

Perception, motivation, and needs of students and lecturers towards Bookcreator-assisted Ethnopedagogy-based e-module in learning Indonesian as a foreign speaker

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Abstract: This study aims to examine the perceptions, motivations, and needs of both students and lecturers regarding the use of an ethnopedagogy-based module supported by the Book Creator application in teaching Indonesian as a Foreign Language (BIPA). A descriptive quantitative method was employed, involving 210 international BIPA students and 45 lecturers from various universities worldwide. Data were gathered using a Likert-scale questionnaire covering perception, intrinsic and extrinsic motivation, and learning needs, and analyzed through descriptive statistical techniques. Findings revealed that students expressed highly favorable perceptions of the module, with an average score of 4.7. Their intrinsic and extrinsic motivation also scored highly, averaging 4.8 and 4.7 respectively, indicating a strong desire to engage with the module. In terms of needs, students recorded a score of 4.8, highlighting the module's essential role in their learning process. Lecturers also gave high ratings, with an overall perception score of 4.6 and a module evaluation of 4.7. The study concludes that the module is both relevant and effective, strengthening language acquisition through integration with local cultural contexts. The implication is a clear call for broader adoption and development of similar culture- and technology-integrated modules to enhance the global quality of BIPA instruction.

Keywords: BIPA, Book creator, Ethnopedagogy, Motivation, Needs, Perception.

1. Introduction

Teaching Indonesian for Foreign Speakers (BIPA) has become one of the strategic efforts to introduce Indonesian culture and language to the global community. In the era of globalization and digitalization, the importance of technology-based language education is increasing, especially to reach foreign students from various cultural backgrounds. One of the innovations that can support BIPA learning is the development of ethnopedagogy-based e-modules that utilize technology such as the Book Creator application. This e-module is designed to provide an interactive, adaptive, and responsive learning experience to the needs of students [1].

Ethnopedagogy, as an approach that integrates local cultural values into the learning process, has been proven effective in building an emotional connection between learners and teaching materials [2]. This approach not only facilitates language comprehension but also introduces a deep cultural dimension, which is an important aspect of learning a foreign language. In the context of BIPA teaching, ethnopedagogy can connect foreign students with local Indonesian wisdom, enriching their understanding of Indonesian society and culture [3].

Foreign students often face various challenges in learning BIPA, including cultural adaptation, differences in learning systems, and diverse motivations. Motivation, both intrinsic and extrinsic, plays a crucial role in the success of language learning. According to Dörnyei [4] language learning

motivation is influenced by various factors such as personal goals, academic expectations, and the support of the learning environment. However, many studies show that students often lose motivation due to the lack of relevance of teaching materials to their needs and cultural background [5-8].

The use of technology in language learning has opened up opportunities to create more interactive and adaptive teaching materials. Apps like Book Creator allow educators to design e-modules that are engaging and tailored to the individual needs of students. Technology-based e-modules not only facilitate access to learning but also increase student engagement and motivation through interactive features such as multimedia, quizzes, and reflective notes [9-13].

This research focused on analyzing the perceptions, motivations, and needs of foreign students and lecturers towards the use of ethnopedagogy-based e-modules. This approach is important to ensure that the teaching materials developed are truly relevant and effective in supporting BIPA learning objectives. Previous studies have shown that students' needs are often not fully met due to a lack of understanding of their backgrounds and expectations [14]. In addition, lecturers' perception of new technology and learning methods is also a determining factor for the success of the implementation of e-modules in teaching [1].

The aims of the research are: (1) Identify the specific needs of foreign students related to ethnopedagogy-based content, features, and e-module design through quantitative and qualitative analysis. (2) Exploring the intrinsic and extrinsic motivational factors of foreign students that affect the success of BIPA learning with an approach that integrates technology and local culture. (3) Analyze the perception of BIPA lecturers on the effectiveness of the Book Creator application as a tool for developing teaching materials and the application of ethnopedagogy in supporting cross-cultural learning goals. (4) Combining quantitative findings in the form of statistical data and qualitative findings in the form of narrative insights to provide a holistic picture related to the experiences of students and lecturers in the use of innovative e-modules. The results of this study are expected to provide strategic recommendations for the development of technology-based teaching materials that are relevant, responsive, and support culture-based learning, as well as enrich the literature on international language education.

