Dialogic-Interactive Media Design for Language Learning To Improve Speaking Activities and Skills

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Abstract. Technology is an unavoidable resource in the education sector, Technology can facilitate learning offline or online. Technology can be used for language learning. Therefore, the purpose of this study is to produce dialogic-interactive media used in Indonesian language learning to improve student learning activities and outcomes. This type of research is development research using Plomp Model (1997) which consists of three phases, namely (1) preliminary research phase; (2) prototype phase; and (3) assessment phase. The study was conducted to develop a product that is dialogic-interactive media to improve learning activities and speaking skills of secondary students in learning Indonesian. Based on the research stages, this article will explain the results of research in the design phase. The data analysis technique used in this study is a descriptive data analysis technique that describes the validity of the learning model. The research instrument was a questionnaire. Based on the results of the questionnaire analysis, it was concluded that the syntax for the development of dialogic-interactive media was categorized as very valid and could be used as a model for the development of instructional media that would be tested in schools.

Keywords: dialogic learning, interactive media, language learning, speaking skills, mobile device

1. Introduction

The sudden outbreak of COVID-19 in late 2019 forced the government to exercise control and prevent large-scale distribution[1][2]. One such action is to apply online distance learning, in Indonesia called "School From Home"[3]. This activity is the largest online teaching in human history and has made tens of millions of teachers and students have to complete the conversion from offline teaching to online teaching overnight[4]. This results in ambiguity and disagreement about what to teach, how to teach, and the teaching environment [5].

This policy certainly has positive and negative impacts. The positive aspect is health itself, but the negative aspect is that learning continues at home until a certain uncertain time limit [5]. Even so, learning can still be done with the help of technology carried out online [6]. Based on observations made, in secondary schools in West Sumatra, through a questionnaire filled out by 108 teachers, concluded as follows. First, online distance learning has been done almost 100%. Second, teachers use smartphones as technological devices for online learning (88.9%). Third, teaching materials used are still dominated by printed books (75.9%). Fourth, most learning approaches use Task Based Learning (86.1%). Fifth, most learning media use whatsapp social media (86.1%). Sixth, the most difficult learning skills taught online are speaking skills (85.19%).
Speaking is considered as the ultimate goal of language learning and the most basic skills to be achieved [6]. Although humans live with natural speaking skills, these skills need to be developed through education so that they can be used in an appropriate and effective manner [7]. Student performance in speaking activities has been influenced by many factors, such as students lacking in grammar, vocabulary, and pronunciation [8], besides psychological problems such as doubt [9]. Some students don't want to talk because they think they don't have original ideas and/or are not confident in their language skills [10]. Also participation is low or uneven, related to contexts where students have fewer opportunities to talk when in a large class. Some students do not get a chance to speak because of the tendency of some other students to dominate, while others speak very little or nothing [11].

Speaking is a means through which students can communicate with others to achieve certain goals and communicate their opinions, perspectives, hopes, and intentions [12], in addition to expressing feelings and being able to explore what is thought even in new perspectives about various things [8]. The main goal in learning speaking skills is to develop language skills; communication skills; learning and understanding skills; mental skills; and social skills [7]. As a language skill, speaking activities involve certain fields of knowledge, among others [13]; mechanics (pronunciation, grammar, and vocabulary); functions (transactions and interactions); social and cultural rules and norms (turn of speech, level of speech, length of time between speakers, relative roles of participants). The development of speaking skills is not only based on the maturity of the individual's articulation system but also the maturity of individual thought [9].

Talking perceptions are quite diverse, in part because students describe their experiences by speaking in various academic situations and assignments, including class discussions, academic presentations, conversations, and interacting with the teacher during their clinical experiences [14]. This is an interactive process of constructing meaning that involves the production and reception, and processing of information. The form and meaning depend on the context in which it occurs, including the characteristics of the students themselves, their collective experience, physical environment, and purpose of the message. In addition, it is often spontaneous, open, and developing [15]. These skills require heavy language input in terms of language exposure, scaffolding, and real interactivity in the classroom and supportive effective environments [16].

