



A Need Analysis of English Course for Agriculture Department Students

Received: 26-11-2022; Revised:9-4-2023; Accepted: 11-04-2023

Alfi Hidayatu Miqawati*)

Politeknik Negeri Jember, Indonesia

E-mail: alfi_hidayatu@polije.ac.id

Ikrima Halimatus Sa'diyah

Politeknik Negeri Jember, Indonesia

E-mail: ikrimahalimatus12@gmail.com

*) *Corresponding Author*

Abstract: The process of doing a needs analysis becomes essential since it gives instructional designers the chance to create learning materials that will actually benefit the target audiences. The present study aimed at scrutinizing the students' needs to develop an English course for agriculture students in Indonesian vocational higher education or polytechnic. The researchers try to bring novelty in the present study by considering CEFR framework as a standard for describing and determining the level of ability or proficiency. Convergent parallel mixed methods design was employed in the current study. The data were obtained from questionnaires, interviews and focused group discussion. The questionnaire was distributed to the agriculture department students, employing a stratified random sampling method. In addition, the interview and focused group discussion were done with the coordinators of study program, the Head of Quality Assurance, lecturers who taught Intermediate English Course, and industry partners as well. The data collected from questionnaires, interview, and focused group discussion were then analyzed using side-by-side comparison. The results disclosed that the language skill considered the most important for the agriculture department students is speaking skill since it has a great impact on students' academic, social and professional development. In other words, the agriculture department students require a learning process that emphasizes practice over theory. Furthermore, to make classroom activities more exciting, they desire the learning process that is blended with games. As a result, this study also provides implications for course designers to develop English materials that reflect comprehensive needs of the students.

Abstrak: Proses melakukan analisis kebutuhan menjadi penting karena memberikan kesempatan kepada perancang pembelajaran untuk menciptakan materi pembelajaran yang benar-benar bermanfaat bagi khalayak sasaran. Penelitian ini bertujuan untuk meneliti kebutuhan siswa untuk mengembangkan kursus bahasa Inggris untuk siswa pertanian di pendidikan tinggi kejuruan atau politeknik Indonesia. Peneliti mencoba menghadirkan kebaruan dalam penelitian ini dengan mempertimbangkan kerangka kerja CEFR sebagai standar untuk menggambarkan dan menentukan tingkat kemampuan atau profisiensi. Desain metode campuran paralel konvergen digunakan dalam penelitian ini. Data diperoleh dari kuesioner, wawancara dan diskusi kelompok terfokus. Kuesioner dibagikan kepada mahasiswa jurusan pertanian

dengan menggunakan metode stratified random sampling. Selain itu, wawancara dan diskusi kelompok terfokus dilakukan dengan koordinator program studi, Kepala Penjaminan Mutu, dosen yang mengajar Kursus Bahasa Inggris Menengah, dan juga mitra industri. Data yang dikumpulkan dari kuesioner, wawancara, dan diskusi kelompok terfokus kemudian dianalisis dengan menggunakan perbandingan berdampingan. Hasil penelitian mengungkapkan bahwa keterampilan berbahasa yang dianggap paling penting bagi mahasiswa jurusan pertanian adalah keterampilan berbicara karena memiliki dampak yang besar pada pengembangan akademik, sosial dan profesional mahasiswa. Dengan kata lain, mahasiswa jurusan pertanian memerlukan proses pembelajaran yang lebih menekankan praktek daripada teori. Selain itu, untuk membuat kegiatan kelas menjadi lebih menarik, mereka menginginkan proses pembelajaran yang dipadukan dengan permainan. Akibatnya, penelitian ini juga memberikan implikasi bagi para perancang kursus untuk mengembangkan materi bahasa Inggris yang mencerminkan kebutuhan siswa secara komprehensif.