2. Literature Review

2.1. *Ethnopedagogy in Language Education in the Age of Technology*

Ethnopedagogy, which is rooted in the theory of culture-based education, promotes the integration of local cultural values in learning to enhance cross-cultural understanding. Gay [15] mentions that ethnopedagogy allows learners to understand the cultural context in the language being studied. Widodo, et al. [1] emphasized that the use of ethnopedagogy in language education helps build a deeper relationship between learners and teaching materials through reflection on social and cultural contexts. In BIPA learning, the application of ethnopedagogy is significant because foreign students can get to know the Indonesian cultural values inherent in the language.

The combination of ethnopedagogy and technology creates an inclusive and relevant approach to learning. Gay [2] argues that this approach helps students understand language as an integral part of culture, not just a communication tool. Technology-based approaches such as the use of e-modules also allow for interactive exploration of local cultural values, which can deepen students' understanding of the target language and culture [16]. In the context of BIPA, this approach not only improves the language competence of foreign students but also strengthens their relationship with Indonesian culture.

2.2. *Student Needs and Motivation in Learning a Foreign Language*

Needs analysis in language learning includes the identification of learning objectives, methods, and supporting elements that are relevant to learners [17]. In the context of BIPA, student needs include materials that support language mastery, cultural elements, and methods that facilitate social interaction in a new environment [18]. Research by Kim, et al. [5] shows that foreign students often

face challenges in understanding material that is not relevant to their cultural background, so a thorough needs analysis is essential.

In addition to needs, motivation is also a key factor in the success of learning a foreign language. [4] identified intrinsic and extrinsic motivation as the main drivers of language learning. Intrinsic motivation is related to personal pleasure and satisfaction in learning, while extrinsic motivation is often influenced by external factors, such as recognition or career opportunities. In BIPA learning, the motivation of foreign students can be influenced by their direct experience with Indonesian culture and the use of interactive learning technology [6]. Technologies such as interactive e-modules have been shown to increase learning motivation through personalized and connected learning experiences [10].

2.3. Perception of Students and Lecturers on E-Modules in Language Education

Perception of technology affects the effectiveness of its use in learning. Zhao [16] showed that students tend to be more involved in learning when the technology used is relevant and interactive. In the context of language learning, applications such as Book Creator allow the integration of multimedia elements to improve comprehension and engagement [19]. On the other hand, lecturers' perception of technology is influenced by their level of digital literacy as well as the support available from educational institutions [20].

Technology-based e-modules are learning innovations that provide flexibility, interactivity, and personalization [14]. In language learning, e-modules enable the delivery of more engaging material through the integration of text, audio, video, and interactive simulations [1]. With applications such as Book Creator, lecturers can develop materials that are responsive to student needs, accommodate different learning styles, and promote independent learning [19].

3. Research Methods

This study used a mixed-methods approach to obtain a more comprehensive understanding of the needs, motivations, and perceptions of foreign students and lecturers in learning Indonesian for Foreign Speakers (BIPA) with ethnopedagogy-based e-modules using the Book Creator application. This method integrates quantitative data to obtain a broad overview and qualitative data to deeply understand the context and user experience [21]. This approach allowed for triangulation between numerical data and narrative findings to improve the accuracy and depth of research results [22].

Table 1.

Student Data Sources Based on Country of Origin.

No	Country of Origin	Number of Students	Percentage (%)
1	Taiwan	47	23.2
2	China	45	21.0
3	Germany	40	19.0
4	United States	15	7.5
5	Morocco	15	7.5
6	Sudan	15	7.5
7	Japan	8	3.8
8	Thailand	5	2.4
9	South Korea	5	2.4
10	Australia	5	2.4
11	Costa Rica	5	2.2
12	Others (Europe, Africa, etc.)	4	1.9
Total		210	100.0

3.1. Data Collection

Data collection was carried out in two stages: quantitative and qualitative. Quantitative data was obtained through the distribution of questionnaires to 210 foreign students studying BIPA and 45

lecturers involved in BIPA teaching from the following countries. The following is a table of research data sources that include 210 BIPA foreign students from various countries:

The following table was the research of data sources that include 45 BIPA teachers from different countries:

Table 2.

