students (Bullough, 2014). The COVID-19 pandemic in 2020 requires all students to learn from home using online platforms. Full-time online learning has challenges and passions that teachers and students must have to meet specific objectives. During the COVID-19 pandemic, teachers must work hard and create creative innovation in adapting and entering the online learning world (Liu et al., 2022). Parents' participation also plays an important role in directing children to follow the online learning schedule prepared by the teacher, and they should follow the learning process online. Today's shift in learning locations previously performed in schools (classrooms) has been transformed into online (virtual synchronous).

Classroom management is a conscious effort to plan, organize, actualize, and supervise programs and activities in the classroom so that learning occurs systematically, effectively, and enjoyably. Effective classroom management is inseparable from how teachers manage students' attitudes in a learning process; it is undeniable that each student in the class has different characteristics and intelligence, with these differences will influence the learning process in the classroom (HD & Darmawan, 2023). Classroom management is a reference for an active learning process because, through classroom management, teachers will find it easier to manage their classes, students will also have no difficulty in following the learning process, and the teacher will immediately handle problems that arise through good classroom management (Chen, Luo, Wang, Yin, & Yang, 2023).

The combination of online and offline classroom learning has its advantages. However, some teachers complain about online learning because there is a principled subject that is important to build

taste, communication, and interaction with students to be less effective. Some teachers also intend to learn online because it is more effective and efficient in managing online learning and classes in the current pandemic conditions for students to learn from home. Both types of learning, either in the classroom or online, have needs that teachers and students must meet. Learning in the classroom needs readiness, motivation, and passion, interaction, and it becomes the basis of an assessment that can be observed directly by the teacher so the teacher can know the activities that are done and understand the character of the students (Leyer, Yuan, Wang, & Moormann, 2023). Online learning needs adequate infrastructure for virtual learning to run without any obstacles. Support in the availability of electronic devices, internet networks, and student readiness at home is an important factor in synchronous virtual (Gumartifa, Syahri, Siroj, Nurrahmi, & Yusof, 2023). The learning format applied in principle supports teacher (and student) learning effectively and efficiently (Fishman et al., 2014).

Intensive offline learning has a positive effect on communication patterns built by teachers and students (Wang & Chen, 2022). The grades gained from classroom activities can provide students with experience and thinking processes in keeping up with the development of the modern era. The moral aspect of value is important to develop in the classroom and becomes a habit teachers constantly convey wisely to students. Respect and responsibility The basic principle in the school and the classroom is to build healthy personal development, caring interpersonal relationships, a humane and democratic society, and a just and peaceful world (Lickona, 1991). Certainly, studying in the classroom fosters cooperation between students, practicing honesty, fairness, tolerance, confidence, helpful attitude, self-discipline, and student self-development (Ling, Yang, Liang, Zhu, & Sun, 2022).

Face-to-face learning in classrooms and classroom meetings online (virtual synchronous) has its characteristics and advantages. The digital world is like a highway that provides the morning facilities for its users who react quickly to the condition and development of technology from day to day (Arthur, 2012). Acceleration of the flow of information and technology can be utilized for the world of education precisely; thus, the standard of learning qualifications conducted online must be made with the plan and preparation of innovative, creative learning quality for students (Bu, 2022). Therefore, it is interesting to be displayed in front of students when virtual synchronous. The development of information and technology is implemented by the desire of every individual, society, and student to keep up with the changes of the modern era. However, internet users should know that it takes a wise attitude and respect for the rights of others to continue to use the internet properly. The benefit of the internet is that it will greatly facilitate its users, and on the other hand, users of information media and technology should have filters against themselves in internet use (Rahmawati, Adha, Kusuma, & Rohman, 2023).