The development of speaking skills is determined or at least influenced by the relationship between cognitive processes and social interactions [9]. To improve this can be done by using a dialogical approach. This developing is not only shown to help student thinking and learning [17], but it is also important to develop students' content knowledge through the use of spoken language in discussions [18]. This approach has the potential to involve students in more interactive patterns of interaction, support students to think about their solutions, evaluate ideas, justify explanations, give reasons, refine the perspectives of others and the collective construction of ongoing knowledge through sharing, active listening, criticizing solving problems, questioning, expanding and reconciling opposing ideas [19][20][21]. These forms of speech are cumulative and often connect between learning in the past and the future or with a broader context beyond direct interaction [22]. These learning principles provide a theoretical basis for school success, promote a complex and richer teaching-learning process, produce deeper understanding and facilitate the development and better emotional values, and are very beneficial for students from non-background dominant [23] [24][25][26].

To support the learning process, it needs appropriate media to support the maximum learning process. At present, the dominant learning media used by teachers is to use technological devices. Especially now, when the COVID-19 virus attacks part of the world community, learning is done using online distance learning [3]. Because technology has the opportunity to connect with people around the world without the constraints of time and distance because this communication takes place through technology [27]. In the pre-digital era, students could only express themselves through written texts or oral texts. Conversely, students in technology-assisted environments (for example computers) can quickly combine these two modes and even add visuals or sounds [28]. Utilizing technology in the classroom has many advantages for students to increase motivation, more student-centered learning and involvement in more active learning, resulting in higher-order thinking skills and better memory [29].
Based on observations in the previous explanation, smartphone as the most widely used technological device for online learning, because almost 90% of students under the age of 18 have access to cellular technology [30]. Mobile devices are considered as an efficient tool for language learners with additional support for understanding and communication and also accommodate different learning styles [31][32]. The availability, sophistication, and use of these devices have the potential to improve efficiency and effectiveness in teaching and learning, learning outcomes, and skills [33][34]. These mobile devices can be used for interactive media. Interactive means there is two-way communication and users can respond directly [35]. By using interactive media, students can be motivated to learn, because they can listen to audio, watch videos or view texts, animations and graphics simultaneously. If interactive media are well designed, learning will be more effective because students will receive ongoing feedback. In addition, this also helps students to achieve the expected competencies [36].

Based on observations in the previous explanation, whatsapp is the most widely used learning media for language teachers for online learning. However, media needs to be varied and suitable for use in learning this speaking skill. Based on this explanation, learning media must be developed that can be used by language teachers to teach speaking skills in online distance learning activities. Therefore, the aim of this research is to develop dialogic-interactive media to improve learning activities and speaking skills of secondary students in Indonesian language learning.

2. Method

This type of research was development research using Plomp Model (1997) which consists of three phases, namely (1) preliminary research phase; (2) design phase; and (3) assessment phase [37]. This research was conducted to develop products and test the effectiveness of these products [37]. The study was conducted to develop a product that is dialogic-interactive media to improve learning activities and speaking skills of secondary students in learning Indonesian. Based on the research stages, this article will explain the results of research in the design phase. The data analysis technique used in this study is a descriptive data analysis technique that describes the validity of the learning model. The research instrument was a questionnaire.

3. Result and Result

Based on the needs analysis and literature review, it was found that it is necessary to develop a learning media that is suitable and can be used for the language learning process specifically to improve student learning activities and outcomes in speaking skills. The media was developed to match the needs of current students by utilizing technological devices. Because, many formal education environments that require learning to be done online. Based on these explanations, learning media must be developed to be used by students in the context of digital learning or online learning.

The media used in the learning process are not only in the form of tools used to assist the learning process, but need to apply learning models/methods that can become the foundation in the learning phase. Therefore, this media was developed by applying dialogic learning and interactive media to be used in language learning, specifically to improve student activities and learning outcomes in speaking skills. This article will explain the design of the model in the form of steps (syntax) of learning from the media that will be developed by explaining media applications in two ways, namely face-to-face learning and distance learning. For distance learning, the author recommends the Zoom Meeting application for the learning process, while for media development can use the iSpringer application. A description of the steps of learning using interactive dialogic media is as follows.

a. Introduction

Every learning process, definitely starts with an introduction. This activity needs to be done to ensure the readiness of students and teachers in the learning process [38][39]. Readiness can be in the form of preparing learning tools that need to be used in the learning process, such as books, modules, and notebooks. If learning is done online, in addition to preparing books, modules and notebooks, it is also
necessary to prepare technological devices and stable internet connectivity. After making sure everything is ready, then the teacher gives an explanation of the learning activities to be carried out. Whereas students prepare to study; listen and understand the explanation from the teacher regarding the learning activities to be carried out. If students experience difficulties, please provide confirmation or report to the teacher so that the learning process can be carried out according to the plan and time specified.

