



Learner's needs of interactive multimedia based on hybrid learning for TISOL program

Rukayah^{a1} , Andayani^b , Ahmad Syawaludin^c 

^{a,b,c} Universitas Sebelas Maret, Surakarta, Indonesia

APA Citation:

Rukayah., Andayani., & Syawaludin, A. (2022). Learner's needs of interactive multimedia based on hybrid learning for TISOL program. *Journal of Language and Linguistic Studies*, 18(1), 619-632. Doi: 10.52462/jlls.207

Submission Date:04/09/2021

Acceptance Date:09/12/2021

Abstract

The utilization of technology through the use of interactive multimedia based on Hybrid Learning is regarded as an effective learning strategy for Teaching Indonesian to Speakers of Other Languages (TISOL). The study aims to identify the learner's needs of TISOL for appropriate media to increase language skills. This study applied a qualitative-method. Subjects study consisted of TISOL teachers, TISOL coordinators, and learners in universities serving the TISOL Program in Universitas Sebelas Maret. The data was collected by interviews. Data analysis used an interactive model consisting of data reduction, data display, and conclusion. The study indicate that media used in TISOL are currently dominated by audio learning styles, less interactive, and only practice receptive language skills. TISOL learners need technology-based learning media that can enhance interaction and can take advantage of the principle of combining the power of face-to-face learning and online learning (hybrid learning). Recommendation for instructors to develop interactive multimedia based on hybrid learning for TISOL students in improving Indonesian language skills.

Keywords: Hybrid learning; Indonesian language; interactive multimedia; learner's need; teaching Indonesian to speakers of other languages (TISOL)

1. Introduction

Language is essential for communication activities, both in national and international spheres. Indonesian Language cannot be longer considered as an exclusive language of Indonesians but as the official language of the international forum; the 32nd ASEAN Inter-Parliamentary Assembly (AIPA) meeting held in Phnom Penh, Cambodia on 2014. The reputation of the Indonesian Language among second language learners is notable and evidence of this remark can be observed in many countries choose to include Indonesian as the language studied in education (Arumdyahsari et al., 2016; Saddhono, 2015). Indonesian language has opportunity to an international language seen from the increasing interest of other countries.

The Center for Language Strategy and Diplomacy Development (PPSDK), the Ministry of Education and Culture, continues to send Indonesian language teachers for Foreign Speakers (BIPA) abroad. In 2017, PPSDK sent 200 teaching assignments in 79 BIPA organizing institutions in 22 countries to serve 21,940 students. In 2018 it increased by carrying out 226 teaching assignments in 87

¹ Corresponding author.

E-mail address: rukayah@staff.uns.ac.id

BIPA organizing institutions in 22 countries to serve 18,171 students (Kemendikbud, 2019). This data shows that the high interest shown by foreigners to learn Indonesian must be considered, both in terms of teachers, teaching materials, and media. Teaching materials and media for the TISOL program need to be provided so that foreigners who will learn Indonesian are well served (Andayani & Suyitno, 2014). These materials should incorporate the use of a computer as a mediator to conduct the teaching and learning process when working with TISOL learners. This concept is a support for TISOL learners in accessing and utilizing the media to improve their language skills.

Computer-mediated learning supports the transfer of teaching materials from offline learning into online situations thus enabling distance learning (Eckhaus & Davidovitch, 2019). The shift learning strategies from traditional classrooms to online classroom is currently evolving to hybrids as a combination of both. This method leads to a hybrid learning model to facilitate students being able to learn unlimitedly in space and time. Hybrid learning refers to the mixing of traditional face-to-face classroom learning environments and online environments (Doering, 2006). Hybrid learning pattern allows independent learning and learning affordability of learning in an unlimited space and time. The use of well-developed in hybrid learning materials could assist these learners to develop an interest in the language learned, introduce deeply the treasures of local Indonesian culture, and prepare learners to communicate through student involvement.

The role of learners is a prominent component in the TISOL learning process since it distinguishes between TISOL learning and Indonesian language learning for native speakers. As foreign speakers of Indonesian, TISOL learners have characteristics that appear in personal characteristics, background, fields, knowledge, interests, learning goals, learning strategies, and learning time so have implications for instructional media to convey material that must be considered as an influential variable and determine in TISOL learning (Andayani & Suyitno, 2014; Rivers, 2008; Stern, 2007). Therefore, TISOL program should ideally be complemented by multimedia media which supports interactive functions so as to increase the response and role of students to the media in practicing productive and receptive language skills.

The development of technology plays a role in building an effective Indonesian language learning system for TISOL learners (Aryuntini et al., 2018; Saddhono et al., 2019; Sucipto et al., 2017; Suparsa et al., 2017; Widiatmika et al., 2019). Technological facilities allow the combination of teaching materials and media that currently exist such as recording audio advertisements, radio news, song recordings, biographical records, and audio recordings based on books in interactive multimedia designs so that it was more concise and practical. Interactive learning based on hybrid learning is needed for TISOL be effective, oriented to the needs/interests of learners to increase motivation and independent in improving Indonesian language skills. It can be an alternative to overcome TISOL learning problems that are the unavailability of effective learning media can be used sustainably for foreign learners.

1.1. Literature Review

Hybrid learning is an online learning combining with face-to-face learning. Teaching Indonesian to TISOL students is not fulfil by only using face to face, hybrid learning is recommended that is considered appropriate for language classes for foreign speakers (Vereshchahina et al., 2018; Sutisna & Vonti, 2020). Hybrid learning allows students to learn through content that is delivered online and can be accessed anytime and anywhere (Dwigustini et al., 2021; Rad, 2021). Hybrid learning classes offer the possibility to include a wider learning experience, because interaction between students in collaborative situations creates a good learning experience (Raes et al., 2020). Hybrid learning models can use multimedia to involve students in meaningful learning so that learning outcomes get better

results (Rahardjanto, 2019; van Tonder & Steyn, 2018). Reviews on hybrid learning show that learning is implemented in a mix between online and face to face with the aim of creating easy access to learning, interest in learning, and independent learning.