Keywords: Need Analysis, English Course, Agriculture Students, Polytechnic

INTRODUCTION

The rapid and dynamic development of the times requires humans to be able to keep up with the times and civilizations. In the 21st century, humans need to master a variety of skills which include creativity, divergent thinking, critical thinking, working in teams (especially in heterogeneous groups), working autonomously, developing cognitive and interpersonal skills, mastering social and community competencies, be a global and national citizen and responsible, recognize and respect diversity, able to communicate using mother tongue and foreign languages, competent in mathematics, social, and technology, have accountability and leadership (Chalkiadaki, 2018). In addition, the US-Based Partnership for 21st Century Learning (P21) stated that the framework for 21st century learning includes 4Cs, namely Critical thinking, Communication, Collaboration and Creativity (Joynes, et al., 2019). Based on this explanation, it can be concluded that as part of a global society in the 21st century, we must be able to master these skills. One of the skills that is the focus is communication skills in both mother and foreign languages.

Higher Education Standards (SN-Dikti) have changed several times in the last six years. This is done in response to the development of science and technology, community needs, and the needs of graduate users. In addition, the most basic thing and one of the biggest challenges in the preparation of higher education curriculum is how to produce graduates who have 21st century skills. Moreover, currently, both academic and vocational higher education institutions do not have a dichotomy of demands for skills achievement. Both are required to place an emphasis not only on delivering content but also on how to skill. In other words, the curriculum developed must be able to facilitate students learning according to their times, pass on the nation's cultural values, and prepare students to be able to play an active role in the era of the industrial revolution 4.0 (Junaidi et al., 2020; Rose & Nicholl, 2021).

Politeknik Negeri Jember is one of the vocational higher education institutions that is responsive to the existing challenges. This is evidenced by the periodic curriculum evaluation and curriculum revision in 2021 based on the latest changes to SN-Dikti in Permendikbud No. 3 of 2020 is in line with the

policy of the Ministry of Education and Culture regarding Independent Learning-Independent Campuses. All study programs at the Politeknik Negeri Jember followed up on this by compiling the latest curriculum in 2020 and implemented in the 2021/2022 academic year. In preparing the curriculum, the courses included in the curriculum were General Courses (*Mata Kuliah Umum*/MKU), Institutional Compulsory Courses (*Mata Kuliah Wajib Institusi*/MKWI) and Expertise Courses (*Mata Kuliah Keahlian*/MKK). MKWI is a course that is determined by the institution based on the government policies stated in the guidelines for the preparation of the higher education curriculum. One of the MKWIs offered in the curriculum is Intermediate English.

This requires the role of lecturers to develop both hard skills and soft skills of students in learning so that they can enter the professional world and be ready to compete with other countries. All devices such as curriculum, lesson plans, and models or methods that are integrated with 21st century learning need to be well designed. The learning process in each subject, including English as a part of Institutional Compulsory Courses, must be designed in such a way that learning outcomes can be achieved optimally (Septikasari & Frasandy, 2018). In this case, lecturers must have in-depth knowledge of the skills that must be achieved by students and what learning strategies and innovations can be applied to achieve these skills. In other words, the learning process must be able to develop student competencies and ensure that they can live, work and participate in the global society in the 21st century (Chalkiadaki, 2018; Rose & Nicholl, 2021).

The implementation of the latest curriculum at Politeknik Negeri Jember has been running since the 2021/2022 academic year. The learning tools for each course are arranged in order to obtain maximum outcomes

and provide space for students to develop their potential in achieving the expected skills. To improve the results to be achieved, it is necessary to conduct a comprehensive needs analysis on how Intermediate English should be taught.

Need analysis is a crucial process in a course development. It is done to identify what learners can function with the foreign language in certain target situations and how they might best master the target language during their learning process (West, 1994). In vocational education settings, need analysis is needed to find out what the stakeholders want and need and how to formulate ways to meet the needs. It is in line with a statement proposed by Kim (2013) that that we should understand what the industries want from our students as prospective workers, what teachers expect from their students to master and meet the goal of each program, and the students' motivation to learn in English classes. Akyel & Ozek (2010) also highlighted the importance of need analysis as it can help educators clarify and validate learners' needs.

