ENHANCING ELT WITH TECHNOLOGY: A STUDY ON THE APPLICATION OF LEARNING THEORIES

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Abstract

In this era, many people worldwide have started using technology daily because it saves time and effort. This research investigates the application of learning theories in SMA Adiguna Bandar Lampung and how they are utilized in English language learning through technology. The descriptive qualitative method is employed in this study. To collect data, the researchers interviewed four SMA Adiguna Bandar Lampung teachers. Thematic data analysis was used to analyze the research findings. The results indicate the presence of behaviorism and cognitivism learning theories in SMA Adiguna Bandar Lampung and the teachers integrated learning theory with technology through several stages, namely: Curriculum Integration, Selection of Technology Tools, Instructional Design, Support and Guidance, and Assessment and Feedback. The researchers recommend further research with a broader scope and more participants. Therefore, educators can design effective instruction that supports learners in achieving their learning goals by applying appropriate learning theories.

Keywords: *behaviorism theory; language instruction; technology*

INTRODUCTION

Technology is continually improving in every phase of our lives. The overwhelming majority of people on Earth have started utilizing technology daily since it saves time and effort. In this era, technology is also used in teaching and education, impacting the process of learning English (Loderer et al., 2020). The high rise in English language learners is a notable national trend in today's educational institutions. Most teachers use technology as a way to teach English to students. There is an increasing trend in classrooms to employ technology as a tool for instruction. This technological trend in education is demonstrated by the widely used term "educational technology," the ELL trend is demonstrated by the sharp rise in the proportion of ELL students enrolled in schools and classrooms across the country.

Learning is a problem of epistemology because it involves knowledge and necessitates extensive investigation, which is not the topic of this work (Alakrash et al., 2021). As a teacher, we are all aware of the significance of its cognitive structure, learning as knowledge acquisition, process knowledge that is and provides subjective and objective impressions of the external environment. Teachers like Behaviorism, cognitivism, constructivism, and humanistic can understand some learning theories.

Behaviorisms is a learning theory based on the idea that all behaviors is acquired through conditioning, and conditioning occurs through interaction with the environment. A stimulus is shown to a person, which generates a reaction, which is then reinforced (stimulus, response, reinforcement) (Rao, 2012). This stimulus can shape our actions in the learning process. The relationship between stimulus and response is used to understand behavior. Controlling the

stimulus and responses can influence behavior. There is no thought given to cognitive or affective components. The emphasis is solely on observable behaviors that lend themselves to the stimulus-response relationship.

Cognitivism is a learning theory that focuses on how the mind acquires, puts away, and retrieves information (Rao, 2012). It uses the mind as an information processor, similar to a computer. As a result, cognitivism considers learning to involve internal mental processes rather than observable behavior. According to this viewpoint, learners actively participate in processing information. Knowledge, memory, reasoning, and problem-solving are all aspects that can be improved. This theory regards knowledge as a scheme or symbolic mental creations structured or processed in the mind. When there is, learning occurs; the learner is an engaged participant (Kessels & Van Houtte, 2021)

Constructivism is a form of learning theory that strongly emphasizes students actively creating their understanding (Duffy et al., 2013). Instead of just receiving information, learners reflect on their experiences, create mental models, and integrate new knowledge into their schemas. This promotes deeper understanding and learning. Constructivism believes that rather than obtaining knowledge, learning is a process of producing it. It considers the learner's cultural, social, and contextual factors and theorizes that the learner develops knowledge via experience (Bada et al., n.d.).

Meanwhile, humanistic is a theory of learning based on the premise that everyone has a natural tendency to develop, learn, and reach full maturity (Glaser & Strauss, 2017). Humanists put human needs and interests first. Additionally, they think it's crucial to examine a person as a whole, particularly as they develop and change throughout their life. Human education improves learning by establishing relatable connections to students' personal lives, feelings, and experiences. Students gain more and deeper knowledge as a result. According to human educators, academic learning offers a context for developing the knowledge and skills required to succeed in the real world.