Virtual synchronous can be said to be all things done by students from home when covid-19 pandemic is occurring in various regions of the world; therefore, learning must adjust to the current situation. Not all students in online learning understand how to use virtual applications during the learning process. The help of parents, siblings, or teachers must help students in using the online learning application. This article does not give a final decision on which type of learning in the classroom or online learning is better. Still, both conditions are needed in teaching and learning strategies to achieve the target of learning achievement that has been prepared. Online learning

conditions play an important role in today's pandemic, and of course, offline learning will return to normal in the classroom if the situation allows for live synchronous.

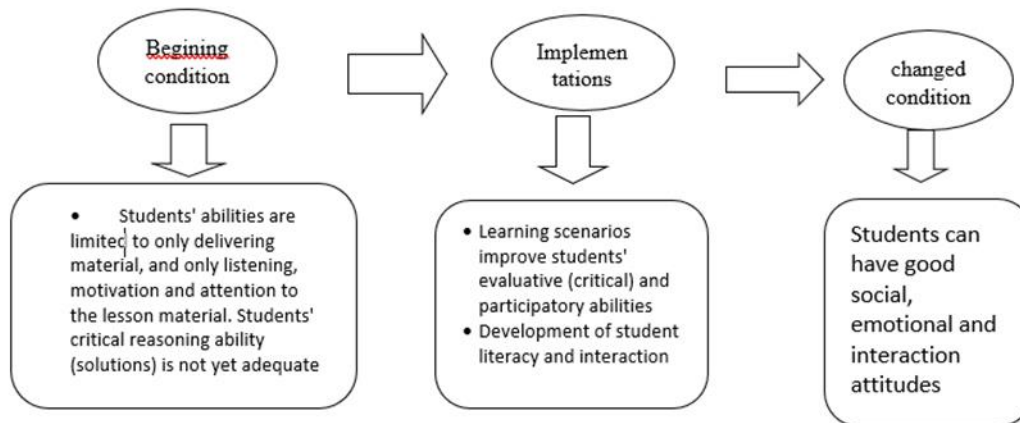


Figure 1. Research Framework

Conditions during the Covid 19 pandemic, the learning process is limited. Interaction between teachers and students is carried out through online learning or Distance Learning. Teachers' difficulties increase because student involvement has not been fully accommodated due to limitations in space and time, even found that in distance learning, education and literacy are still limited. (Sanchez-danday, Ph, & Sanchez-danday, 2021). Constructivism answers the teacher and student gap (Pande & Bharathi, 2020). There are 12 taxonomies of constructivist principles according to them, namely new knowledge, social interaction and diversity of thinking, self-autonomy, optimization of existing knowledge, problem visualization, authentic tasks, metacognitive reflective abilities, idea initiators, personal experience, self-relevance, shared and adaptive experiences.

Referring to Heinrich and Green's research experience as a learning process can also increase confidence (Moseley, Summerford, Paschke, Parks, & Utley, 2020). This belief forms students' involvement to be deeply involved in the interaction between their socio-cultural life and what is felt. This perspective explains that experience as a learning process creates emotional power from existing interactions. Therefore, it is also necessary to realize that every interaction should be given treatments encouraging critical skills not to cause false beliefs. For example, in implementation in the field, field trip activities are criticized because they are considered only as access to play. Learning experiences are not included as part of the visit process because the management of activities is oriented towards other aspects.

The aspects in question will be explained basically by (Mufida & Qosyim, 2020) Which contains several things in creating an understanding related to activities of doing or experiencing in real terms, the existence of investigative efforts as a form of curiosity so that it gives rise to initiatives that are strengthened by collaboration and cooperation both individually and in groups. However, both research is still felt to be limited to cognitive. Still, it is necessary to see the reciprocal relationship between cognition and belief to be involved, even though follow-up is needed regarding this Table 1.