In identifying the students' needs, there are numerous factors that need to be considered. One is the demand of the era and the suitable framework to be implemented. In this 21st century, the students are expected to master certain skills to be able to compete and survive. We need to identify how to make our students be able to think critically, communicate fluently not only in their native language but also other languages (especially English as a *lingua franca*), collaborate effectively with others in many different situation and time and boost their creativity positively.

The framework is also essential. One mostly implemented framework is CEFR (Common European Framework of Reference). It is an internationally recognized standard for describing and determining the level of ability or proficiency in a foreign language, especially

English. In CEFR, a person's English proficiency can be described in several levels, namely A1 and A2 (Basic User), B1 and B2 (Independent User), and C1 and C2 (Proficient User) (Council of Europe, 2020). In this case, using international standards in determining English proficiency level is very pivotal to do so that English language skills can be measured properly.

The European Association for Quality Language Service (2002) mentioned the presence of the CEFR is very important and provides significant changes including avoiding the "Tower of Babel" language learning that is only done to get scores and certificates without being able to use the target language (English) properly or contextually. Willems (2016) also noted that this framework can measure the extent to which students can learn the language and determine at what level they can learn the language. Following this notion, in terms of language learning materials, it can be adjusted to the students' English proficiency level. In addition, in deploying CEFR comprehensively, teachers or curriculum developers need to understand the concept of CEFR and its descriptors and how to adapt them in their curriculum. If it is implemented accordingly, the students can meet the international standard of English communication and can take part and compete with other people round the globe. Miqawati et al. (2023) highlighted that there is a need in carrying out further discussion about its implementation in vocational education contexts. Thus, when conducting a need analysis, these two aspects (21st century skills and CEFR) should be considered.

Numerous studies of need analysis have been undertaken in various contexts and countries. In higher education contexts, need analysis for the teaching of English in non-English departments were conducted by Parnawati & Ulinuha (2019) who studied students' needs and want on English language

learning at higher education level. However, their study only focused on the students' point of view since they did not involve other stakeholders to gain further information of the students' needs. Kim (2013), Septiana et al. (2020), Sari et al. (2020), Pranoto & Suprayogi (2020), and Ekayati et al. (2020) also conducted need analysis studies in different non-English study programs, but none of them specifically identified the need of the teaching of English for agriculture students. Other studies have focused on analyzing the needs of agriculture students in learning English (Hajar & Triastuti, 2021; Mahbub, 2018). However, their studies are limited to the analysis of the needs of vocational high school students, not those of vocational higher education/polytechnic students. Thus, this study aimed at analyzing the students' needs to develop an English course for agriculture students in Indonesian vocational higher education or polytechnic.

METHOD

The present study was conducted at a vocational higher education or polytechnic, employing Convergent Parallel Mixed Methods Design (collection of both quantitative and qualitative data). It entails gathering, combining, or integrating quantitative and qualitative data. In this method, a researcher gathers both quantitative and qualitative data, analyses them individually, and then compares the results to see if the findings confirm or contradict each other. According to Creswell & Creswell (2018), the mixed approach employs both predetermined and developing methodologies, open and closed-ended questions, different types of data drawing on all possibilities, statistical and text analysis, and database interpretation across databases. The main goals were to explain the general goal of the study, the quantitative and qualitative methodologies used, and the justification for using both methods to investigate the research problem.

The respondents in the present study were the students of Agriculture Department who took Intermediate English Course the Coordinators of study program, the Head of Quality Assurance, lecturers who taught Intermediate English Course, and industry partners. According to Sugiyono (2013), the participants are the generalization zone, comprising objects or subjects with specified attributes and characteristics defined by the researchers to be investigated so inferences can be drawn. The sampling technique exerted was stratified random sampling to group the students based on their study program which was carried on with random sampling from each study program.