b. Interactive Settings

This stage is determining the arrangement and modality of interaction. Interaction can be done in five ways, namely whole class teaching (teacher-student); group work (teacher-student, teacher-led); group work (student-student, student-led); one-to-one (teacher-student); one-to-one (student-student) [40]. This learning can be done by selecting one or more interactions depending on the following points. First, language skills will be developed. Based on the research conducted, the developed media is to be used in language learning for speaking skills. So that intestation needs to be done orally and all students must be able to make an infection so that learning activities can be carried out properly and students' speaking skills can develop.

Second, determine the learning process carried out individually or in groups. This is very influential in the selection of interaksi. In individual learning, interaction can be done between teacher-students, while group learning, must be done between students. So that interactions that can be chosen in individual learning are whole class teaching (teacher-student) or one-to-one (teacher-student), whereas interactions that can be chosen in group work learning (teacher-student, teacher-led); group work (student-student, student-led); or one-to-one (student-student).

Third, the type of text and learning objectives. The text learned in language learning varies greatly. Determine the type of text and learning objectives also greatly affect the selection of interaksi. In the study of argumentative texts, such as discussion texts and debate texts, the aim of learning is that students are able to talk by interacting between students, the teacher can choose group work interactions (student-student, student-led) or one-to-one (student-student). While learning that requires students to tell stories (for example, narrative texts), or convey an event (for example, procedure texts or explanatory texts), the teacher can choose the interaction of whole class teaching (teacher-student); one-to-one (teacher-student); or one-to-one (student-student).

Fourth, the process of face-to-face learning or distance learning. If the learning process is face-to-face, then the selection of infections described earlier can apply. While the distance learning process, teachers are more difficult to do group work interactions. If the teacher still wants to choose the interaction, then a strategy or media is needed to support the activity even though the learning process uses this dialogic-interactive media.

c. Everyday Talk

Talks about daily life are identified by sociolinguistics as all kinds of talks that empower and support daily human interaction [41]. This stage is based on that whatever the school does, they must equip students to be able to tell and explain, ask various types of questions, explore ideas, articulate feelings and responses, and frame opinions and judgments [40]. This stage is intended so that students are able to speak well in order to be able to carry out their activities as human beings who are essentially social beings. This learning will be very useful for students to be able to communicate under any circumstances to live their daily lives. This is in accordance with the purpose of language learning in speaking skills that are often used by humans in expressing themselves [42]. This skill is also the most significant characteristic that distinguishes humans from animals [43]. This is a means for students to communicate with others to achieve certain goals and communicate their opinions, perspectives, hopes, and intentions [12], in addition to expressing feelings and being able to explore what is thought even in new perspectives about various things [8].

This stage can be applied at the beginning or end of learning. This stage is adapted to the topic and the text being studied. If learning is done interactively using media in the form of mobile devices, this step can be done by the teacher by providing a number of keywords or topics displayed on the media that
have been designed or displaying images, videos, audio on the media. Next the students discuss it so they can speak. The teacher can also ask questions and students can provide responses to these questions. In addition, students can raise questions if they have doubts or express hopes and feelings about the topic of learning being done. This stage can be done on all types of texts studied, but the dominant interaction is done by the teacher-student.

d. Learning Talk

On each occasion, each student not only gave a really effective answer to answer the question, or combined the answers they thought the teacher wanted to be heard. They learn to: tell, explain, analyze, evaluate, discuss, debate, speculate, imagine, explore, justify and ask their own questions [41]. This is combined with the conditions or capacities that students need to develop to enable such talks to occur. They must listen; record what they hear; give time for others to think; and normalize alternative points of view. This is the basic norm in discussion [44][45]. This norm describes and facilitates the principles of dialogical teaching about collectivity, reciprocity and support [40].

