Maharah Kalam Learning in Higher Education Using a Collaborative Learning Based on Constructivism Theory

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Abstract

Aim: Speaking skills are one of the main skills that must be mastered by students and are one of the ultimate goals of learning a foreign language. On that basis, various strategies based on learning theories have been developed to facilitate the process of language acquisition and learning Arabic. One of these theories is the constructivism theory. Constructivism theory understands learning as a process of forming (constructing) knowledge by the learner themselves. This study aims to explore the implementation of constructivism theory in teaching speaking skills in the Arabic Language Education Department, State Islamic University of Salatiga.

Methodology: This study is a qualitative study with a case study. Data were collected through observation, in-depth interviews, and documentation. The analysis technique used is data triangulation. In the data analysis process, the researcher used the following steps: data collection, data reduction, data presentation, and drawing conclusions.

Findings: TThe implementation of collaborative learning based on constructivism theory in teaching speaking skills is carried out with several strategies, namely: role play and drama, three-step interview, debate, and language games.

Keywords: Maharah Kalam, Higher education, Collaborative learning, Constructivism theory

INTRODUCTION

Speaking skill (maharah kalam) is one of the core competencies that must be mastered by students in Arabic language learning. It constitutes a primary goal in Arabic language education, as it reflects the learners' ability to communicate effectively, fluently, and accurately in real-life contexts (Rufaiqoh, Rosyidi, Machmudah, Ibrahim, & Sodik, 2023). Mastery of speaking not only supports academic success but is also crucial in preparing students for professional environments that increasingly demand communicative competence in foreign languages .

However, in practice, maharah kalam often receives less attention compared to other language skills such as reading and writing. This imbalance has resulted in many students encountering persistent challenges in developing their speaking abilities, both in formal academic settings and in everyday interactions (Sutaman & Febriani, 2021). Several contributing factors have been identified, including the heterogeneity of students' linguistic backgrounds, limited Arabic vocabulary, minimal exposure to Arabic-speaking environments, and the use of less varied instructional methods and learning materials (Falaqi, 2020).

These challenges have led to suboptimal learning outcomes in speaking skills. Therefore, it is essential to implement innovative and effective instructional strategies that not only address these issues but also align with contemporary theories of language learning (Abdelhadi, Hameed, Khaled, & Anderson, 2020). One promising approach is the integration of collaborative learning based on constructivist theory. This approach emphasizes active student engagement, knowledge construction through social interaction, and contextualized learning experiences, all of which are particularly beneficial for developing communicative competence in a foreign language (Rizal et al., 2024). Hence, this study aims to explore the implementation of a collaborative learning model grounded in constructivist principles as a strategy to enhance maharah kalam learning in higher education institutions.

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In the development of language education, different methods have emerged to facilitate the learning process for students. Three main theories were born: behavioral theory, cognitive theory, and constructivist theory (Sutaman & Febriani, 2021). There are also those who mention four main theories by adding another theory, the humanistic theory, to become four theories. These learning theories are the basis for designing learning activities and processes to achieve goals, which then leads to the selection of methods and techniques to be used. As is well known, the theory that has dominated the language learning phase for several centuries of the four major theories is behavioral theory, and its superior style, "the oral audio method". Ibrahim Al-Osali even stated that although A paradigm shift (from innovative to interactive), audio-linguistic practices still dominate methods of teaching Arabic to non-Arabs, especially in formal learning programs at government-owned universities, institutions, and language centers. But over time, especially in Europe, America, and Australia, constructivist learning theory has become a contemporary theory and role model to be applied in their learning. Constructivist learning principles have greatly influenced the education systems of Europe, America, and Australia (Al-Ushaili, 1999).

Constructivist theory offers an interesting approach to learning, where knowledge is built through social interaction and experience. In a cooperative learning environment, students can share ideas, discuss concepts, and provide constructive feedback. This approach not only enriches the learning experience but also helps students develop better communication skills.

The current learning paradigm has undergone a major transformation on the basis that there is no single appropriate approach or strategy to apply in all situations and circumstances. The learning model that positioned teachers as a center of learning no longer has the dominant part. Students are destined to be more active in building their knowledge, so that the role of the teacher in the age of constructivism was nothing more than a facilitator and mediator to help the student build his knowledge. The paradigm shift from a behavioral school to a constructivist school brought about prevalent changes in the education system, with students becoming the center of attention in learning. Similarly, it has a significant impact on students in the process of building knowledge. In constructivist learning theory, students themselves build their knowledge through the diagrams they have with the help and guidance of the teacher (scaffolding).