Table 1. Research Problems

No.	Learning Activities	Problems	Feedback
1	<i>Problem Statement</i>	Based on the results of interviews with students and collaboration teachers, the problems that occurred included teachers' explanations about collaboration material differing from one another and limitations in discussions during online periods	Requires discussion and interaction between classmates
2	<i>Collection</i>	Lack of presentation time and the ability to analyze cases is not an easy job. Meanwhile, from observations in class, students' skills in conducting investigations into cases are underdeveloped. Students still focus on memorizing rather than building learning experiences and values	Requires enthusiasm in discussions related to the process
3	<i>Data Processing</i>	Student input is very important to guide teachers to reflect on the learning process on the material of legal case evaluation. In addition to the material that is considered difficult to understand. The operational word "evaluate" can be categorized as having a high cognitive level to achieve learning objectives	The findings include how active students are in discussions to build understanding
4	<i>Verification</i>	Based on the students' previous readiness, literacy experiences still need to be developed. Not only investigative skills but also building critical and creative thinking experiences are also very much needed. Therefore, teachers plan alternative actions to develop literacy	The discovery process in class provides a different atmosphere and experiences.
5	<i>Generalization</i>	Communication and cooperative attitude are important factors so problems can be solved quickly. Classes should provide critical space for students because they contextually get direct information from someone's experience	Good communication and cooperation are needed in handling problems

The objectives and points of view between online and classroom learning can differ. Both educational methods have unique strengths, and their approaches vary in flexibility, interaction, structure, and accessibility. Online learning can provide flexible, widespread access to education, allowing learners to study from anywhere with an internet connection and provide a platform for communication and interaction through digital tools (forums, email, chat). The objective is to make learning more accessible and convenient but may reduce face-to-face interactions. Students appropriately adjust in how, when, and where students learn. Many online courses are self-paced, allowing students to progress through the material at their speed within a given timeframe. Students have greater autonomy and responsibility for their learning. Teachers may take on more of a facilitator role, offering resources, assignments, and assessments, but with less direct involvement in daily learning.

Classroom learning is typically more structured, focused on real-time interaction, and emphasizes social learning and immediate feedback. The primary objective is to create a structured,

face-to-face environment where students can engage directly with teachers and peers. It focuses on providing immediate interaction, guidance, and real-time feedback. The objective of interaction and communication aspect to foster real-time communication, collaboration, and face-to-face interaction among students and teachers. This supports immediate clarification of concepts, peer interaction, and group learning. Conversely, teachers play an active, central role in the learning process. Teachers direct lessons, provide in-person support and often tailor instruction to students' needs, provide engaging content through multimedia tools (videos, podcasts, interactive lessons), often aiming for a more individualized approach to suit different learning styles. Focusing on direct access to the teacher and resources within the school or institution is also important. Classroom learning ensures students access physical materials, technology, and in-person support.

The function of classroom learning is to make changes in the class so that students can work together and develop self-control. As educators, teachers can also help students' competencies so that they lead to active and creative attitudes from students and a conducive class. From several understandings and definitions above, it is concluded that class management is an effort or attempt that teachers must make as educators to achieve teaching goals, which include planning, arranging, and optimizing various sources, materials, and learning facilities to create quality and effective learning for students. Class management is also closely related to the success of the learning process because it creates a passion for learning and improves the quality, and quality of learning.

2. Methods

2.1. Research Design

This qualitative research used a case study approach to examine how teaching and learning strategies, especially learning in classrooms with virtual learning, have effectiveness and efficiency, leading to achieving learning goals that teachers have prepared. Case study research models focus more on the question of what can be learned from a single case (Payne, 2021). Case behavior has a pattern consistency, sequels are very prominent, and some aspects are significant as contexts. In the tradition of qualitative research, the terminology case study is known as a type of research. A case study is defined as a method or strategy in research to uncover a particular case. Case study research focuses on a particular object that is raised as a case to be studied so that it can uncover the reality behind the phenomenon. Because what is visible is essentially not something real (reality). It is only a reflection of what is inside.