Each learning theory has its strengths and weaknesses, and educators often use a combination of theories to create effective learning environments (Hastomo & Septiyana, 2022). Educators must consider the learners' characteristics, goals, and preferences when designing instructional activities and selecting appropriate instructional methods. Humanistic, constructive, cognitive, and behavioral learning theories all have the same goal to change students' attitudes, behavior, and skills as a result of the learning process and learning itself. What makes the difference is the viewpoint on what and how learning objectives can be met. These theories appeared due to educational experts' criticism and dissatisfaction with previous theories. The constructivist theory appeared to respond to behavioral theory, which only treats students as passive objects. Only educators (teachers) are the focus of behavioristic learning. The following theories are similar.

Learning theory and the key research frameworks in online education are linked; theories of learning, like most scientific theories, are relatively new (Suhendi & Purwarno, 2018). Muhammad Bello Nawaila, Sezer Kanbul, and Radwan Alhamroni researched the previous article. The previous research conducted a literature review about Technology and English Language Teaching and Learning in 2019. This study examines the digital nature of modern students as it relates to educational technology and how helpful it is in learning English through the media most familiar to modern students (Muhammad Nawaila et al., 2020). They did a survey of correlated literature with the only goal of determining recent research trends on the contributions of innovative technologies to English language learning and instruction. To measure the trends in technology contributions to English teaching, a quantitative content analysis method was used for this study, in which fifty academic articles published between the years 2000 and 2018 were considered relevant, open-access, and written in English. The results of this article concluded that constructivism holds that learning is a process of making knowledge rather than acquiring it. It considers the learner's cultural, social, and contextual elements and theorizes that

experience develops knowledge. Therefore, the novelty of this research lies in the fact that no previous studies have discussed the implementation of learning theory by teachers from SMA Adiguna Bandar Lampung and how it is integrated with technology. Therefore, the research questions in this article is "What are the learning theories used in SMA Adiguna Bandar Lampung and How do the teachers integrate them with the learning technology?"

METHOD
Research Design

The data in this study were analyzed using the descriptive qualitative method. The descriptive and qualitative method analyzes data and then organizes it for easy comprehension and conclusion. Descriptive research aims to describe a phenomenon and its characteristics, focusing on what happened rather than how or why it happened (Glaser & Strauss, 2017).The data was collected using an interview session with an SMA Adiguna Bandar Lampung teacher.

There are several methods for gathering data: To begin, the researchers went to SMA Adiguna Bandar Lampung, the sample in this research is four English Teachers in SMA Adiguna Bandar Lampung. Second, interviewed the two teachers using the 12 questions as the research instrument that had been prepared. The final step is to write down the findings to find similarities and common threads in the research topic. Data was gathered through interviews, reference collections of relevant books, and journal articles on learning theory, learning models, and exercises.

The researchers used thematic analysis to analyze the data. Thematic analysis is a research technique for identifying and investigating recurring themes in qualitative data. In thematic analysis, topics in qualitative data are carefully discovered, categorized, and structured (Braun et al., 2014). The researchers do the coding technique, which includes initial coding, connecting coding, recognizing themes, and assessing detected themes by hand. A thematic analysis aims to find themes or interesting or remarkable patterns in data and then utilize them to explain the research or make a point (Peel, 2020). The strong thematic analysis explains and illuminates the facts rather than defining them.

This article uses a purposive/convenience sampling technique. This purposive sampling is most commonly used in clinical research to enrol patients who meet the inclusion criteria. The benefits are that they are the most commonly used, less expensive, and do not require a list of all population elements.

Table 1. The characteristics of the respondents

No	Participants	Gender	Age	Position	Degree	Experience in Teaching
1	First Respondent	Female	48 years old	English Teacher	S.Pd	22 years
2	Second Respondent	Female	45 years old	English Teacher	S.Pd	19 years
3	Third Respondent	Male	40 years old	English Teacher	S.Pd	14 years
4	Fourth Respondent	Female	38 years old	English Teacher	S.Pd	12 years

Ethical considerations

Ethical considerations are critical when conducting human subjects research. As a result, the current study was chosen to obtain informed consent, protect participant privacy and confidentiality, reduce any potential risks, and consider the study's potential benefits.