The basic principle underlying the constructivist view of learning is the philosophy of constructivism, where all knowledge is constructed rather than perceived directly by the senses (smell, touch, hearing, touch, etc.). In general, constructivists agree on the two main ideas of this philosophy; (1) knowledge is actively constructed; and (2) knowledge cannot be separated from social interaction.

Constructivist theory understands learning as the process of formation (construction) of knowledge by the learner himself. From a constructivist point of view, learning is the process of knowledge formation. Lev Vygotsky said that there are two important concepts in Vygotsky's theory: (1) the proximal growth area (ZPD), the ability to solve problems under adult guidance or by collaborating with more capable peers; and (2) support, i.e., providing a certain amount of help to students during the early stages of learning, then reducing assistance and providing opportunities to take on greater responsibilities once they are able to do so.

The following is a statement of the characteristics of constructivist learning according to several literature, namely: A. Knowledge is built on the basis of experience or prior knowledge. B. Learning is a subjective interpretation of the world. c. Learning is an active process where meaning is developed based on experience. d. Knowledge grows as a result of negotiating meaning through various information or agreeing on a point of view in interacting or collaborating with others. Learning should take place in a realistic environment, the assessment should be integrated with the assignment and not a separate activity.

Education experts are always trying to find the answer to the question of how students can learn effectively. Research has found that the way each student learns is different. There are those who like to learn visually, auditory or motor. There are also those who like to study in groups and vice versa there are those who like to study individually. The same thing also happens to language students, such as English students. Academics believe that there is no educational method or strategy that works for all students. However, to make a learning strategy useful, the strategy must: (1) prioritize immediate tasks (2) be consistent with the student's preferred learning method and (3) be linked to other relevant learning strategies (Siska Oktawidya Wati & Thahar, 2023.).

Constructivism is a curriculum that demonstrates that learning is most effective and meaningful when

students are able to interact with problems or concepts. This approach allows students to build knowledge, integrate it into new situations, take their initial knowledge as a foundation, benefit from social interactions, and develop critical thinking. In other words, he argues that instead of being passive recipients waiting for the teacher to provide a stimulus to elicit a response, the learner is actually responsible for his or her learning (Rizal et al., 2025). Constructivist learning is usually associated with an approach that focuses on an approach that focuses on it. on the learner, where students actively participate in meaningful activities. Students are therefore not "empty boxes filled with knowledge, but dynamic organisms searching for meaning." Learning outcomes from both cognitive processes and social interactions. That is, in addition to the processes of perception, organization and retrieval of information, constructivism also refers to the interactions in which learners learn with and from others (Riani Tri Utami, 2012).

The choice of this approach is because learning makes students so excited about existing problems that they are willing to try to solve the problem. Classroom learning still mostly uses lecture and Q&A methods so that it does not provide opportunities for students to interact directly with tangible objects. The teacher needs to pay attention to the elementary concepts of students before learning. If not, the teacher will not succeed in instilling the right concepts, and this may lead to the emergence of other sources of learning disabilities. Teaching is not only about conveying a teacher's ideas to students, it is also the process of changing students' current perceptions and the places where these concepts may be wrong and correct. In practice, this theory is not always applied to language learning activities because the use of the method depends on the teacher's skills.

Regarding learning theory indicators, many studies have been addressed in depth regarding learning theory and language learning. The application of learning theory can be an alternative to developing language skills comprehensively. The construction of learning theory can be accommodated through the language curriculum. The practice of applying constructivist theory has been developed through educational materials (Hamid, Hilmi, & Mustofa, 2019). Apart from this, other research has proposed different learning techniques based on indicators of constructivist theory (Utami, 2020).