This stage can be applied to the learning process of core activities. The teacher can focus so students can tell, explain, analyze, evaluate, discuss or other things based on the text and learning objectives. For example, so students can tell it was learned in narrative texts or so students can discuss or debate, it is learned in argumentative texts, and so on. Interactions carried out in this activity are more dominant by students, one-to-one or group work. For learning objectives to be achieved, all students must be involved and feedback is needed so that the learning process occurs dialogically. In order for the learning process to occur interactively, learning media supported by learning materials need to facilitate students to learn according to the teacher's direction. The directive does not have to be delivered directly by the teacher, but can be assisted with instructional media designed. Learning media need to help and support students so that the dialogue process occurs in accordance with the expected goals and competencies.

e. Teaching Talk

Reading has an important role in teaching, because facts need to be conveyed, information needs to be memorized, and explanations need to be given, and even memorization which is very out of date has a place (memorizing tables, rules, spelling and so on). However, joint problem solving through discussion, and the achievement of shared understanding through dialogue, no doubt more demanding teacher skills than providing information or testing withdrawal through memorization or reading [46]. Therefore, dialogical teaching encompasses the whole series of teaching lectures and at this stage dialogue in the sense of more specific interactions [40]. The epistemology that underlies classroom interaction determines the essence of learning: the most important is the extent to which teaching requires students to think, not just report the thoughts of others [47].

This stage is almost the same as the previous stages that can be applied to the learning process of core activities. The difference is, in the previous stage, students can tell, explain, analyze, evaluate, discuss, debate, speculate, imagine, explore based on their knowledge from something they read, saw or based on their experiences. In the learning process, for example, learning argument text, students can provide an explanation or opinion based on the text that is read from various information that they find, both information from printed or electronic sources, whether in the form of text, or video and that source is trusted. Thus, they are able to summarize ideas and present them well in class and can be well understood by the listener.

While this stage is a continuation of the previous stage, students must be able to think and construct their knowledge to be conveyed to others and the statement/opinion comes from their own thoughts. This stage can be implemented well, if students can carry out previous activities well. Because a statement and opinion must be based on or supported by facts and opinions that are correct so that students are able to convey information and opinions correctly. Because students learn to be able to think scientifically.
f. **Presenting**

This stage needs to be done in language learning to improve student activity and speaking skills. It was based that not all of this learning had to be done by discussion or debate, but it could be done by presenting something. For example, in learning literary texts (stories, poetry, drama, etc.) students are assessed by presenting them. Even so, texts that require discussion or debate, also need to do presentations in order to convey their opinions, because before students present, students need to write texts and present them in class. This stage is part of the final stage of all previous dialogical processes. During this stage, students are expected to be able to show improvement in their speaking skills.

g. **Questioning**

The classroom remains the place where the teacher asks the majority of questions, so the dialogically informed repertoire of questions and answers must allow for the possibility that students will also have questions to ask and should be encouraged and if necessary train them to do so [40]. This stage is done so that more interaction occurs, both between teacher-student or students. Question and answer also allows teachers to be able to assess students’ understanding of learning and assess speaking skills at the learning stage. This stage can be done at other stages, namely when every talk, learning talk, & teaching talk. This stage can trigger interactions so that learning occurs dialogically.

h. **Extending**

Extending is the final stage in this learning. This was developed by Michaels and O’Connor (2012), not within the framework of dialogical teaching as originally stated [45][48]. This stage is done to divide and explain thoughts, students can think, listen to each other, deepen reasoning, and conclude whether they agree/disagree and provide additional support for the statement [40]. At this stage, the teacher evaluates student learning and understanding by providing assessments and feedback. The teacher can also provide reflection on the learning undertaken. Students discuss what are the obstacles and what makes it easy for students in the learning process.

i. **Closing**

This stage needs to be done in order to be able to draw meaning from the learning that has been done. The teacher gives the final explanation in learning; giving assignments and exercises; as well as providing assessments to students both attitude, knowledge, and skills.