In order to collect data, the researchers employed instruments namely questionnaire, interview and focused group discussion. A closed-ended questionnaire was employed in the present study. It was distributed to the Agriculture Department students taking the Intermediate English Course in the form of Google form survey. It comprised students' profile (name, gender and study program) and also six closed-ended questions in relation to students' need analysis.

The current study also employed an interview and focused group discussion (FGD) instruments to collect the data. As mentioned by Subakti et al. (2021), interview is a method that involves asking participants a series of questions to be answered verbally in order to gather data. Meanwhile, A focus group discussion is a method where a researcher gathers a group of people to talk about a certain subject with the intention of learning about the participants' personal experiences, beliefs, perceptions, and attitudes through a mediated interaction (Hayward et al., 2004; O. Nyumba et al., 2018). In present study, the interviewees were five coordinators of study programs (out

of six coordinators) at Agriculture Department and industry partners. In addition, a focus group discussion attended by the head of quality assurance and lecturers who taught Intermediate English Course at Agriculture Department was also head.

Since the present study exerted convergent mixed methods design, a challenge was perceived. It is a bit demanding to determine how to really converge or integrate the data. To subdue the challenge, the researchers applied a strategy proposed by Creswell & Creswell (2018). The strategy is called A side-by-side comparison. He mentioned that he two databases can be combined in a variety of ways. A side-by-side comparison is one of the strategies that can be used by the researcher to analyze the data in convergent mixed methods design. These comparisons can be found in the discussion sections of mixed methods research.

The qualitative findings that either support or refute the statistical findings are discussed after the researcher has first reported the quantitative statistical data. Yet, the researcher may begin with the qualitative findings and contrast them with the quantitative data. Mixed methods researchers refer to this as a "side-by-side" technique since the researcher compares two sets of findings inside a discussion, presenting one first and then the other (Creswell & Creswell, 2018). The quantitative data obtained from the questionnaire was analyzed using statistical methods covering the frequencies and percentages for each item.

Meanwhile, to analyze the qualitative data taken from the interview, the researchers wrote the conversation transcript by repeating the record and reading important notes written by the researchers during the interview. After writing the result of the interview, the researchers classified the numerous responses into the categories of information required by the researcher. The researcher then proceeds to

write the findings of all the information received from the participants to each question that was posed. The researcher then combines both qualitative and quantitative data acquired by applying two methods of data analysis based on Creswell & Creswell's theory (2018).

RESULTS AND DISCUSSION

In this section, the researchers thrashed out the results of the questionnaire, interviews and focused group discussion in relation to the students' needs.

Based on the results of the questionnaire distributed to the agriculture students, in the present study, the participants involved were 103 students; 57,3 % were female, and 42,7% were male. The students who participated in the current study were from Food Crop Production Technology study program (54%), Horticulture Crop Production study program (32%), and the last study program involved in the present study was Coffee Plantation Management (14%).

In the questionnaire, the researchers included six closed-ended questions. Those questions covered the objectives to study English, English language skills need to be emphasized, topics of agriculture required, learning activities, learning strategies and teacher's role.

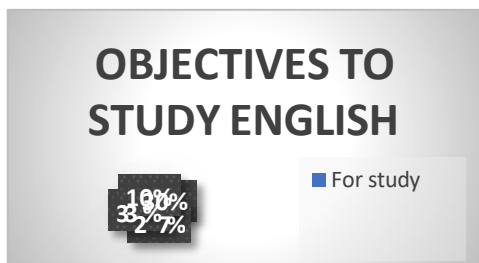


Figure 1: Objectives to study English

The result of the first question was about the students' objectives to study English. As shown in Figure 1, learning English was done primarily for the purpose of improving communication. As shown in Figure 2, 33% of the students wanted to study English to have

better communication. Based on this outcome, it is obvious that the students recognized future global development from the current condition. They understand that learning English help them communicate with foreigners wherever they meet them. Then, 30% of the students expressed a desire to learn English for study. They claimed that they need to learn English because they have to take English proficiency test as one of the requirements before graduating from the vocational higher education. The third reason they wanted to learn English was for future profession. They understand that one of the most crucial abilities when looking for work is English. This finding was consistent with the findings of Khan's study (2007). He noted that the students' success in the workplace is influenced by their English proficiency.