Although much research has been done regarding collaboration in learning, there are still limitations in its application, especially in the context of speech skill at the university. This research aims to explore how cooperative learning based on constructivist theory can improve students' speech skills. By understanding the impact of social interaction and collaboration on the learning process, it is hoped that this research will make a significant contribution to the development of more effective teaching methods. This research aims to explore the teaching of speech skills with cooperative learning based on constructivist theory in the Department of Arabic Language Education at Slatica Islamic State University. Through this research, it is expected to identify best practices that can be implemented in the university's curriculum, as well as provide new insights on how to support students in achieving better speech proficiency. Thus, this research is relevant not only to academics but also to curriculum developers and teachers at different universities.

METHODOLOGY

This research uses the qualitative descriptive approach through case studies (Yin, 2011). This qualitative research examines and analyzes the teaching of speech skills with cooperative learning based on constructivist theory in the Department of Arabic Language Teaching, Slatiga State University. There is something unique to learn from applying learning theory throughout this lesson. This phenomenon can be explored and interpreted as an overarching unit in any strategy and teaching speech skills. The research participants were students of the Department of Arabic Language Teaching at Slatiga Islamic State University. Data was collected through in-depth interviews and documentation. The interviews were conducted to collect data on teaching strategies for speech skills. Documentation is used to gather information about classroom management and the learning process from lesson plans and academic evidence.

The analysis technique used is data triangulation. Data is reduced by selecting and sorting the data that supports the research topic. In the data analysis process, the researchers used the following steps: data collection, data reduction, data presentation, and drawing conclusions.

Qualitative data analysis is an effort that is carried out continuously, repeatedly, and continuously based on Mills Huberman's theory. Several steps in data analysis are described as follows. The researchers collected data from in-depth interviews and information from documents, and collected them through written documentation on

websites and articles describing the phenomenon of learning speech skills at the Department of Arabic Language Instruction, Slatica Islamic State University. In the classification of data, researchers By reducing and classifying case-related data by coding. When disaggregating data, researchers focus on data related to speech learning strategies. Finally, the data is organized and then presented in a data presentation. Data presentation is the process of its presentation and processing, which includes the process of identifying, classifying, organizing, explaining systematically, objectively, comprehensively, and finally the emergence of interpretations. The final step is for researchers to infer the results according to the researcher's classification and interpretation.

RESULTS AND DISCUSSION

Implement the process of teaching speech skills with cooperative learning based on constructivist theory by dividing the class into several groups to discuss the material that is not understood in the class. Another strategy to improve students' language skills is to place them in groups of 4-6 people. In one group, there is a leader with more abilities than the other members. The process of implementing cooperative learning provides opportunities for students to be responsible for productive language errors. If there are still things that are not understood, the chair can provide guidance To develop language quality. There is linguistic intervention from the lecturer and the boss when something goes wrong while speaking, such as phonology and choosing the right vocabulary. Lecturers and other friends will automatically improve, and corrections will become the basis for improving foreign language instruction.

In addition, the lecturer displays visual media to support the real setting. Students apply context-based topics from the activities they encounter (Alfayez, 2022). Thus, this helps students to build the Arabic language according to their own circumstances. For example, describe family circumstances, home conditions, and daily activities.

The activities performed by the group of students are as follows:

First, Role-Playing and Play

Role-playing is a position designed for students to represent or assume characters who are not usually supposed to achieve learning goals. In speech teaching at Slatija Islamic State University, role-playing techniques are used many times on different subjects. Groups are divided into several members. The number of members per group is determined by the topic being discussed. Sometimes the theme is implemented by dividing groups of two members, sometimes three people, or six people each.

The stages of its implementation are as follows: Students are divided into several groups, with members playing each role in the group. After the groups are formed, the lecturer presents a topic and story that each group will perform. Each group was then given time to discuss. Students are also given the opportunity to ask questions if something is unclear. Every student plays a role. Lecturers make sure that students know their tasks. If students understand and are ready, role-playing can begin. After all groups have finished performing, a discussion is held within the group regarding students' interpretations of the roles performed.

Role play provides students with an understanding of how role-playing relates to their lives using assessment techniques (Ceka & Murati, 2016). Role playing provides an illustrative environment for students to experience emotional and intellectual responses to assumed identity firsthand. Role play is an example of "learning by doing." The word role refers to that students must apply knowledge, skills, and understanding effectively so that they can speak and behave well from a different perspective given to students. Playing with words suggests that students use their imagination and enjoy acting their role in the environment (Boon, Orozco, & Sivakumar, 2022). Role-playing involves students in a creative participatory activity that requires students to apply lecture concepts that they imagine as fictional identities in unusual situations. Setting up a scenario in role-playing requires interaction from interested parties with different perspectives. So, select the perspective, select its type, number of characters, and character frame.