Utilization of technology can be applied in the form of interactive multimedia to increasing student interest and learning outcomes (Komalasari, 2019; Rosamsi et al., 2019; Syawaludin et al., 2019). Interactive multimedia that is supported by text, image, video, audio, and animation services creates a dynamic and interactive presentation that provides active facilities for TISOL learners to use it as a learning resource. Interactive multimedia based on Hybrid Learning is a combination of the characteristics of traditional face-to-face learning with online via electronic that includes web-based learning, video streaming, and audio communication. The objective of hybrid learning model for multimedia was to improve student learning outcomes by facilitating a variety of learning styles (Riza et al., 2018). Through multimedia implementation applied in the hybrid learning model, it provides students the opportunity to accelerate learning outcomes, particularly in Indonesian language learning (Loren, 2017; Nadirah et al., 2020). The use of interactive multimedia provides many features, for instance, video, animation, recording, dialogue and it facilitates feedback to enhance the students' interest and motivation and provide feedback on a student's response (Meixner, 2017; Rachmadtullah et al., 2018; Wibawa, 2017). Therefore, combination of hybrid learning for interactive multimedia supports its independent learning without time and place limitations.

The development of Indonesia and its association of country nowadays place Indonesian as one of the most important languages in the world. TISOL focuses in the development and internationalization of the Indonesian language. The target of TISOL is for students or people from outside Indonesia who are studying or working in Indonesia (Maharani & Astuti, 2018; Rachman et al., 2019; Yahya & Saddhono, 2018). The enthusiasm of other citizens (particularly foreign students) for the Indonesian language increases continually. Thus, it can be said that the internationalization of higher education in Indonesia can be carried out through the implementation of the TISOL program (Ningrum et al., 2017).

Teaching Indonesian in the TISOL class is different from regular classes. TISOL teachers are required to be able to improve the quality of learning which is effective for foreign speakers in acquiring vocabulary, sentence structure in Indonesian language rules, expressions, and the use of active language in daily activities (Dereh, 2019; Junpaitoon, 2017). The TISOL program is expected to assist them master Indonesian language skills, both productive language skills (writing and speaking) and receptive language skills (listening and reading) (Fitriana & Aziez, 2021; Taubah & Dhaifi, 2020). Therefore, the TISOL program needs to be supported by an effective learning system and allows independent learning with easy access, both in the teaching aspect and the material aspects and learning media. In the evaluation, foreign speakers who have participated in the TISOL Program will be tested for their competence through the Indonesian Language Proficiency Test (UKBI) (Elitasari et al., 2019; Hardini et al., 2019).

Interactive multimedia in TISOL learning is unity of 21st-century learning design. Integration of technology in learning to create effectiveness and independence in learning anytime and anywhere as characteristics of 21st century learning (Barak et al., 2016; Simonson et al., 2019; Tican & Deniz, 2019). The current availability of media in TISOL classroom has not facilitated active students through the interactivity function in order to practice both productive and receptive language skills. Therefore, 21st century teachers are be able to make use of technologies to reinforce Indonesian language learning in TISOL with not limited to face-to-face meetings. The strategy is utilizing interactive multimedia with hybrid learning as the best combination of traditional and online face-to-face learning approaches (Bonk & Graham, 2012; Daradkeh & Kukharenko, 2016).

Previous study shows that the role of interactive multimedia in language learning has been effective for improving receptive language skills (Ampa, 2015; Astuti & Nurhadi, 2019), and productive skills (Irlidiya et al., 2015; Windiyani et al., 2020), student activities in the learning process (Susilowati et al., 2018; Riza et al., 2018), and foster student interest well (Damanik et al., 2019; Praheto et al., 2018). These findings indicate an opportunity as an effective learning medium for TISOL learners. Different from previous research, the novelty of this media product is a study of media content containing content according to the TISOL program curriculum. This study aims to identify the needs of TISOL learners for the appropriate media to increase their interest and language skills. This research is an exploratory stage from development research in order to identify product specifications of expected to be used as a reference in developing the ideal media for students to learn Indonesian in the TISOL class which is effective.

1.2. Research Questions

The results of this research data are of two main points: (1) explanation of using media when working with TISOL learners; and (2) identify the learners' need for interactive multimedia based on hybrid learning to increase language skills in TISOL Program.

2. Method

Procedure in this research adapted the need analysis step from McKillip (1998) consists of identify users, analyze the use of needs analysis; describe the target population; identify the needs of the target; assess the importance of the need; and then communicate the results or presenting research reports as can be seen in Figure 1.