As is common with data acquisition in qualitative research, case study data can be obtained from all parties concerned through interviews, observation, participation, and documentation. Data obtained from various methods is essentially to complement each other. Sometimes, the interview data is incomplete, so it must be sought through other methods, such as observation and participation. To gain in-depth knowledge, case study data can be obtained from the studied case and from all parties who know and are familiar with the case. Data or information can come from many sources but must be limited to the studied case. To obtain in-depth information on a case, reliable informants are needed who meet the requirements as informants, namely maximum variety, namely people who know a lot about the problem being studied. However, they do not have to have high academic

degrees. This method is very appropriate for understanding certain phenomena in a particular place and at a particular time.

2.2 Participants and Sampling

The interview involved ten respondents from middle school teachers who taught in several schools in Bandar Lampung. Triangulation was done to report the data collection results in the field in the form of the respondents' experiences. To reduce the likelihood of misinterpretation, procedures were used in data collection until it reached saturation point (Payne, 2021).

2.3 Instrumentation

Interviews were conducted with all respondents in this study, especially teachers who experienced the learning process during the COVID-19 pandemic. Interviews were conducted for approximately sixty minutes for each respondent and on different days between respondents. The interviews were very conducive and were recorded as a guide for the author to interpret the interview results to find the uniqueness of this study after obtaining permission from the respondents. The interviews were conducted using questions prepared with a predetermined question grid.

2.4 Data Analysis

The researcher followed guidelines to ensure the study was carried out systematically. Data is collected to obtain the information needed to achieve the research objectives. Defining the specific research questions or objectives will guide the data collection process by helping identify the type of data needed: 1) Data Reduction: data reduction is a process of selecting, focusing on simplifying, abstracting, and transforming raw data that emerges from written notes in the field; 2) Data Presentation (data display). This data presentation is done by arranging it in such a way that it provides the possibility of drawing conclusions and taking action. The data presentation used in qualitative data is narrative text; 3) Drawing Conclusions (verification); the last data analysis activity is drawing conclusions and verification. Briefly, the description of the interactive model proposed by (Miles & Huberman, 1984).

3. Results and Discussion

3.1 What Do We Expect? Teaching and Learning Activities in The Classroom

In the classroom, teaching and learning activities are designed to engage students meaningfully, promote understanding, and foster skills development. These activities' expectations vary depending on the subject, age group, and educational goals. What We Expect: Students should actively participate in their learning rather than being passive recipients of information. This can be achieved through discussions, problem-solving, debates, role-playing, or hands-on activities. Examples: Group work, class discussions, peer feedback, collaborative projects, and hands-on experiments in science or art. Teachers must explain concepts clearly, offer step-by-step guidance, and model processes. This ensures that students understand the objectives and what is expected of them, for instance, direct instruction, demonstrations, visual aids (like slides or diagrams), and guided practice sessions. Opportunities for critical thinking and problem-solving: What We Expect Here classroom activities

should challenge students to think critically, analyze information, and solve problems. This is important for developing students' higher-order thinking skills in the real world. Doing some case studies, debate sessions, project-based learning, inquiry-based learning, and scenarios where students apply concepts to solve real-world problems.

Classroom learning (face-to-face classroom), between teachers and students, can interact, communicate, and observe students directly (Culajara, 2024). Activities and experiences that are done and obtained directly can also be called authentic learning (Cronin, 1993); Schneider, 1994). Teachers can understand the character of students easily. Therefore, teachers can choose and prepare learning strategies or models to implement in the classroom. Learning activities that occur in the classroom can be started and supervised directly by the teacher; the interaction process that occurs in the classroom can run naturally. Usual conditions can provide a calmer classroom atmosphere, productive discussions, and more directional learning objectives. The strength of direct learning meetings in the classroom is creating an atmosphere of balance. Balance of situation that touches the sense and motivates students is essential to achieve the learning objectives (Pierce, 1994).