Figure 2: English Skills Required

After observing the students' goals to study English, the researchers looked into the English skills they needed to master. It can be discerned in Figure 2. It revealed that 23% of the students expected to master speaking skill. In other words, it was the most preferred skill for the students to learn. 16 % of the students then selected listening skill as the next preferred skill to be mastered. It was then followed by pronunciation, reading, writing, grammar and vocabulary. The students argued that they can produce English as well as they listen to English utterances or speeches. This is in accordance with Dincer (2017) who argued that the more speaking practice the students receive in the classroom, the more progress they make. Additionally, Siahaan (2019) also stated that speaking ability is very important for the

students to be able to participate in the wider world of work.

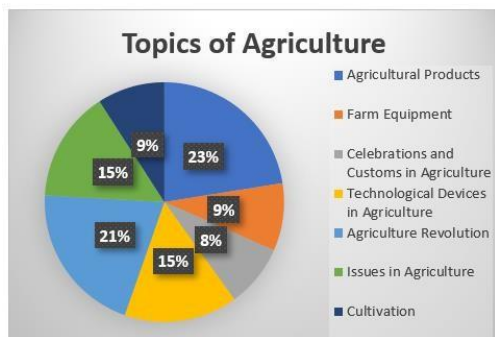


Figure 3: Topics of Agriculture

The students were asked not only what skills should be emphasized, but also what topics they required. This might assist the lecturer in choosing the subject that will be covered in the Intermediate English course. The topics of agriculture required by the students in the agriculture department are depicted in Figure 3. It showed that “Agricultural Products” got the highest percentage among the other topics, meaning that 23% of the students really needed to know more about products of agriculture. The next topic that the students wanted to learn was that agriculture revolution. There were 21% of the participants who chose “Agriculture Revolution” as the next topic to be learned, meaning that they wanted to learn more how agriculture evolved over time. In addition, the students also needed to learn about technological devices and issues related to agriculture. These two topics got the same percentage of 15%. In contrast, “Cultivation, Farm Equipment and Celebrations and Customs in relation to agriculture” got the lowest percentage. However, these three topics which got the lowest percentage will be included in the Intermediate English Course since they were still related to their major.

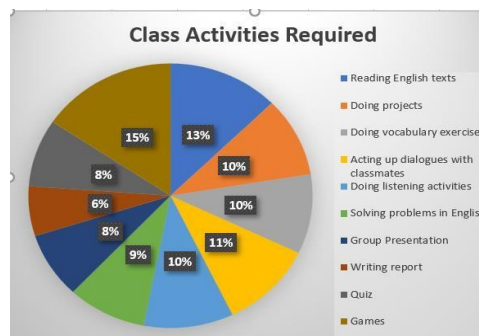


Figure 4: Class Activities Required

The next item in the questionnaire analyzed by the researchers was about the class activities required by the students (Figure 4). It can be seen from Figure 6 that 15% of the students chose games as the most preferred learning activities. By having games, the students can learn English in such a joyful way since it creates a non-threatening atmosphere. It also encourages the students’ motivation, critical thinking and engagement in learning (Padmavathi, 2013). Additionally, games can encourage the development of general abilities including teamwork, communication, problem-solving, critical thinking, and decision-making (Anastasiadis et al., 2018; Rumeser and Emsley, 2019). Then, the next learning activity that the students wanted to have in the classroom is that reading English texts. 13% of the students selected reading English texts to be included in the teaching and learning activities. It was then followed by the other learning activities such as acting up dialogues with the classmates, doing projects and doing vocabulary exercises, which have the same percentage.