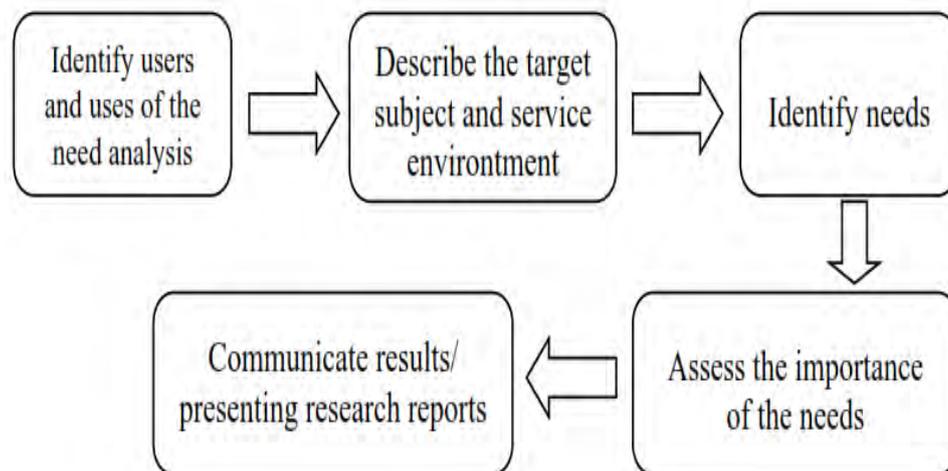


Figure 1. Five steps in need analysis

2.1. Sample

The study was conducted in Universitas Sebelas Maret, Jawa Tengah. The sample of the study consisted of 10 TISOL teachers, 7 TISOL coordinators, and 125 TISOL learners in Language UPT at Universitas Sebelas Maret.

2.2. Instrument and Data Collection

Data collection techniques comprised of questionnaires and interviews. Interviews conducted with 10 teachers, 7 program coordinators, and 25 TISOL students. The interview was aimed to find out about what media were used and how the Indonesian language learning process was currently in TISOL program. Questions in interview developed by criteria for good multimedia including aspects of learning, content, and media design (Hannafin & Peck, 1988). The learning aspect included the implementation of media in supporting active, interactive learning and student learning independence to achieve learning goals. The content aspect included all materials that supported students' language skills, both receptive and productive skills. The media design aspect included the function of the media in appearance and practice. To achieve data credibility, the study used triangulation. Triangulation is a combination of various data collection sources as a repeat or recheck of research data to achieve valid data.

2.3. Data Analysis

This study collects data obtained through questionnaires and interviews in the form of field notes with informants. Data were analyzed using interactive model consisting of reducing research data, presenting research data, and conclusion (drawing/verification) (Miles & Huberman, 1994; Syawaludin et al., 2019). Data reduction was carried out by simplification and selection to sharpen the data obtained to be able to provide the current use of media in the TISOL class and what media criteria were needed by TISOL students. The data in this study was presented in tabular form, descriptive exposure in the unit category, and specific general appointment discussion. Based on the presentation of data, conclusions can be drawn.

3. Results

The interviews were conducted with 10 TISOL teachers, 7 TISOL coordinators, and 25 TISOL learners in Language UPT at Universitas Sebelas Maret. Through interview, it gained qualitative data about the description of media that had been usually used in Indonesian learning at the TISOL class. The interview also revealed about the use of the media in TISOL class, both indoor and outdoor learning. Description of interview data is presented in Table 1.

Table 1. Description of interview data

Informants	Technic	Media Type	Descriptions
Teachers	Indoor learning	Audio and recording	The creative was connected to the loudspeaker. After that, Trivago's advertisement recordings could be seen clearly. Learners listened carefully while noting important points.
	Indoor learning	News audio recording	News record of Indonesia regarding to the flooding in Pati, Jawa Tengah, then learners listened carefully until the news had finished
	Outdoor learning	Listening to poetry and drama staging	Learners recorded difficult vocabulary and looked for ten new words every day, from poetry, theater, or announcements.
Learners	Indoor learning	Audio based books	Learning media were often used to listen to audio recordings. The teacher was looking for audio recordings that had low levels. The speakers were Indonesian native speakers, as used by teachers, there were some foreigners who spoke and some spoke Indoensia.
	Indoor learning	Song recording	Learners played Indonesian national anthems, with various versions of traditional musical instruments.

	Outdoor learning	Recorder and radio (visit to cultural sites)	Through the study tour method, learners visit the Solo Palace. They are accompanied by guides who actively provide explanations about the features of the palace. Learners collect data in the form of field notes.
Teacher and learners	Indoor learning	Human	All foreign learners in the TISOL class listened to two native Indonesian-speaking learners reading the text. The texts read are in the form of dialogues and monologues for listening skills. Then foreign learners answer questions about the text that was read.
	Outdoor learning	Listen to songs	The teacher gives assignments to learners to listen to songs in Indonesian. Then, learners identify the singer, song content, and detailed song lyrics. The results of analysis are explained.
	Outdoor learning	Indonesian native speakers	Learners are assigned to make connections with local people to talk about a topic. Learners listen and take notes on what local people say.
Coordinators	Indoor learning	Indonesian Proficiency Test (UKBI) audio recording	Containing UKBI simulations, instructions, and sample questions. Initially, the dialogue had been given as an example, then answered questions about the dialogue. Every one sentence, the teacher then gave instructions.
	Indoor learning	Biographical records and folklore	Teachers often used media to listen to, such as advertisements, news, and other biographies. The teacher made biographical texts, including folklore. Learners listened and listened.
	Outdoor learning	Loudspeakers and native	Assignments were given to learners outside the classroom. Learners listened in public, both in the market and in the surrounding environment on streets, railway stations, bus stops, and airports.

The research findings obtained through the interviews with TISOL teachers, TISOL coordinators, and TISOL program learners suggested that there were several learning media used by TISOL learners, both in the classroom and out of the classroom. The types of media used in TISOL learning currently consist of human subjects (teachers, learners, and native speakers of Indonesian), song recordings, advertisements, news, dialogues, tape recorders, books, and loudspeakers. Thus, the type of media used was dominated by auditory learning styles generally. Besides being dominated by the type of audio media, the media used in TISOL classes were also more in the acquisition of receptive languages so that they did not meet the needs of TISOL learners to achieve full language skills.