Table 2. Face-to-Face Learning Implementation in Classroom

Learning	Teacher	Students
Open classroom climate	Motivation Communication Interaction listening	Engage with the interaction Give some opinion Feel welcome
Role	Role model Leader and collaboration	Pay attention and communicative
Classroom management	Teaching and learning activities	Discussion Individual and group task

Source: processed data

Face-to-face classroom learning is a traditional educational approach where students and teachers interact directly in the same physical space. It involves a combination of teaching methods, classroom management, and fostering an environment conducive to learning. Key aspects of face-to-face learning include an open classroom climate, the teacher's role, and classroom management, each of which plays a critical role in shaping the learning experience. An open classroom climate means creating an environment where students feel safe, supported, and encouraged to express themselves. This atmosphere promotes active engagement, collaboration, and critical thinking, fostering a sense of belonging among students. The teacher plays multiple roles beyond that of an instructor. These roles shape the overall dynamics of the classroom and support student learning: 1) Facilitator, 2) Motivator, 3) Mentor, 4) Assessor. Classroom management is essential to creating a structured environment where effective teaching and learning can occur. Classroom management ensures that students remain focused, disciplined, and engaged in the lesson. It includes 1) Setting Clear Expectations, 2) Maintaining Engagement, 3) Dealing with Disruptions, and 4) Promoting Positive Behaviour.

The main point in this section is that the correlation between face-to-face learning (physical classroom) settings and student interaction in moral feelings is a topic that bridges the realms of

education, psychology, and social development. The physical classroom environment significantly shapes students' moral feelings and values, often through interactions within that space. Teachers need to be prepared for various scenarios and difficult teaching and learning in the post-pandemic period as they gradually return to providing instruction in-person or on-site because individuals differ in how they approach issues and their capacity to overcome them (Culajara, 2024); Mpofo & Ndlovu, 2024).

The implementation of classroom learning can give students the ability to get to know the teacher more closely. Uniquely, one student can get to know almost all the teachers in the school, but not all teachers recognize their students because of the large number of students. Through the interaction of learning in the classroom, students can recognize and understand the character of the teacher who teaches them; therefore, teachers and students can open positive influences and atmospheres in the classroom. Classroom activities built with a discussion after watching several videos show that the intensity of communication and taste built into the classroom is important; thus, the teacher in the classroom should act as a model, scaffolding, and construction (Farrow et al., 2024; Arya et al., 2014). On the other hand, students have favorite teachers, so a teacher should be able to set a good model for his students in the classroom/school.

Classrooms become a place of learning that effectively motivates students because the spirit and sincerity of a teacher can be seen directly by students. This motivational process breeds care, sensitivity, sympathy, empathy, and student responsibility toward friends in the classroom and teachers. Teachers are role models who directly meet students in the classroom; therefore, moral values, life skills, self-reliance, and other components of life are very important and delivered and practiced to students with the help or /guidance of teachers (Schneider, 1994; (Japar, Casmana, Adha, & Fadhillah, 2024). Student's ability to identify both knowledge and personal skills must continue to be developed to build students' future (Anbiya & Asyafah, 2020). Paying attention to and improving class activities, including processes and outcomes, becomes a way to transfer knowledge and values to students.

Lickona is very concerned about the moral behavior of students incorporated into three components, moral knowing, moral feeling, and moral action then learning in the classroom should be able to teach respect and responsibility (Lickona, 1991). The understanding of good is strengthened by the desire to do good. Finally, the good deed becomes a habit that every individual does towards moral life and maturity of wiseness. Teachers continuously convey and give students an understanding of something good and bad around them. Knowledge transfer and transfer of grades such as wisdom, justice, fortitude, temperance, loving, hardworking, integrity, grateful, and modesty need to be developed in the classroom to strengthen the character of students (Lickona, 2013).

There is not much research done with sufficient longitudinal in examining the importance of outcomes of a study. A five-year study was conducted on activities in the classroom by a primary education student focusing on strengthening identity as a teacher. The results showed that discourse identity, affinity identity, nature identity, and institution identity become stronger when a person prepares to learn and the results of interaction experiences and experiences gained from the classroom during the college period (Avraamidou, 2014). Learning activities in a classroom are certainly needed, especially in qualitative research that observes patterns of behavior and activity of students

in interacting and discussing. A qualitative study conducted over 15 weeks in the classroom was conducted by observing what students read, discussing, finding accurate information, analyzing and writing their analysis results, and what they did in the classroom amplified by visual representation in the classroom (Bailey & Van Harken, 2014; Tsourounis et al., 2022).