Instruments

In this study, interviews were conducted as a research tool. In May 2023, the researcher conducted direct conversations with English teachers at SMA Adiguna Bandar Lampung for 60 minutes. The instruments passed the reliability and validity tests and experts' recommendations. Researchers prepared the following 12 questions for respondents:

Table 2. Instruments of This Research

No	Questions
1	What are the most influential learning theories in English language teaching with technology?
2	How do learning theories apply to English language teaching with technology?
3	What are the key principles of learning theories, and how do they apply to English language teaching with technology?
4	How do different learning theories influence the use of technology in English language teaching?
5	How can technology support a learning approach to English language teaching?
6	What are some challenges in using technology to support English language teaching from different learning theory perspectives?
7	How can teachers effectively integrate technology into their English language teaching practice using learning theory principles?
8	What are some of the benefits of using technology to support English language teaching from different learning theory perspectives?
9	How can technology enhance English language learning through collaboration and communication among students?
10	How can technology be used to support differentiated instruction in English language teaching?
11	What are some successful implementations of learning theories in English language teaching with technology?
12	How can technology create authentic and meaningful language learning experiences for students?

FINDINGS AND DISCUSSION
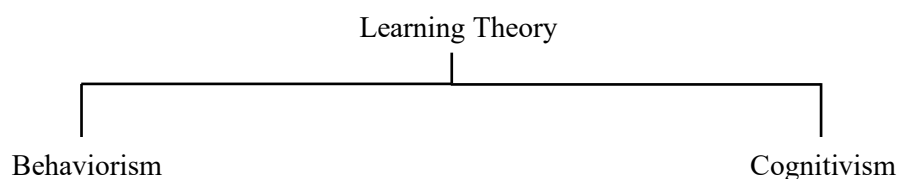**FINDINGS**
Types of Learning Theories

Figure 1. Findings of Learning Theories Used in the School

From the figure above, the researchers determine two learning theories used in SMA Adiguna Bandar Lampung. The first is a cognitive learning theory that supports learning with

indicators of thoughts, beliefs, cognitions, and self-talk. According to Piaget (1977), the stimulus-response schema, while not entirely false, is, in any case, completely incapable of explaining cognitive learning because when a person thinks of a stimulus-response schema, he usually thinks of a stimulus. Then a response is set off by this stimulus (Piaget, 1977).

The second is a behaviorism learning theory supported by indicators of actions and behavior. Behaviorism refers to the relationship between the stimulus and the response the individual or subject displays due to interaction with the environment (Skinner, 1935). This theory emphasizes that a person's behavior results from an interaction between stimulus and response.

How Learning Theories Apply to English Language Teaching with Technology

In the learning of Theories, some theories can be used in every school during the learning process.

1. Behaviorisms

Behaviorism is based on the premise that all behaviors are acquired via environmental interaction. According to this learning theory, Behaviors are acquired from their environment, and intrinsic or hereditary characteristics have little influence on behavior. Behaviorism is a learning theory based on the idea that all behavior is acquired through conditioning, and conditioning occurs through interaction with the environment. Aa stimulus is shown to a person, which generates a reaction, which is then reinforced (Skinner, 1935)

Respondent 1 said, " *Teachers can encourage active learning by providing opportunities for students to explore and construct their own knowledge. I can use technology tools such as online research platforms, interactive simulations, and educational applications that allow students to actively engage with English content."*

Data above is the answer from question number 7 in the table 2. It can be concluded that the way the teacher presents the material and the instructional strategy they select significantly impacts the students' attitudes toward learning. It means that the teacher and the students can know directly if the learning strategy used in language instruction suits their needs. However, the needs of one student to another student can be different because of their differences in characteristics. A teacher should design a variation learning strategy to improve students' interest in learning.