The media developed need contextually and actuality criteria so that they could mastery Indonesian language skills in receptive skills and productive skills. Students also wanted the media developed to have an attractive design without compromising the essence of learning materials that were easily accessible to students of the TISOL program. The findings of the TISOL media needed analysis discussed in this study referred to the needs of TISOL learners for interactive multimedia forms. Multimedia interactive would be more interesting for learners and meet different learning styles. Media interactivity supported the strengthening of two-way interaction in the learning process so that it could increase the acquisition of language skills, both receptive and productive. TISOL multimedia is currently dominated by the use of traditional learning so it doesn't support the existence of TISOL learners' learning independence when out of the classroom. Through the use of interactive multimedia technology, it could be designed with a hybrid learning approach so that TISOL learners could access learning media anywhere and anytime. This method was interactive multimedia based on hybrid learning that was wanted by TISOL learners to foster their learning independence.

4. Discussion

4.1. Media availability in TISOL program

The use of media in Language UPT at Universitas Sebelas Maret for TISOL consisted of human subjects and recordings. Human subjects in the form of native Indonesian were instructors, learners, and speakers as a real model to assist TISOL learners in the acquisition of language skills. In listening skills in the TISOL class utilized the audio recording of the Indonesian Proficiency Test or the Indonesian Language Proficiency Test (UKBI). UKBI is a standardized test developed following modern testing theory and is designed to measure a person's ability in Indonesian, both oral and written (Rahmawati et al., 2017; Winiasih, 2018). The use of media through UKBI audio recordings includes UKBI simulations, instructions, and sample questions. Learners played a dialogue, then the teacher gave instructions or questions after each conversation. This method is similar to the related study about the use of other recording media currently used in the TISOL class, for instance, news recordings, advertisement records, announcement recordings, and song recordings (Mattarima & Hamdan, 2011; Soerjowardhana & Nugroho, 2017).

The use of media for individuals was also carried out under controlled conditions using language laboratories. Each student got headphones that were controlled by a laboratory center. When learning outside the classroom, the learning media uses native Indonesian speakers. Media in human form is a way to help foreign speakers improve their language skills. Native Indonesian speakers have the advantage of being reliable compared to other media in terms of flexibility and ease of understanding by foreign speakers. Another flexibility of human media native speakers of Indonesian is the frequency in traditional and online learning. The findings of this study were relevant to related study which revealed the need for interaction between speakers to improve language acquisition (Lestari, 2018).

Non-classroom learning for TISOL was also done through field trips by visiting cultural sites, such as palace. A guide explains the inside and outside of the Solo palace using a loudspeaker and radio. In this situation, TISOL students listen to the explanation and record the explanation. The task of writing a narrative is given to TISOL students after listening to the guide's explanation. Other locations that could be a reference for learning outside the classroom for TISOL were public facilities such as railway stations, bus stops, airports. Performing arts and poetry readings also played a role as TISOL student media through listening to poetry, staging plays, and listening to announcements. Teachers can provide opportunities for TISOL learners to record difficult vocabulary.

The findings revealed that audio media dominated TISOL learning. These learning media currently were used in TISOL classes had not fully facilitated the interactive learning process. Interaction between learners in learning Indonesian was less formed and intertwined. Interaction in process was vital, both the interaction between learners to learners and learners to teachers. According to Oprea (2014), the reciprocal relationship in learning would make learners able to process information into something new. Thus, the results obtained by applying the questionnaire revealed that interactivity in TISOL learning was needed to be improved. The social context of the interaction would affect the desires of learners in the lesson (Mikani et al., 2010). Interaction patterns between learners and the provision of communicative and cooperative tasks were a good way to create positive interactions for the acquisition of learning outcomes (Cihan & Yildirim, 2014).

The development of instructional media technology provided opportunities to improve the activities of TISOL students in learning. TISOL required teaching materials and media that were more complete and easier to access. The development of instructional media by utilizing devices and multimedia provided hope for increasing the interaction of TISOL students in unlimited space and time. The use of various media, for instance, audio, visual, and audio-visual based on computer applications allowed

TISOL students to learn anytime and anywhere according to individual needs (Nurhadi et al., 2019; Lestari et al., 2019). Therefore, the development of multimedia is needed now as an effort to support the existence of good and comprehensive teaching materials, as well as to provide (Lin & Lo, 2017). Multimedia that was prepared for learning could improve the listening, reading, writing, and speaking exercises that would be achieved because the information conveyed to foreign speakers would have been easier to understand.

4.2. The needs for interactive multimedia based on hybrid learning for TISOL program

The findings of interview highlighted to the need for development of media for TISOL classroom. Media characteristics questions was focused on aspects of learning, content, and media design. The findings indicated that the TISOL learning media should be ideally designed by fulfilling its aspects, for instance, aspects of learning, content, and learning media design. These aspects of interactive multimedia referred to the ideal aspects possessed by interactive multimedia to achieve effective functions, including the adequacy of the media aspects of media design, curriculum or learning, and content (Leow & Mai Neo, 2014; Syawaludin et al., 2019). Multimedia was needed to facilitate TISOL students in speaking, writing, listening, reading, and writing language activities. Also, the important thing in the TISOL classroom learning process was interactivity. Interactive media meant being able to increase student activity through mutual communication between learners and teachers or learners with the media itself. Thus, the media could be seen to attract learning interest. The finding was consistent with a related study on the need for media that could improve the acquisition of TISOL learners' language skills through strengthening interaction, both between learners and teachers and between learners (Domagk et al., 2010; Nurhadi et al., 2019; Rosita & Rohmatika, 2019; Tiawati, 2019).