If carefully managed, role-playing can be a great tool for conducting engaging language learning in the classroom. Role-playing refers to assigning roles to one or more group members and setting goals or objectives that participants must complete (Musyarapah, 2017). Role-playing means that the teacher directs students to pretend to be people who are not who they are. Role-playing topics such as asking for help and offering it, such as the play about folk stories.

Second, The Three-Step Interview

In this technique, students form pairs and take turns interviewing each other and then reporting what they have learned to the other group of couples. Three stages of the activity (interview - interview - report), namely: Stage 1: Student A interviews student B Stage 2: Student B interviews student A Stage 3: Student A and B summarize their partners' responses to students C and D, as follows: To be followed by the opposite. The question types used are used to verify past values, attitudes, or experiences, or to understand the lecture material. Three-step interviews provide students with the opportunity to improve certain communication skills. Interviewers should listen carefully, focus on the interviewee's answers and encourage clarification, and interviewees should train themselves to express their thoughts briefly and clearly. Interviewers must also understand and integrate the information obtained from interviewees' responses at a deep enough level to be able to effectively summarize and analyze those responses for other students.

Students are divided into groups of four students, and then these groups are divided into A-B and C-D pairs. Each of them prepares a list of interview questions. Interview questions relate to someone's opinion or experience regarding lecture materials. Student A interviews B and student C interviews D for two minutes. The interviewer asks questions, listens, and seeks more information, but does not evaluate the answers. Once completed, the couples switch roles and interview each other for the same period of time. Finally, students A and B showed a summary of their partners' answers obtained from the interview to students C and D. Students C and D did the same with students A and B.

A three-step interview is an effective strategy for expanding students' experience and knowledge beyond the classroom. If used in this way, this method can help motivate students because it can bridge the gap between the academic world and the "real" world. Create questions that have the potential to create a wide stream of interesting answers (Hachem, 2019). If the interview questions have predictable and similar answers, the interview will lose its energy so that reporting in groups of four (A, B, C, D) becomes teddy. The evaluation method in the three-step interview can be carried out in five stages: remembering, summarizing, questioning, communicating and commenting. All stages of the evaluation activity are used sequentially. In interview activities, students are asked to take notes or record the interview and make a copy of it.

Third, Critical Discussion

In the critical discussion style, students choose an aspect of the issue that conflicts with their own views. Students then form teams, discuss, present, and defend their opinions on the issue against other teams. The steps that are performed in the critical discussion method include:

First, the lecturer presents the topic and rules of the debate, and then the students are divided into groups of six students, with three team members supporting one side of the argument and the other three opposing the argument. It gives students time to divide roles and organize how the debate is prepared and carried out. Students are given 10 minutes to prepare their arguments. Once prepared, the discussion begins with arguments from each side. After presenting arguments from each side, each team is given 10 minutes to prepare the defenses. Each party then lodged an objection. After completion, a class discussion was held to summarize important issues and provide students with the opportunity to discuss their experiences in defending their opinions.

Discussion can increase motivation, develop research skills, encourage critical thinking, and develop communication skills. The discussion presents the chapter for focused and in-depth analysis and multiple perspectives on an issue (Barnard, Bradley, Hodgson, & Lloyd, 2013). An additional dimension of critical debate is to ask students to take a position that contradicts their own, so this approach encourages students to challenge their own assumptions. This method can move students beyond simple binary thinking, deepen students' understanding of an issue, and help them see the range of perspectives inherent in complex topics. Critical discussion can also promote appreciation of diversity and embrace tolerance for the perspectives of others (Giroux & Bosio, 2021).

Fourth: Applying The Linguistic Style of Play

Such as guessing words/pictures and guessing sentences. Students are divided into several groups. Each group consists of a chairman and a number of members. The leader will come forward to clarify or give instructions on which words, pictures, or sentences to guess. Members may ask about the characteristics of the word, image, or sentence being guessed, but the chair can only answer yes or no. This allows them to practice creativity and critical thinking to guess the right answer. Based on this strategy, students learn independently and try to win the

competition together.