From a sociocultural point of view, the classroom provides a variety of social and cultural experiences that can improve understanding of values in society, multicultural understanding, tolerance, and many others (Adha, Nurmalisa, Pitoewas, & Ulpa, 2023). Socio-culture perspectives in schools or classrooms allow students to get to know their friends at school and learn about different ways of thinking and attitudes, and that determines how they behave, get along, and become thoughtful personalities (Ulpa & Adha, 2022; Kwek & Ross, 2016; Japar et al., 2024). On the other hand, students' understanding of the diversity of values and morals around them can be affected by poor deeds if personal integrity has not been so strong. For example, moral decline (darker picture) mentioned by Lickona, such as violence and vandalism, stealing, cheating, disrespect for authority, peer cruelty, bigotry, bad language, and self-centeredness (Lickona, 1991: 13-17), has a bad impact on students, therefore explaining/understanding to students about social life is highly recommended that students be able to choose activities that are positive for themselves (Asghar, Afzaal, Iqbal, & Sadia, 2022).

Students' social attitudes, in addition to being strengthened through learning activities in the classroom, the other sides that are very important to get authentic learning that is very important for students can be implemented by conducting interviews, oral histories, surveys, investigations, participation in public issues forums, debates, civic action projects, and community service (Schneider, 1994: 132). According to Schneider, in addition to the classroom, activities outside the classroom are also done to increase students' knowledge of real life. Students are invited to practice directly through motion activities that engage them to experience adding to their skills and knowledge and strategizing while out of class. The experience in the classroom should bring students connected to the world outside the classroom (Li, Tang, Tomizuka, & Zhan, 2022), therefore Newmann and Wehlage explain five very important standards in supporting authentic learning, among others: higher-order thinking, extensive knowledge, classroom activities being a bridge to human life in the world, substantive studies, and social support for student success (Newmann & Wehlage, 1993).

3.2 *Online Learning Implementation (Virtual Synchronous)*

Virtual synchronous learning refers to learning that happens in real-time, typically over video conferencing platforms like Zoom, Microsoft Teams, or Google Meet. This mode of learning allows for interaction between instructors and students in a live environment, mimicking the classroom experience in a virtual space. Research on this learning model often explores its effectiveness, challenges, and advantages. Virtual synchronous learning can enhance engagement through real-time interactions. Students can ask questions, discuss ideas, and receive immediate feedback, fostering a dynamic learning environment. However, research also suggests that engagement can be influenced by the technological infrastructure, the teacher's ability to manage a virtual space, and students' comfort with technology. In some cases, the lack of non-verbal cues (such as body language) can reduce the depth of interaction compared to in-person settings. Studies show mixed results regarding

student satisfaction with virtual synchronous learning. While some students appreciate the flexibility and convenience of attending classes remotely, others struggle with technical issues, distractions at home, and feelings of isolation. Highlighted that students often have to adjust to the technological demands and the absence of in-person socialization, leading to fatigue and disengagement. However, well-designed virtual classes with collaborative elements (e.g., breakout rooms for group discussions) tend to improve satisfaction.

In terms of learning outcomes, research has found that virtual synchronous learning can be as effective as traditional face-to-face learning, provided that instructors use appropriate strategies and tools. Using interactive features (e.g., polls, quizzes, discussions) during synchronous sessions can boost retention and comprehension, making the virtual experience more akin to an in-person classroom. However, certain groups, such as students with limited access to technology or those with lower levels of self-discipline, may struggle with virtual learning. As a result, academic performance might suffer if these factors are not addressed. One of the key challenges of virtual synchronous learning is technology access. Students from underprivileged backgrounds may have limited access to reliable internet, hardware, or quiet study spaces. Digital literacy can also pose a barrier for some students, as navigating the various online platforms and tools can be overwhelming. Another issue is student motivation and discipline, which can be more difficult to manage online, where students might feel less accountable for participation. Researchers have pointed out that in virtual learning environments, the social presence is reduced, and students may feel less inclined to engage or take ownership of their learning.