Learning media that have been developed are then validated. Validation is done in two ways, namely self-evaluation and expert validation. The results of the validation of the learning media developed can be seen in table 1 and table 2.

| Table 1. Self Evaluation |
|--------------------------|
| **Rated aspect** | **Score** | **Category** |
| Content | 89.29 | Very valid |
| Language | 91.67 | Very valid |
| **Validity result** | 90.84 | Very valid |

| Table 2. Expert Validation |
|---------------------------|
| **Rated aspect** | **Score** | **Category** |
| Content | 87.50 | Very valid |
| Language | 92.59 | Very valid |
| **Validity result** | 90.05 | Very valid |

The learning media developed are categorized as very valid, so that this syntax can be used as a model for developing learning media to be tested in schools. Trials were conducted to obtain practicality and effectiveness of learning media.
Discussion
Difficulties found in language learning to improve learning activities and speaking skills, resulting in us need to develop learning media so that learning objectives are achieved. The learning media developed will be less meaningful if only used as a tool that helps the learning process, whereas learning media can be used optimally by applying other things such as learning materials, learning models, or learning evaluations. It was intended that by using the learning media, the learning process can be carried out with students as the learning center. This media was developed with ideological learning and interactive media.

The main behavior and application of the characteristics of dialogic teaching described and described above are clarified to create an environment of dialogic discussion [49]. This teaching concept has many supporters in education [40][41][45][48][50][51]. Based on a literature review, the learning steps in the developed dialogic-interactive media are a modification of the repertoire stated by the previous expert, namely: interactive settings; everyday talk; learning talk; teaching talk; presenting; questioning; & extending. Alexander (2018) developed 6 modified repertoires of (Alexander, 2006; Michaels and O'Connor; 2012) consisting of interactive settings; everyday talk; learning talk; teaching talk; questioning; & extending [40]. Elhassan & Adam (2017) only uses 3 repertoires consisting of everyday talk; learning talk; teaching talk; questioning; & extending [40]. Elhassan & Adam (2017) only uses 3 repertoires consisting of everyday talk; learning talk; teaching talk; questioning; & extending [40]. Elhassan & Adam (2017) only uses 3 repertoires consisting of everyday talk; learning talk; teaching talk; questioning; & extending [40].

4. Conclusion
Based on the results of research and discussion concluded that it is important to develop learning media to improve student learning activities and outcomes. In addition, instructional media need to be innovated in accordance with the development of science and technology. One alternative that can be used is dialogic-interactive learning media on language learning to improve students' speaking activities and skills. The syntax for learning media developed is categorized as very valid and can then be used as a guide for developing learning media that can be used by teachers and students. In addition, the developed media is expected to be utilized also in the online distance learning process caused by the COVID-19 pandemic.

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References
[1] X. Cheng, “Challenges of “School’s Out, But Class’s On” to school education: Practical exploration of Chinese schools during the COVID-19 Pandemic,” SIEF, vol. 5, no. 2, pp. 501–516, 2020.
[2] D. Stovall, “On Knowing: Willingness, fugitivit y and abolition in precarious times,” J. Lang. Lit. Educ., vol. 16, no. 1, pp. 1–7, 2020.
[3] R. Setiawan, “Penerapan School From Home selama PSBB,” www.rancah.com, 21-Apr-2020.
[4] J. Yao, J. Rao, T. Jiang, and C. Xiong, “What role should teachers play in online teaching during the COVID-19 Pandemic? Evidence from China,” SIEF, vol. 5, no. 2, pp. 517–524, 2020.
[5] W. Zhang, Y. Wang, L. Yang, and C. Wang, “Suspending classes without stopping learning: China ’ s education emergency management policy in the COVID-19 outbreak,” J. Risk Financ. Manag., vol. 13, pp. 1–6, 2020.
[6] D. Dai and G. Lin, “Online home study plan for postponed 2020 spring semester during the COVID-19 Epidemic: A case study of Tangquan middle school in Nanjing, Jiangsu Province, China,” BECE, vol. 4, no. 2, pp. 543–547, 2020.
[7] K. C. Bozkirli, “An analysis of the speaking anxiety of Turkish teacher candidates,” *J. Educ. Train. Stud.*, vol. 7, no. 4, pp. 79–85, 2019.

[8] U. Maulina, S. Hikmah, and J. Pahamzah, “Attractive learning media to cope with students’ speaking skills in the industry 4.0 using sparkol videoscribe,” *Int. J. Linguist. Lit. Transl.*, vol. 2, no. 5, p. 132–140, 2019.

[9] Zainurrrahman and S. Sangaji, “A study the university students’ speaking difficulties,” *Langua—Journal Linguist. Lit. Lang. Educ.*, vol. 2, no. 1, pp. 1–8, 2019.