This interactive strategy not only fosters a sense of collaboration among students but also creates an enjoyable learning environment that reduces anxiety commonly associated with speaking a foreign language (Fajriati et al., 2020). Through this game-based approach, students are unconsciously involved in language production activities that enhance their vocabulary acquisition, sentence structure comprehension, and fluency in a natural and meaningful context (Hermena & Reichle, 2020). The competitive element stimulates intrinsic motivation, while the group-based format reinforces the principles of social constructivism by encouraging students to construct knowledge collectively (Febriani, Wargadinata, Syuhadak, & Ibrahim, 2020).

Furthermore, the guessing game model sharpens students' skills in formulating questions, interpreting linguistic cues, and applying logical reasoning—skills that are essential for effective oral communication (Jailani, 2021). In this context, language learning becomes more than just memorizing vocabulary; it becomes a process of discovery, hypothesis testing, and negotiation of meaning, all of which are central to constructivist learning theory. As students become more engaged and invested in the learning process, they gradually develop confidence and autonomy in using the Arabic language in spoken form (Al Anshory & Falaqi, 2023). This approach, when integrated systematically within the speaking curriculum, not only enriches the learning experience but also aligns with the cognitive development framework of Jerome Bruner, where students are encouraged to explore and internalize concepts through active participation and problem-solving.

CONCLUSION

Based on the results of the study, it can be concluded that the implementation of collaborative learning based on constructivism theory in teaching maharah kalam (speaking skills) at the Arabic Language Education Department of State Islamic University of Salatiga significantly contributes to the improvement of students' oral proficiency and communicative competence. The use of various collaborative strategies such as role-playing, drama, three-step interviews, structured debates, and language games has enabled students to actively construct their own understanding of language through interaction and meaningful engagement with peers and learning materials.

These strategies reflect the core tenets of constructivism, which view learning as an active, contextualized process of knowledge construction rather than passive reception. In this learning environment, students are not only passive recipients of information but are empowered to become active participants, problem solvers, and critical thinkers. This paradigm shift from teacher-centered to student-centered instruction fosters deeper cognitive engagement, emotional involvement, and social interaction—elements essential for mastering spoken language skills.

Furthermore, the study highlights the importance of providing diverse and interactive speaking activities that are integrated with real-life communication scenarios, thereby bridging the gap between theoretical knowledge and practical language use. The findings also emphasize the value of learner autonomy and motivation in foreign language acquisition, which are both enhanced through constructivist approaches that recognize individual differences and encourage cooperative learning.

The implications of this study suggest that higher education institutions, particularly those involved in Arabic language instruction, should consider adopting collaborative constructivist-based methods to revitalize traditional teaching approaches that often neglect speaking practice. It is also recommended that teacher training programs integrate constructivist pedagogies to better prepare instructors to facilitate effective speaking classes. Future research can expand on this study by applying the model in different institutional contexts, comparing its effectiveness with other learning theories, or incorporating digital tools and media in constructivist speaking activities to meet the evolving needs of 21st-century learners.

REFERENCES

Abdelhadi, R., Hameed, L., Khaled, F., & Anderson, J. (2020). Creative interactions with art works: an engaging approach to arabic language-and-culture learning. *Innovation in Language Learning and Teaching*, *14*(3), 273-289.

Al Anshory, A. M., & Falaqi, M. R. (2023). Arabic calligraphy education programs at ibn al-bawwab calligraphy institute in madiun, indonesia. *Journal of Calligraphy*, *3*(2), 15-23.

Alfayez, A. F. (2022). Saudi teachers' self-efficacy in implementing the arabic language integrative curriculum. *Education Research International*, *2022*(1), 6823935.

Al-Ushaili, A. a.-A. b. (1999). Ibrahim. *Al-Nadhzariyyat al-lughawiyyah wa Talim al-Lughah al-Arabiyyah. Riyadh: Maktabah al-Malik Fahdh al-Wathaniyyah*.

Barnard, Y., Bradley, M. D., Hodgson, F., & Lloyd, A. D. (2013). Learning to use new technologies by older adults: Perceived difficulties, experimentation behaviour and usability. *Computers in human behavior*, *29*(4), 1715-1724.