In virtual synchronous learning, the role of the instructor is paramount. Effective teaching strategies, such as keeping lessons interactive, using multimedia, and regularly engaging with students, are crucial for maintaining attention and improving outcomes. Studies emphasize the importance of clear communication, where instructors provide clear instructions and are available for individual support during or after the session. Instructors are also encouraged to integrate active learning strategies in virtual classrooms. These may include group activities, case studies, and real-time problem-solving exercises, which can help make synchronous sessions more engaging. Another important area of research focuses on students' mental health and well-being in virtual synchronous learning environments. Extended screen time, lack of social interactions, and the pressure to always be "on" during live sessions can lead to burnout and anxiety. This has increased interest in reducing digital fatigue and promoting mental health during virtual learning. The research into virtual synchronous online learning shows that while it offers flexibility, engagement, and opportunities for real-time interaction, it also presents challenges related to technology access, student motivation, and mental health. The effectiveness of this mode of learning depends largely on how well it is implemented, including the support provided to students and instructors, the tools used, and the ability to adapt to students' needs.

Teaching and learning activities are currently held online at home (virtual synchronous) (Basilaia & Kvaavdze, 2020; (Edelhauser & Lupu-Dima, 2020). Materials are presented in digital or videos using conference applications such as Zoom, google meet, and others. Through virtual class teachers and students interact well in delivering materials, discussing, and helping students when encountering difficulties in the work of the assignment stipulated at the same time. Virtual classes

have schedules created by the school or teachers, so students must prepare in front of a laptop or communication tools such as their smartphones to follow the learning. Teachers should be able to adapt to using online learning meeting applications because teachers will manage classes and distance learning (Apandi, Hutagalung, Meutia, & Sulistio, 2023). Teachers must also be able to operate the learning application for the subject matter to be delivered properly.

The results of the analysis of learning variables synchronously based on observations and interviews, respondents generally felt that learning activities were short, effective, and efficient. However, on the other hand, synchronous learning is insufficient to build communication interaction and generate different empathy compared to conventional learning in the classroom. Meanwhile, respondents generally stated that learning asynchronously requires students to study independently using online applications, websites, e-mails, and other online learning facilities. Asynchronous learning is online learning that does not require the intensity of teacher-student teaching-learning interactions; students seek and develop materials and assignments independently. Respondents in this study strongly support student activities in using online facilities that support the learning process; it is just that digital literacy must be considered so that students can be responsible for using online facilities as well as possible.

The ability of a teacher with limited mastery of technology tools will have some difficulties when the class turns online during covid-19 pandemic. Learning during pandemics is undertaken online using Zoom, Google Meet, Edmodo, and other applications supporting synchronous virtual learning. Meanwhile, teachers proficient in using advanced technology tools such as laptops, smartphones, or other electronic devices are certainly easy to operate. Therefore, it is very important for the school to jointly assist the teachers in using or utilizing technology that is rapidly changing and becoming more sophisticated. Teachers who are very good at mastering or using the internet and technology are advised to help other teachers conveniently manage online classes.

Table 3. The UNESCO ICT Competency Framework for Teachers (ICT-CFT)

	Technology Literacy	Knowledge Deepening	Knowledge Creation
Understanding Ict In Education	Policy Awareness	Policy Understanding	Policy Innovation
Curriculum And Assessment	Basic Knowledge	Knowledge Application	Knowledge Society Skills
Pedagogy	Integrate Technology	Complex Problem Solving	Self-Management
ICT	Basic Tools	Complex Tools	Pervasive Tools
Organization And Administration	Standard Classroom	Collaborative Groups	Learning Organizations
Teacher Professional Learning	Digital Literacy	Manage And Guide	Teacher As Model Learner

Source: en.unesco.org, 2020.