Moreover, TISOL class learners wanted learning media should be possible to learn independently, both in traditional or online environments. Therefore, TISOL learning media could be designed using hybrid learning so that learners could access multimedia without being limited to face-to-face meetings, but also online (Mualafina, 2019). In the aspect of TISOL media content, learners wanted TISOL media to be arranged systematically and completely. The complete contents of the media were expected to be able to meet the needs of learners in the acquisition of receptive language skills and the acquisition of productive language skills. The findings indicated the dominance of TISOL learning media which tended to only acquire receptive language skills. To achieve language learning skills, TISOL learners needed productive language skills that assisted them to communicate every day (Rosita & Rohmatika, 2019; Wardani & Ulya, 2019). TISOL learners also wanted a media design that was integrated with the local cultural content of the Indonesian nation. Cultural integration in TISOL media was seen as being able to increase Indonesian language acquisition of TISOL learners through the presentation and cultural knowledge (Haryati, et al., 2019; Rohmadi, 2019).

The findings revealed further needs within the aspect of media design. The media design desired by TISOL learners needed to use attractive types and sizes of letters and could meet the learning styles of learners so that they needed to contain content in the form of visual, audio, audio-visual, animation, and video. The media currently used were dominated more by recordings which only facilitate audio learning styles. Therefore, visual media was also needed to increase the interest of TISOL learners (Ramliyana, 2016). The developed TISOL media could be designed without limitation to one operating system so that it was easy to use. It stood to reason those learners had a variety of computers with various operating systems. Moreover, the speed of media response to instructions when accessed was vital (Syawaludin et al., 2019).

5. Conclusions

Media used in TISOL learning were currently dominated by receptive language skills and were not yet interactive. Besides, TISOL instructors and learners needed technology-based learning media that could utilize the principle of combining the power of traditional face-to-face learning and online learning. Interactive multimedia was supported by various types of media that were involved in learning to increase student interest and meet different learning styles. Media interactivity supported the strengthening of two-way interaction in the learning process so that it was expected to increase the acquisition of language skills, both receptive and productive. This study concludes that hybrid multimedia-based interactive learning is needed for teaching Indonesian for foreign speakers to be effective and independent in improving Indonesian language skills.

This study revealed the limitations of the TISOL in the universities. The results revealed the needs of students and teachers of TISOL of interactive multimedia based on hybrid learning. Since theoretical advice to further studies could utilize the results of this needs analysis as a basis for research and development, the result multimedia products could be following the needs of students of the TISOL program and following the views of experts. Practically, research advice for teachers and TISOL program providers were expected to be able to use media of teaching Indonesian to speakers of other languages involving technology by using interactive principles to improve learning activities and communication. Thus, TISOL could be supported by the availability of media that was suitable for the needs of its users. The results of this study were limited to investigative analysis of the needs of TISOL interactive multimedia based on hybrid learning in Universitas Sebelas Maret. Future related studies are expected to develop research products by utilizing the results of the needs analysis as a basis for development so that the result of media products can be corresponding to user needs and in accordance with the views of experts.

References

- Ampa, A. T. (2015). The implementation of interactive multimedia learning materials in teaching listening skills. *English Language Teaching*, 8(12), 56-62.
- Andayani & Suyitno. (2014). Problematika pengajaran bahasa indonesia bagi penutur asing dalam tinjauan sosiolinguistik [The problem of teaching Indonesian for foreign speakers in a sociolinguistic review]. *Journal of Language and Art / Jurnal Bahasa dan Seni*, 6(2), 122-129.
- Arumdyahsari, S., Hs, W., & Susanto, G. (2016). Pengembangan bahan ajar bahasa Indonesia bagi penutur asing (TISOL) tingkat madya [Development of Indonesian language teaching materials for foreign speakers (TISOL) in the intermediate level]. *Journal of Education: Theory, Research and Development / Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*, 1(5), 828-834.
- Aryuntini, N., Astuti, I., & Yuliana, Y. (2018). Development of learning media based on videoscribe to improve writing skill for descriptive text of english language study. *Journal of Education, Teaching and Learning*, 3(2), 187-194.
- Astuti, W., & Nurhadi, N. (2019). In B. Lestyarini, Wiyatmi, K. Syamsi, Nurhadi & T. Herawan (Eds.), *Proceedings of the International Conference on Interdisciplinary Language, Literature and Education (ICILLE 2018)* (pp. 449-454), Atlantis Press.
- Barak, M., Watted, A., & Haick, H. (2016). Motivation to learn in massive open online courses: Examining aspects of language and social engagement. *Computers & Education*, 94, 49-60.