Boon, M., Orozco, M., & Sivakumar, K. (2022). Epistemological and educational issues in teaching practice-oriented scientific research: roles for philosophers of science. *European Journal for Philosophy of Science*, *12*(1), 16.

Ceka, A., & Murati, R. (2016). The role of parents in the education of children. *Journal of Education and practice*, *7*(5), 61-64.

Fajriati, R. P., Khairani, D., Rozy, N. F., Husin, N., Wiyartanti, L., & Rosyadi, T. (2020). Towards the implementation of arabic language mobile apps learning: designed by user insight. In *2020 8th international conference on cyber and it service management (citsm)* (p. 1-5).

Falaqi, R. (2020). Educational evaluation: Specifications of a good test. *TSAQOFIYA: Jurnal Pendidikan Bahasa dan Sastra Arab*, *2*(2), 160-175.

Febriani, S. R., Wargadinata, W., Syuhadak, S., & Ibrahim, F. M. A. (2020). Design of arabic learning for senior high school in the 21st century. *Jurnal Al Bayan: Jurnal Jurusan Pendidikan Bahasa Arab*, *12*(1), 1-21.

Giroux, H. A., & Bosio, E. (2021). Critical pedagogy and global citizenship education. In *Conversations on global citizenship education* (p. 3-12). Routledge.

Hachem, A. H. (2019). John dewey and the "problem" of the mundane: Implications for philosophy of educational administration. In *The handbook of dewey's educational theory and practice* (p. 345-365). Brill.

Hamid, M. A., Hilmi, D., & Mustofa, M. S. (2019). Pengembangan bahan ajar bahasa arab berbasis teori belajar konstruktivisme untuk mahasiswa. *Arabi: Journal of Arabic Studies*, *4*(1), 100-114.

Hermena, E. W., & Reichle, E. D. (2020). Insights from the study of arabic reading. *Language and Linguistics Compass*, *14*(10), 1-26.

Jailani, M. (2021). Developing arabic media based on brain-based learning: improving mufrodat in school. *Tadris: Jurnal Keguruan dan Ilmu Tarbiyah*, *6*(2), 349-361.

Musyarapah, M. (2017). The role of progressive philosophy in the curriculum based on john dewey's theory. *Al-Hayat: Journal of Islamic Education*, *1*(1), 32-39.

Riani Tri Utami, R. T. U. (2012). *Application of constructivism theory in english language learning about 'regrets, apologies, and sympathy expression,'" riani tri utami (blog), february 28, 2012,*. Retrieved from https://shorturl.at/amLdl

Rizal, F. M., Einosar, Y. A., Husein, M. G., Susanto, N. H. A., Nugroho, A. S., Firdausy, A., . . . Abdurrahim, I. H. (2024). Integrated curriculum: Optimizing the multiple intelligences of senior high school students in Indonesia. *Journal of Advanced Research in Social Sciences and Humanities*, *9*(4), 1-16.

Rizal, F. M., Nurkholisoh, S., Ansharah, I. I., Alfiyah, N., Tricahyo, A., & Bahruddin, U. (2025). The impact of educational philosophy on the development of islamic education curriculum. *Journal of Advanced Research in Social Sciences and Humanities*, *10*(1), 1-13.

Rufaiqoh, E., Rosyidi, A. W., Machmudah, U., Ibrahim, N. I. E., & Sodik, A. J. (2023). The learning of Arabic speaking skills with constructive theory perspective. *Izdihar: Journal of Arabic Language Teaching, Linguistics, and Literature*, *6*(3), 243-252.

Siska Oktawidya Wati, M. Z., & Thahar, H. E. (2023.). *"application of constructivism theory in the context of foreign language teaching," 2023*.

Sutaman, S., & Febriani, S. R. (2021). Optimizing arabic speaking skills based on integration of learning theory framework in higher education. *Arabiyat: Jurnal Pendidikan Bahasa Arab Dan Kebahasaaraban*, *8*(1), 75-89.

Utami, R. L. (2020). Desain kurikulum bahasa arab di Indonesia. *EL-IBTIKAR: Jurnal Pendidikan Bahasa Arab*,

    9(1), 108-124.

Yin, R. K. (2011). *Applications of case study research.* Sage publications.