ICT in education refers to integrating digital technologies into teaching and learning. It encompasses tools like computers, the internet, software, digital resources, and communication

devices that facilitate and enhance learning. ICT allows students and teachers to access vast online information, research, and resources. This can enhance learning by providing materials beyond traditional textbooks, including videos, simulations, interactive modules, and global research databases. Curriculum design and development that ICT allows educators to redesign the curriculum to include digital literacy, coding, data analysis, and other skills required in the modern workforce. The curriculum must focus on content knowledge and developing critical thinking, problem-solving, and creativity using technology. Pedagogy refers to the methods and strategies used by teachers to facilitate learning. When combined with ICT, pedagogy incorporates digital tools, new teaching models, and more interactive and student-centered approaches. The integration of ICT in education enhances curriculum design by making learning more interactive, personalized, and accessible (Mpofu & Ndlovu, 2024). It transforms assessment methods by offering dynamic, real-time feedback and diverse evaluation techniques. In terms of pedagogy, ICT promotes student-centered, collaborative, and flexible learning approaches, moving away from traditional, one-size-fits-all methods. These elements help create a more engaging, inclusive, and effective learning environment, preparing students for a digital future. However, for these benefits to be fully realized, addressing challenges such as teacher training, equitable access to technology, and student engagement is essential.

Online learning positively impacts teachers and students, especially in mastering information and technology. Some teachers and students do not understand how to use the Zoom application or Google Meet; after the implementation of online learning during the pandemic, many teachers, students, and users of learning applications become aware of how to use it. The competence of teachers in packaging online (virtual) lessons based on materials is urgently needed. Therefore, the materials delivered can be displayed more attractively, not just in assignments. The competency focuses not only on classroom and material management but the competence of teachers can be a leader and a model that inspire (the transfer of knowledge and values) the students.

Online collaborative learning is one of the significant components in strengthening the interest of students when they use communication and information technology tools, student-student interaction in a flexible delivery system (Dahal, 2022; Malatuny et al., 2020). But from another point of view, learning online is perceived as not enough to provide more deep and meaningful learning because online learning does not involve the structure of leadership and interaction that is not maximal or simple (Huddar, Chavarkar, & Patil, 2023). During the pandemic period, learning will not be undertaken virtually synchronously. Still, Garrison & Cleveland's opinion should be noted because the implementation of learning involving taste, communication, direct interaction, meaningful learning, and leadership in learning is needed; of course, this implementation can run back to normal after the school is re-opened before the pandemic.

4. Conclusion

Learning carried out by well-implemented learning planning learning objectives is a good step. Teaching and learning strategies implemented by teachers in the classroom (live synchronous) and online (virtual synchronous) have their learning process. Teacher competency is the main concern to accommodate both types of learning strategies. Study face-to-face activities in the classroom so

teachers can observe and interact directly with students. While virtual synchronous, teachers are expected to be able to display something different than usual in the classroom, as different classroom management, limited amount of time, and infrastructure support are important factors in the success of online learning. Online and classroom learning types still require cooperation between the school, teachers, students, parents, and the community. Classroom learning fosters social skills, real-time feedback, and a sense of community that can enhance motivation and engagement. The teacher's presence allows for dynamic, personalized instruction, and students benefit from spontaneous discussions and collaborative activities. Online learning offers greater flexibility and accessibility. It allows students to learn at their own pace, on their schedule, and from any location, making education more inclusive for those with geographical, financial, or time constraints. Technology enables personalized learning experiences and greater access to diverse resources. However, online learning can be isolating for some students and may lack the immediate support and interaction that many find motivating in a traditional classroom. Students need classroom learning in learning because the learning model and application of interactions in the classroom can organize students' experiences to construct learning experiences. Students' initial knowledge is built through case studies and class activities, and then they carry out presentations that they build themselves with friends in the class.

5. References

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