- Bonk, C. J., & Graham, C. R. (2012). *The handbook of blended learning: Global perspectives, local designs*. John Wiley & Sons.
- Cihan, T & Yildirim, A. (2014). Instructor's perception of social instruction and its practical reflection in foreign classes. *Journal Elementary Education Online*, 13(3), 1033-1048.
- Damanik, M., Saragih, A. H., & Mursid, R. (2019). Development of interactive learning media in Indonesian language subjects at VIII grade of junior high school. *Electree: Journal of Electrical Engineering and Electrical Technology*, 1(1), 9-12.
- Daradkeh, Y. I., & Kukhareno, V. (2016). Open online course for prepare world teachers. *International Journal of Open Information Technologies*, 4(5), 59-62.
- Dereh, N. M. (2019). BIPA learning media: Management and problems. *ISLLAC: Journal of Intensive Studies on Language, Literature, Art, and Culture*, 3(1), 44-48.
- Doering, A. (2006). Adventure learning: transformative hybrid online education. *Distance Education*, 27(2), 197-215.
- Domagk, S., Schwartz, R. N., & Plass, J. L. (2010). Interactivity in multimedia learning: An integrated model. *Computers in Human Behavior*, 26(5), 1024-1033.
- Dwigustini, R., Sari, N., Susilawati, S., & Nisa, B. (2021). Fostering students' writing skill by the integration of mall application. *Journal of Languages and Language Teaching*, 9(1), 34-43.
- Eckhaus, E., & Davidovitch, N. (2019). Technology-Supported Teaching: Technological Progress or a Sham? *European Journal of Educational Research*, 8(3), 697-702.
- Elitasari, H. T., Mustadi, A., & Saifudin, M. F. (2019). Implementation of UKBI to improve students' listening ability. *Journal of Education and Learning (EduLearn)*, 13(2), 255262.
- Fitriana, F. T., & Aziez, F. (2021). Pengetahuan dan persepsi guru bahasa Indonesia SMK sekabupaten banyumas tentang evaluasi pembelajaran keterampilan berbahasa produktif dalam Kurikulum 2013 [Knowledge and perceptions of Indonesian junior high school teachers in Banyumas regency regarding the evaluation of learning productive language skills in the 2013 Curriculum]. *Metaphor: Journal of Language and Literature Learning / Metafora: Jurnal Pembelajaran Bahasa dan Sastra*, 7(1), 15-29.
- Hannafin, M. J., & Peck, K. L. (1988). *The Design, Development, and Evaluation of Instructional Software*. Macmillan Publishing Company.
- Hardini, T. I., Setyarini, S., & Harto, S. (2019). Indonesian language assistant program in Australian Schools: Recruitment and selection process. *Journal of Cakrawala Education / Jurnal Cakrawala Pendidikan*, 38(2), 330-342.
- Haryati, G., Andayani, A., & Anindyarini, A. (2019). The complexity of cultural outcomes as Indonesian language teaching material for foreign speakers (TISOL). *International Journal of English Literature and Social Sciences (IJELS)*, 4(6).
- Irlidiya, I., Tolla, A., Noni, N., & Anshari, A. (2015). The development of interactive multimedia for first-grade beginning readers of elementary school: An innovative learning approach. *Journal of Language Teaching and Research*, 6(3), 553-559.
- Junpaitoon, P. (2017). Enrichment of vocabulary in BIPA learning for beginner Thai students. *ISCE: Journal of Innovative Studies on Character and Education*, 1(1), 88-103.

- Kemendikbud. (2019). *Upaya internasionalisasi bahasa Indonesia, pemerintah terus kirim tenaga pengajar BIPA ke luar negeri [Efforts to internationalize Indonesian, the government continues to send BIPA teachers abroad]*. Retrieved from: <https://www.kemdikbud.go.id/main/blog/2019/07/upaya-internasionalisasi-bahasaindonesiapemerintah-terus-kirim-tenaga-poengajar-bipa-keluar-negeri>
- McKillip, J. (1998). Need analysis. *Handbook of applied social research methods*. Retrieved from: <https://courses.phhp.ufl.edu>
- Komalasari, K. (2019). Living Values Based Interactive Multimedia in Civic Education Learning. *International Journal of Instruction*, 12(1), 113-126.
- Leow, Fui-Theng, & Mai Neo. (2014). Interactive multimedia learning: innovating classroom education in a Malaysian University. *Turkish Online Journal of Educational Technology TOJET*, 13(2), 99-110.
- Lestari, P. (2018). Penggunaan media sosial berbasis pembelajaran bahasa asing hellotalk bagi penutur asing (kajian sintaksis) [The use of social media based on hellotalk foreign language learning for foreign speakers (syntactic study)]. *Konfiks: Indonesian Language and Literature Journal / Konfiks: Jurnal Bahasa dan Sastra Indonesia*, 5(2), 98-106.
- Lestari, N. M. C. P., Utama, I. M., & Utama, I. D. G. B. (2019). Pengembangan Media Pembelajaran Visual bagi Pebelajar BIPA Pemula di Undiksha [Development of Visual Learning Media for Beginners BIPA Students in Undiksha]. *Undiksha Indonesian Language and Literature Education Journal / Jurnal Pendidikan Bahasa dan Sastra Indonesia Undiksha*, 8(1), 86-95.
- Lin, A. M. & Lo, Y. Y. (2017). Trans/languageing and the triadic dialogue in content and language integrated learning (CLIL) classrooms. *Language and Education*, 31(1), 26-45.
- Loren, F. T. A. (2017). The use of learning media on listening skill in teaching Indonesian to speakers of other language (TISOL). *Lingua Didaktika: Journal of Language and Language Learning / Lingua Didaktika: Jurnal Bahasa dan Pembelajaran Bahasa*, 11(1), 1-12.
- Maharani, T., & Astuti, E. S. (2018). Pemerolehan bahasa kedua dan pengajaran bahasa dalam pembelajaran BIPA [Acquisition of second language and language teaching in BIPA learning. *Language Journal of Lingua Scientia / Jurnal Bahasa Lingua Scientia*, 10(1), 121-142.
- Mattarima, K., & Hamdan, A. R. (2011). The teaching constraints of English as a foreign language in Indonesia: The context of school based curriculum. *Sosiohumanika*, 4(2), 287300.
- Meixner, B. (2017). Hypervideos and interactive multimedia presentations. *ACM computing surveys (CSUR)*, 50(1), 1-34.
- Mikani A.Y. Lerner, M.D & Lun J. (2010). Social cotext influences on children;s rejection by their peers. *Child Development Prespective*, 4(2), 123-130.
- Miles, M.B., & Huberman, A. M. (1994). *Qualitative data analysis*. Sage Publications.
- Mualafina, R. F. (2019). Utilization of online media as a learning media bahasa Indonesia. *AKSIS: Indonesian Language and Literature Education Journal / AKSIS: Jurnal Pendidikan Bahasa dan Sastra Indonesia*, 3(2), 378-394.
- Nadirah, N., Asrifan, A., Vargheese, K. J., & Haedar, H. (2020). Interactive multimedia in EFL classroom: a study of teaching reading comprehension at junior high school in Indonesia. *Journal of Advanced English Studies*, 3(2), 131-145.