After having the learning activities, the researcher also reported the result of the seventh item in the questionnaire which was the preferred learning strategy. The result revealed that 47% of the students preferred to have group work, instead of individual and pair work. The students chose the group work since it enabled them to help each other and they could have more interaction with the other students. This is

in line with Alfares (2017) who argued that group work makes the students get help from their peers and the interaction in group work helps them become aware of their mistakes due to receiving feedback from others. Also, group work is regarded as an effective teaching strategy, particularly in EFL classes, for a number of reasons, including the maximization of the amount of time that students can speak the target language (Hammar Chiriatic, 2014).

Last but not least, the researchers also analyzed the result of the questionnaire in relation to teacher's role. The result revealed 69% of the students expected that the teacher can be a facilitator during the teaching and learning process, meaning that the majority of the students expected the teacher to facilitate and guide the learning process. They needed to be involved in the learning process, but they must be guided by the teacher. They believe that controlling everything in the classroom is comparable to a traditional classroom. Alonazi (2017) supported these findings by stating that when a teacher acts as a facilitator, student autonomy in learning is fostered. The students like to have the freedom to select their own learning style, based on their preferences. Additionally, teachers should be able to create educational materials that are practical and aid in the pursuit of objectives as well as the teaching and learning process. (Putri, et al., 2019).

The researchers also explored more about the students' needs by having interviews and a Focused Group Discussion (FGD) with the stakeholders. The interviewees were five coordinators of study programs (out of six coordinators) at Agriculture Department and industry partners. In addition, a focus group discussion attended by the head of quality assurance and lecturers who taught Intermediate English Course at Agriculture Department was also held.

At Politeknik Negeri Jember, two English courses were provided namely Basic English and Intermediate English). Each of the course weighed 2 credits. For Intermediate English course at Agriculture Department, it was formulated that the students are expected to be able to master spoken and written communication in English in accordance to CEFR (Common European Framework of Reference for Languages) standard level B2 (Intermediate English).

To support outcome-based education and follow up the students' need mentioned by the coordinators of the study programs and industry partners, more specific learning outcomes were also identified. Based on the results of the interview and FGD, it was highlighted that, in Intermediate English course, the students are expected to be able to 1) communicate with some confidence in English about familiar and unfamiliar topics that they encounter in personal, social, academic or vocational, and professional life and field, 2) understand spoken and written factual texts on subjects related to their field and social life by employing a variety of strategies to achieve comprehension and adapting various speed and style of reading, 3) conduct presentations and discussions with various issues and contexts, 4) write personal and business letters and simple report, 5) conduct job and/or scholarship interviews, 6) possess cross culture competence, and 7) obtain certain scores in English proficiency tests (TOEP, TOEIC, TOEFL/IELTS) as required by the institution. In addition, several challenges were also identified. The students' heterogenous English proficiency (mostly low proficiency) and motivation play crucial role in the enhancement of their English communication competence.

The need analysis conducted in this study is in line with what was done by Poedjiastutie & Oliver (2017) that involving stakeholders at one institution (employers, teachers and students) is pivotal to prepare students and

make them function well in workplace. This study also involved students, teachers, and industry partners (employers) in identifying the students' needs to fulfil academic requirement and workplace communication skill. Furthermore, the highlighted competence that the students need to achieve in this recent study also supports several skills that need to be mastered in this 21st century as mentioned by Van Laar, et al. (2017). They mentioned that 21st century skills are group into two, core skills and contextual skills. The first include technical, information management, communication, collaboration, creativity, critical thinking and problem solving while the latter include ethical awareness, cultural awareness, flexibility, self-direction and lifelong learning.