[10] J. Bomgaars and J. W. Bachelor, “Visual thinking strategies: Exploring artwork to improve output in the L2 classroom,” *J. Foreign Lang. Educ. Technol.*, vol. 5, no. 1, pp. 1–34, 2020.

[11] A. AL-Ghazali and Y. Alrefaee, “Silent pauses in the speech of Yemeni EFL learners,” *ELS J. interdisciplinary Stud. Humanit.*, vol. 2, no. 1, pp. 39–48, 2019.

[12] S. M. F. El Sakka, “Explicit affective strategy instruction to develop speaking performance of Egyptian EFL university students,” *English Lang. Teach.*, vol. 12, no. 4, pp. 85–95, 2019.

[13] A. Burns, “Teaching speaking,” *Annu. Rev. Appl. Linguist.*, vol. 18, no. 3, pp. 102–123, 1998.

[14] D. M. Wolf and L. Phung, “Studying in the United States: language learning challenges, strategies, and support services,” *J. Int. Students*, vol. 9, no. 1, pp. 211–244, 2019.

[15] M. F. Jaime-Osorio, M. C. Caicedo-Muñoz, and I. C. Trujillo-Bohórquez, “A radio program: A strategy to develop students’ speaking and citizenship skills,” *HOW*, vol. 26, no. 1, p. 8—33, 2019.

[16] E. A. E. Elnadeef and A. H. E. H. Abdala, “The effectiveness of English club as free voluntary speaking activity strategy in fostering speaking skill in Saudi Arabia context,” *Int. J. Linguistics, Lit. Transl. (IJLLT)*, vol. 2, no. 1, pp. 230–235, 2019.

[17] N. Mercer and K. Littleton, *Dialogue and the development of children’s thinking: a sociocultural approach*. London: Routledge, 2007.

[18] N. Anderson, S. Chapin, and C. O’Connor, *Classroom discussions: Seeing math discourse in action*. Sausalito: Scholastic Math Solutions, 2011.

[19] G. Wells and R. M. Arauz, “Dialogue in the classroom,” *J. Learn. Sci.*, vol. 15, no. 3, p. 379–428, 2006.

[20] Y. Chung, J. Yoo, S. Kim, H. Lee, and D. L. Zeidler, “Enhancing students’ communication skills in the science classroom through socio-scientific issues,” *Int. J. Sci. Math. Educ.*, vol. 14, no. 1, p. 1—27, 2016.

[21] R. R. Mello, “From constructivism to dialogism in the classroom theory and learning environments,” *Int. J. Educ. Psychol.*, vol. 1, no. 2, p. 127—152, 2012.

[22] Y. Saglam, S. Kanadli, V. Karatepe, E. A. Gizlenci, and P. Goksu, “Dialogic discourse in the classroom,” *Int. J. Educ. Math. Sci. Technol.*, vol. 3, no. 4, p. 322—335, 2015.

[23] G. Wells and R. M. Arauz, “Dialogue in the classroom,” *J. Learn. Sci.*, vol. 15, no. 3, p. 379–428, 2006.

[24] A. Simpson, “Dialogic teaching in the initial teacher education classroom: ‘Everyone’s voice will be heard,’” *Res. Pap. Educ.*, vol. 31, no. 1, pp. 89–106, 2016.

[25] M. E. Treff and S. E. Earnest, “Intentionally developmental teaching,” *Adult Learn.*, vol. 27, no. 1, p. 16—22, 2016.

[26] A. Cetin-Dindar, “Student motivation in constructivist learning environment,” *EURASIA J. Math. Sci. Technol. Educ.*, vol. 2, no. 2, p. 233—247, 2016.

[27] F. Kılıçkaya and G. Seferoğlu, “The impact of CALL instruction on English language teachers’ use of technology in language teaching,” *J. Second Mult. Lang. Acquis.*, vol. 1, no. 1, pp. 20–38, 2013.

[28] P. McDonald, “Sustainability in CALL learning environments: a systemic functional grammar approach,” *EUROCALL Rev.*, vol. 22, no. 2, pp. 3–18, 2014.

[29] J. Stepp-Greany, “No TitleStudent perceptions on language learning in a technological environment: Implications for the new millennium,” *Lang. Learn. Technol.*, vol. 6, no. 1, pp. 165–180, 2002.