- Ningrum, R. K., Waluyo, H. J., & Winarni, R. (2017). BIPA (Indonesian for foreign speakers) as an effort to internationalize universities in Indonesia. *Education and Language International Conference, 1*(1).
- Nurhadi, J., Rahma, R., & Fadlilah, A. (2019). Multimedia based on virtual reality in Indonesian for foreign speakers learning. *Journal of Physics: Conference Series, 1179*(1), 012118. IOP Publishing.
- Oprea, C. L. (2014). Interactive and creative learning of the adults. *Procedia Social and Behavioral Sciences, 142*, 493-498.
- Praheto, B. E., Andayani, A., Rohmadi, M., & Wardani, N. E. (2018). Interactive multimedia learning skills for primary school teacher education study program. In U. Mirsa, B. I. Wayan, K.N. Wayan & N. Simon (Eds.), *Proceedings of International Conference of Social Science (ICOSS 2018)*. European Alliance for Innovation (EAI).
- Rachmadtullah, R. M. S. Z., Ms, Z., & Sumantri, M. S. (2018). Development of computer based interactive multimedia: study on learning in elementary education. *International Journal of Engineering and Technology, 7*(4), 2035-2038.
- Rachman, I. F., & Andayani, Suyitno. (2019). Cultural issues in Indonesian language learning for foreign speakers. *International Journal of Educational Research Review, 4*(3), 454-460.
- Rad, H. S. (2021). Exploring Use of mobile-mediated hybrid dynamic assessment in improving efl learners' descriptive writing skills. *Computer-Assisted Language Learning, 22*(1), 111-127.
- Raes, A., Detienne, L., Windey, I., & Depaepe, F. (2020). A systematic literature review on synchronous hybrid learning: gaps identified. *Learning Environments Research, 23*(3), 269-290.
- Rahardjanto, A. (2019). Hybrid-PjBL: Learning Outcomes, Creative Thinking Skills, and Learning Motivation of Preservice Teacher. *International Journal of Instruction, 12*(2), 179-192.
- Rahmawati, L. E., Suwandi, S., Saddhono, K., & Setiawan, B. (2017). The content analysis, the presentation, and the instrument readability of Indonesian proficiency test. *Asian Journal of Assessment in Teaching and Learning, 7*, 16-25.
- Ramliyana, R. (2016). Membangkitkan motivasi belajar bahasa Indonesia bagi penutur asing (TISOL) melalui media komik [Generating motivation to learn Indonesian for foreign speakers (TISOL) through comic media]. *Dialectics: Journal of Language, Literature, and Indonesian Language and Literature Education / Dialektika: Jurnal Bahasa, Sastra, dan Pendidikan Bahasa dan Sastra Indonesia, 3*(1), 1-19.
- Rivers, W.H. (2008). *Second Language Classroom on Teaching and Learning*. Cambridge University Press.
- Riza, L. S., Firdaus, D. S., Junaeti, E., Hidayat, T., Abdullah, A. G., Nandiyanto, A. B., & Abdullah, C. U. (2018). A concept and implementation of instructional interactive multimedia for deaf students based on inquiry-based learning model. *Journal of Engineering Science and Technology, 13*(7), 2016-2035.
- Rohmadi, M. (2019). Text Book As a Java Culture Recognition Media in Indonesian Learning For Foreign Speaker (TISOL) in Sebelas Maret University. *International Journal of Educational Research Review, 4*(3), 427-434.
- Rosamsi, S., Miarsyah, M., & Ristanto, R. H. (2019). Interactive multimedia effectiveness in improving cell concept mastery. *Journal of Biology Education, 8*(1), 56-61.