CONCLUSION

This study identified agriculture students' needs in learning English at vocational higher education (polytechnic). The findings showed that English is essential to master both to fulfil academic requirement and meet workplace standards. Several English language skills and competencies as well as challenges in learning were proposed to help curriculum developers and teachers develop syllabus and materials well. The findings provide practical direction for policy makers, English language teachers, and curriculum developers about the needs and issues to be taken into account in developing curriculum and materials. This current need analysis can also serve as information that can support other students' needs in different institutions in Indonesia and other countries.

REFERENCES

Akyel, A. S., & Ozek, Y. (2010). A language needs analysis research at an English medium university in Turkey. *Procedia Social and Behavioral Sciences*, 2(2), 969–975.

- Alfares, N. (2017). Benefits and difficulties of learning in group work in EFL classes in Saudi Arabia. *English Language Teaching*, 10(7), 247-256.
- Alonazi, S. M. (2017). The role of teachers in promoting learner autonomy in secondary schools in Saudi Arabia. *English Language Teaching*, 10(7), 183-202.
- Anastasiadis, T., Lampropoulos, G., & Siakas, K. (2018). Digital game-based learning and serious games in education. *International Journal of Advances in Scientific Research and Engineering*, 4(12), 139–144.
- Chalkiadaki, A. (2018). A systematic literature review of 21st century skills and competencies in primary education. *International Journal of Instruction*, 11(3), 1–16.
- Council of Europe. (2020). *Common European framework of reference for languages: Learning, teaching, assessment-companion volume*. Strasbourg: Council of Europe Publishing.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed). Los Angeles: Sage publications.
- Dincer, A. (2017). EFL learners' beliefs about speaking English and being a good speaker: A metaphor analysis. *Universal Journal of Educational Research*, 5(1), 104-112.
- Ekayati, R., Manurung, I. D., & Yenni, E. (2020). Need analysis of ESP for non-English study program. *Language Literacy: Journal of Linguistics, Literature, and Language Teaching*, 4(2), 322-332.
- Hajar, I., & Triastuti, A. (2021). A need analysis of ESP materials for agriculture students at Indonesian vocational school in West Sulawesi. *Indonesian Journal of English Language Teaching and Applied Linguistics*, 6(1), 13-26.

- Hammar Chiriac, E. (2014). Group work as an incentive for learning—students' experiences of group work. *Frontiers in psychology*, 5, 558.
- Hayward, C., Simpson, L., & Wood, L. (2004). Still left out in the cold: Problematising participatory research and development. *Sociologia Ruralis*, 44(1), 95-108.
- Joynes, C., Rossignoli, S., & Fenyiwa Amonoo-Kuofi, E. (2019). 21st century skills: Evidence of issues in definition, demand and delivery for development context (K4D helpdesk report). Brighton: Institute of Development Studies. Retrieved from <https://hdl.handle.net/20.500.12413/14674> (Accessed May 3, 2022).
- Junaidi, A., Wulandari, W., Arifin, S., Soetanto, H., Kusumawardani, S. S., Wastutiningsih, S. P., ... Jobih. (2020). *Buku panduan penyusunan kurikulum pendidikan tinggi di era industri 4.0 untuk mendukung merdeka belajar-kampus merdeka*. Jakarta: Direktorat Pembelajaran dan Kemahasiswaan, Direktorat Jenderal Pendidikan Tinggi, Kementerian Pendidikan dan Kebudayaan.
- Khan, H. A. L. I. (2007). *A needs analysis of Pakistani state boarding schools secondary level students for adoption of communicative language teaching*. (Unpublished Master's Dissertation). The School of Arts & Education of Middlesex University, London.
- Kim, H. H. (2013). Needs analysis for English for specific purpose course development for engineering students in Korea. *International Journal of Multimedia and Ubiquitous Engineering*, 8(6), 279-288.
- Mahbub, M. A. (2018). English teaching in vocational high school: a need analysis. *JEELS (Journal of English Education and Linguistics Studies)*, 5(2), 229-258.
- Miqawati, A. H., Wijayanti, F., & Ismailia, T. (2023). Adopting CEFR for English language Learning in Indonesia to support 21st Century Skills. In *Proceedings of the 3rd International Conference on Social Science, Humanity and Public Health, ICoSHIP 2022, 05-06 November 2022, Banyuwangi, East Java, Indonesia: ICoSHIP 2022* (p. 105). European Alliance for Innovation.
- O. Nyumba, T., Wilson, K., Derrick, C. J., & Mukherjee, N. (2018). The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods in Ecology and evolution*, 9(1), 20-32.
- Padmavathi, G. (2013). English teaching and learning in the digital era. *International Journal of Modern Engineering Research*, 3(1), 116-118.
- Parnawati, T. A., & Ulinuha, A. (2019). English at Higher Education Level: A need analysis. *Premise: Journal of English Education and Applied Linguistics*, 8(2), 226-240.
- Poedjiastutie, D., & Oliver, R. (2017). English learning needs of ESP learners: Exploring stakeholder perceptions at an Indonesian University. *Teflin Journal*, 28(1), 1-21.
- Pranoto, B. E., & Suprayogi, S. (2020). A need analysis of ESP for physical education students in Indonesia. *Premise: Journal of English Education*, 9(1), 94-110.
- Putri, A. A. F., Putri, A. F., Andringrum, H., Rofiah, S. K., & Gunawan, I. (2019). Teacher function in class: A literature review. In *5th International Conference on Education and Technology (ICET 2019)* (pp. 5-9). Atlantis Press.
- Rose, C., & Nicholl, M. J. (2021). *Revolusi belajar accelerated learning for the 21st century*. Bandung: Nuansa Cendekia.