Respondent 2 said, "*I integrate learning theory with technology through several stages, namely: Curriculum Integration, Selection of Technology Tools, Instructional Design, Support and Guidance, and Assessment and Feedback. Student learning outcomes can be achieved by implementing these steps*"

Data above is the answer from question number 2 in the table 2. Meanwhile, the researchers discovered that SMA Adiguna had been facilitated and integrated with technological tools that support the learning process, such as computers/laptops, projectors, smartphones, and the internet, based on the findings of the interviews. This makes it simpler for students to access educational resources outside of coursebooks. The usage of that tools is not maximal. The teacher and the students prefer to focus on following the instruction from the coursebook and rarely apply the technological tools in the learning process.

2. Cognitivism

Cognitivism is one of the most adaptable of the five basic learning theories in the internal processes around knowledge and memory. Cognitive learning has applications ranging from teaching infants to adult learners picking up new abilities in their learning process. Cognitive psychology is a subfield of general psychology (Gualtieri et al., 2022). It includes scientific studies of the symptoms of mental life insofar as they relate to the way humans think in gaining knowledge, processing impressions that enter through the senses, solving problems, retrieving memories of expertise, and performing work procedures required in everyday life.

Respondent 1 said, "*I also often use patterns of cognitive theory in various learning methods. They learn how to understand the material and apply it. It is more effective than forcing*

the students to memorize material."

Data above is the answer from question number 1 in the table 2. Students need to know the purposes behind learning material from the beginning of their studies for cognitive learning to function effectively. In this situation, the teacher must introduce the learning objectives. Therefore, the students know the learning target they have to achieve. Furthermore, good cognitive learning strategies can help students apply new information or skills in various situations. Indirectly, their ability to solve problems will continue to grow. In this study, the researchers found the use of cognitivism learning theory at SMA Adiguna Bandar Lampung to support learning activities in student input and output processes.

Discussion

This study discovered that English teachers in SMA Adiguna Bandar Lampung implemented two learning theories on the learning process in the classroom. There are behaviourism and cognitivism. They integrate learning theory with technology through several stages, namely: Curriculum Integration, Selection of Technology Tools, Instructional Design, Support and Guidance, and Assessment and Feedback. A classroom environment is critical for students to study and improve their. The teacher can save time and energy by integrating the learning theory and technology for teaching learning activity. Therefore, they can improve student performance and make them perform better in class (Struyf et al., 2019).

The benefit of applying technology in learning theories is that they aid teachers in comprehending how students learn. Educators can help students achieve academic success and develop more specific learning techniques by incorporating various learning strategies. All phases of learning, including the creation of a curriculum for formal education and how individuals approach self-learning, are influenced by learning theories. While understanding some educational theories is essential for aspiring and working teachers, doing so can benefit anyone looking to better themselves as learners (Henrie et al., 2015).

However, no matter how advanced the technology is, it has limitations. Students are not always interested in learning how to use technology. It is a challenge for teachers to continue innovating in their teaching materials presentation. Teachers can use positive and negative reinforcement to reward or punish a student's behavior in the classroom. Extrinsic motivators such as grades, prizes, and privileges, as well as recognition and praise, are used by behaviorist learning theory to ensure the replication of the intellectual activity or behavior. Teachers who agreed with behaviorist learning theory would linearly present lesson objectives (Blau et al., 2020).

CONCLUSIONS

Based on the research that has been done, Teachers of SMA Adiguna Bandar Lampung use the behaviorism cognitivism and cognitivism learning theory. However, the students responded with their lack of interest in learning because the learning strategies teachers use are less attractive. Therefore, students tend to get bored and do not understand the material. Meanwhile, the teachers integrated learning theory with technology through several stages, namely: Curriculum Integration, Selection of Technology Tools, Instructional Design, Support and Guidance, and Assessment and Feedback. The teacher can save time and energy by integrating the learning theory and technology for teaching learning activity. Therefore, they can improve student performance and make them perform better in class

Furthermore, this research can be a reference for further studies on using learning theories in schools and their application to technological media. It is highly recommended that future researchers investigate the topic from a broader perspective and gain a deeper understanding of learning theories. This research can also be a reference for future researchers interested in discussing learning theories and their application in schools using technology to attract students' interest in learning. However, the scope of the research was limited because of the lack of respondents in the school. Researchers suggest that further research can be carried out in other

scopes with more specific and developing discussions.

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