- Rosita, F. Y., & Rohmatika, A. (2019). Games in Teaching Speaking of Indonesian Language for Non Native Speakers. *Seloka: Journal of Indonesian Language and Literature Education / Seloka: Jurnal Pendidikan Bahasa dan Sastra Indonesia*, 8(1), 88-95.
- Saddhono, K. (2015). Integrating culture in Indonesian language learning for foreign speakers at Indonesian Universities. *Journal of Language and Literature*, 6(2), 349-353.
- Saddhono, K., Hasibuan, A., & Bakhtiar, M. I. (2019). Facebook as a learning media in TISOL (teaching Indonesian to speakers of other languages) learning to support the independency of foreign students in Indonesia. *Journal of Physics: Conference Series*, 1254(1), 012061. IOP Publishing.
- Simonson, M., Zvacek, S. M., & Smaldino, S. (2019). *Teaching and Learning at a Distance: Foundations of Distance Education 7th Edition*. IAP.
- Soerjowardhana, A., & Nugroho, R. A. (2017). Developing English job interview skill by selfaccess language learning through audio podcast-based learning media. *Celt: A Journal of Culture, English Language Teaching & Literature*, 17(2), 178-195.
- Stern, H. H. (2007). *Fundamental Concept of Language Teaching*. Oxford University Press.
- Sucipto, A., Lilo, T., Efendi, A., Hanif, H. N., & Budiyanto, C. (2017). The influence of learning management technology to student's learning outcome. *Online Submission*, 1(1), 11-18.
- Suparsa, I. N., Mantra, I. B. N., & Widiastuti, I. A. M. S. (2017). Developing learning methods of Indonesian as a foreign language. *International Journal of Social Sciences and Humanities*, 1(2), 51-57.
- Susilowati, Y., The, K. S. M., Nasir, B. M., Don, A. G., Huda, M., Hensafitri, T., Maselena, A., Oktafianto, & Irawan, D. (2018). Learning application of Lampung language based on multimedia software. *International Journal of Engineering & Technology*, 7(2.27), 175181.
- Sutisna, E., & Vonti, L. H. (2020). Innovation development strategy for hybrid learning based English teaching and learning. *English Review: Journal of English Education*, 9(1), 103114.
- Syawaludin, A., Gunarhadi, & Rintayati, P. (2019). Development of augmented reality-based interactive multimedia to improve critical thinking skills in science learning. *International Journal of Instruction*, 12(4), 331-334.
- Taubah, M., & Dhaifi, I. (2020). Reseptif dan produktif dalam bahasa Arab [Receptive and productive in Arabic]. *Lahjah Arabiyah: Journal of Arabic Language and Arabic Language Education / Lahjah Arabiyah: Jurnal Bahasa Arab dan Pendidikan Bahasa Arab*, 1(1), 33-36.
- Tiawati, R. (2019). Implementation of Indonesian language teaching material by tisol student in STKIP PGRI Sumatera Barat. In Suyanta, Siswantoyo, S. I. A. Dwinigrum, M. Hajaroh, N. Sugesti, T. Herawan (Eds.). *Proceedings of the 6th International Conference on Educational Research and Innovation (ICERI 2018)* (pp. 328-331). Atlantis Press.
- Tican, C., & Deniz, S. (2019). Pre-Service teachers' opinions about the use of 21st century learner and 21st century teacher skills. *European Journal of Educational Research*, 8(1), 181-197.
- Van Tonder, S., & Steyn, G. M. (2018). Exploring Role Players' Experiences of Learning in Higher Education through a Hybrid Study Approach: A Case Study. *Pertanika Journal of Social Sciences & Humanities*, 26(4), 2179-2194.
- Vereshchahina, T., Liashchenko, O., & Babiy, S. (2018). English language teachers' perceptions of hybrid learning at university level. *Advanced Education*, 5(10), 88-97.

- Wardani, N. E., & Ulya, C. (2019). The reseptive and productive learning models based on folktales for learning Indonesian as a foreign language. *Journal of Physics: Conference Series*, 1339(1), 012073). IOP Publishing.
- Wibawa, S. C. (2017). The design and implementation of an educational multimedia interactive operation system using Lectora Inspire. *Elinvo (Electronics, Informatics, and Vocational Education)*, 2(1), 74-79.
- Widiatmika, M., Darmawiguna, I. G. M., & Putrama, I. M. (2019). Pengembangan film seri animasi 3D “Cerita Made” sebagai media pembelajaran TISOL di Universitas Pendidikan Ganesha [Development of the 3D animated film series "Story Made" as a medium for learning TISOL at Ganesha University of Education]. *Karmapati (Collection of Informatics Engineering Education Student Articles) / Karmapati (Kumpulan Artikel Mahasiswa Pendidikan Teknik Informatika)*, 8(1), 22-32.
- Windiyani, T., Boeriswati, E., & Sumantri, M. S. (2020). Development of scientific-based educative multimedia games to improve indonesian narrative writing skills for elementary school students. *International Journal of Multicultural and Multireligious Understanding*, 6(6), 788-795.
- Winiasih, T. (2018). Studi komparatif hasil UKBI mahasiswa jurusan bahasa Indonesia perguruan tinggi negeri dan swasta di Jawa Timur [Comparative study of UKBI results for Indonesian language department students of state and private universities in Jawa Timur]. *Madah*, 9(1), 63-72.
- Yahya, M., & Saddhono, K. (2018). Studi kesalahan penulisan kalimat dalam karangan pelajar bahasa Indonesia untuk penutur asing (BIPA) [Study of writing errors in sentences of Indonesian language learners for foreign speakers (BIPA)]. *Dialectics: Journal of Language, Literature, and Indonesian Language and Literature Education / Dialektika: Jurnal Bahasa, Sastra, dan Pendidikan Bahasa dan Sastra Indonesia*, 5(1), 1-20.
- Lisnawati, I. (2021). Speaking learning based on multimedia. *Journal of Language and Linguistic Studies*, 17(4).
- Osman, N., Noor, S. S. M., Rouyan, N. M., & Hat, N. C. (2021). The use of PowerPoint in developing multimedia-based teaching and learning materials for learning Arabic Language. *Journal of Language and Linguistic Studies*, 18(1).

AUTHOR BIODATA

Dr. Rukayah, M.Hum. Doctor of Indonesian language education who actively teaches at the Teacher Training and Education of Faculty of the Universitas Sebelas Maret, Surakarta, Indonesia. The author actively teaches Indonesian language education in primary school teacher education, teacher professional education, and Indonesian language education for foreign speakers. The author actively conducts research and community service every year, publishes in national and international journals, and actively writes textbooks and other reference books about Indonesian language and literature education.

Prof. Dr. Andayani, M.Pd. A professor of Indonesian language and literature education, Teacher Training and Education of Faculty, Universitas Sebelas Maret. The author is active in educating, researching, and doing community service. Research related to the author is development research in Indonesian teaching materials and teaching models that are active and contain character education. The author is active in the development of teaching the field of Indonesian language for foreign speakers.

Ahmad Syawaludin, S.Pd., M.Pd. Master of education at the Teacher Training and Education of Faculty at Universitas Sebelas Maret. Research interest on the development of interactive multimedia, development of teaching materials, and innovation of learning models. Author is currently pursuing a doctoral education in basic education program at Yogyakarta State University. Author is active in writing scientific papers in journals and books.