- Rumeser, D., & Emsley, M. (2019). Can serious games improve project management decision making under complexity?. *Project Management Journal*, 50(1), 23-39.
- Sari, Y. I. H., Wienanda, W. K., & Nugraheni, N. E. (2020). Needs analysis to develop teaching materials at Vocational College UGM. *Jurnal Pendidikan Vokasi*, 10(2), 138-149.
- Septiana, I., Petrus, I., & Inderawati, R. (2020). Needs analysis-based English syllabus for computer science students of Bina Darma University. *English Review: Journal of English Education*, 8(2), 299-310.
- Septikasari, R., & Frasandy, R. N. (2018). Keterampilan 4C abad 21 dalam pembelajaran pendidikan dasar. *Tarbiyah Al-Awlad: Jurnal Kependidikan Islam Tingkat Dasar*, 8(2), 107-117.
- Siahaan, B. L. (2019). Effect of group work strategy to the speaking achievement of second semester students of English study program at University of HKBP Nommensen Pematangsiantar. *JETAFL (Journal of English Teaching as a Foreign Language)*, 5(1), 49-61.
- Subakti, H., Chamidah D., Siregar, R. S., Saputro., A. N. C., Recard, M., Nurtanto, M., ... Sitopu, J. W. (2021). *Metodologi penelitian pendidikan*. Medan: Yayasan Kita Menulis.
- Sugiyono, D. (2013). *Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D*. Bandung: Alfabeta
- The European Association for Quality Language Services. (2002). *The CEFR*. Cambridge: Cambridge University Press.
- West. R. (1994). Needs analysis in language teaching. *Language Teaching*, 27 (1), 1-9.
- Willems, M. (2016). *The CEFR as an effective tool for evaluation used by secondary school pupils*. (Thesis). Radboud University, Netherlands. Retrieved from <https://theses.ubn.ru.nl/server/api/core/bitstreams/32cf6728-96ae-4a64-a74b-1d84c73665e5/content>.
- Van Laar, E., Van Deursen, A. J., Van Dijk, J. A., & De Haan, J. (2017). The relation between 21st-century skills and digital skills: A systematic literature review. *Computers in human behavior*, 72, 577-588.