[30] A. A. Zaki and M. M. Yunus, “Potential of mobile learning in teaching of ESL academic writing,”
[31] A. S. Azar and H. Nasiri, “Learners’ attitudes toward the effectiveness of mobile assisted language learning (MALL) in L2 listening comprehension,” Procedia-Social Behav. Sci., vol. 98, p. 1836—1843, 2014.

[32] Z. Hu, “Emerging vocabulary learning: From a perspective of activities facilitated by mobile devices,” English Lang. Teach., vol. 6, no. 5, p. 44—54, 2013.

[33] N. P. Morris and J. Lambe, “Multimedia interactive ebooks in laboratory bioscience education,” High. Educ. Pedagog., vol. 2, no. 1, p. 28—42, 2017.

[34] A. Syawaludin, Gunarhadi, and P. Rintayati, “Development of augmented reality-based interactive multimedia to improve critical thinking skills in science learning,” Int. J. Instr., vol. 12, no. 4, p. 331—344, 2019.

[35] Muflihah and H. Aziz, “Developing Interactive multimedia cd-based teaching materials for teaching arabic skill at Arabic Education Department of Islamic State University Sunan Ampel Surabaya,” Din. Ilmu, vol. 18, no. 2, p. 195—210, 2018.

[36] A. T. Ampa, “The implementation of interactive multimedia learning materials in teaching listening skills,” English Lang. Teach., vol. 8, no. 12, p. 56—62, 2015.

[37] T. Plomp, Educational design research: an intruction. enschede: slo: netherlands institute for curriculum development, 2013.

[38] S. Ramadhyan, Y. Asri, and V. Indriyani, “Learning Module Design Writing Argumentative Text Based Problem-Based Learning,” in Advances in Social Science, Education and Humanities Research, 2018, vol. 263, pp. 194—200.

[39] Atmazaki and V. Indriyani, “Design of reading materials based on contextual teaching and learning (CTL),” in Advances in Social Science, Education and Humanities Research, 2019, vol. 301, pp. 235–241.

[40] R. Alexander, “Developing dialogic teaching: genesis, process, trial,” Res. Pap. Educ., pp. 1–38, 2018.

[41] I. B. M. Elhassan and M. I. Adam, “The impact of dialogic teaching on english language learners’ speaking and thinking skills,” Arab World English J. Vol., vol. 8, no. 4, pp. 49–67, 2017.

[42] T. Demir and D. Melanlioglu, “Speaking anxiety scale for secondary school education students: Validity and reliability study,” Ankara Univ. J. Fac. Educ. Sci., vol. 47, no. 1, p. 103—124, 2014.

[43] S. Ozdemir, “The effect of prepared speaking on eliminating the speaking anxiety of prospective Turkish teacher,” Abant Izzet Baysal Univ. Egit. Fak. Derg., vol. 8, no. 1, p. 361—374, 2018.

[44] N. Mercer and K. Littleton, Dialogue and the development of children’s Linking: A sociocultural approach. London: Routledge, 2007.

[45] S. Michaels and C. O’Connor., “Conceptualizing talk moves as tools: Professional development approaches for academically productive discussions,” in Socializing Intelligance through Academic Talk and Dialogue, L. B. Resnick, C. S. C. Asterhan, and S. N. Clarke, Eds. Washington, DC: U.S: AERA, 2015, pp. 247–361.

[46] R. J. Alexander, Culture and pedagogy: International comparisons in primary education. Oxford: Blackwell, 2001.

[47] A. Nystrand, M., R. Gamoran, Kachur, and C. Prendergast., Opening dialogue: Understanding the dynamics of language and learning in the English classroom. New York: Teachers College Press, 1997.

[48] R. J. Alexander, Towards dialogic teaching: rethinking classroom talk. New York: Dialogos, 2004.

[49] M. Ç. Gürbüz and M. Ağsu, “Dialogic Teaching Model For Ninth Class Students To Conceptualize Inequalities,” J. Educ. Pract., vol. 8, no. 28, pp. 171–187, 2017.

[50] S. Lyle, “Dialogic teaching: Discussing theoretical contexts and reviewing evidence from classroom practice,” Lang. Educ., vol. 22, no. 3, pp. 222–240, 2008.

[51] A. Reznitskaya et al., “Collaborative reasoning: A dialogic approach to group discussions.,” Cambridge J. Educ., vol. 39, no. 1, pp. 29–48, 2009.