Lecturer Data Sources Based on Country of Origin.

No	Country of Origin	Number of Lecturers	Percentage (%)
1	Indonesia	40	88.9
2	China	3	6.7
3	Germany	1	2.2
4	Amerika Serikat	1	2.2
Total		45	100.0

This questionnaire is designed to measure three main aspects: (1) learning needs, (2) learning motivation, and (3) perception of the use of ethnopedagogy-based e-modules. The 5-point Likert Scale is used to measure respondents regarding the extent to which they feel that the materials and media used support the learning process [23]. Qualitative data were obtained through semi-structured interviews with 30 students and 5 lecturers to explore their views on the effectiveness and relevance of e-modules in the cultural and ethnopedagogical context they faced.

3.2. Data Analysis

Quantitative data were analyzed using descriptive statistics to identify general patterns in the needs, motivations, and perceptions of students and lecturers. The ANOVA test will be used to test for differences in perception based on cultural background and level of experience using the technology. These results provide an idea of how much the difference between the groups is based on the variables studied. Qualitative analysis uses a thematic approach [24] performing coding to identify key themes related to the challenges and successes in using ethnopedagogy-based e-modules. These two analyses complement each other and will be combined to provide a more holistic understanding of the impact of the use of e-modules in BIPA learning.

3.3. Data Sources and Ethical Research

The main data sources in this study were international students who study BIPA from various countries and lecturers who teach BIPA courses. The respondents were selected by purposive sampling to ensure relevant representation in the context of teaching Indonesian to foreign speakers [25]. In terms of research ethics, this study adhered to internationally accepted principles of research ethics, as described by the American Psychological Association [26]. Each participant was given clear information about the purpose of the study, the methods to be used, and their right to stop participating at any time without any negative consequences. Furthermore, informed consent was obtained from all participants, and the data collected was kept confidential by removing personal identifiers and stored securely to maintain the privacy of the research participants.

Table 3.

Research Methods.

Aspects	Data Collection Methods	Analysis Methods	Data Source
Quantitative	Likert-based questionnaire to 200 students and 50 lecturers	Descriptive statistics, ANOVA test	BIPA students, lecturers
Qualitative	Semi-structured interviews, FGDs	Thematic analysis, Data codification	BIPA students, lecturers
Triangulation	Combination of quantitative and qualitative data	Integration of findings for validation of results	BIPA students, lecturers
Ethical Research	Informed consent, guarantee of data confidentiality	International ethics protocol	All participants

4. Research Results

4.1. Students' Need

The following table was the result of the analysis of student needs for ethnopedagogy-based e-modules using the Book Creator application in learning Indonesian for foreign speakers. This table is compiled based on the results of a questionnaire filled out by 210 students, with a score range of 1 to 5, where 1 means "Not needed," 5 means "Urgently needed," and other numbers indicate the level of need between the two.

Table 4.
Results of Students' Need Analysis.

No	Statement	Range	Meaning
1	I feel that e-modules can improve my understanding in learning Indonesian.	4.5	Urgently Needed
2	I know the Book Creator application. Using the Book Creator app makes it easier for me to understand Indonesian language learning materials.	4.3	Need
3	I need visual illustrations of Indonesian culture to help me understand the material.	4.6	Urgently Needed
4	E-modules that contain elements of Indonesian local culture will increase my interest in learning Indonesian.	4.7	Urgently Needed
5	I find the audio and video features in the e-module application very helpful in Indonesian pronunciation.	4.5	Urgently Needed
6	App-based modules are more effective than printed books for foreign language learning.	4.4	Need
7	I am interested in modules that teach values and customs from different regions in Indonesia.	4.8	Urgently Needed
8	E-modules should include interactive exercises related to local culture.	4.6	Urgently Needed
9	I feel there is a need for local culture to be explained as a context in each learning topic.	4.7	Urgently Needed
10	I need interactive quizzes in the e-module to test my understanding directly.	4.3	Urgently Needed
11	The application user-friendly akan meningkatkan minat saya dalam belajar Bahasa Indonesia.	4.5	Urgently Needed
12	I need project-based exercises involving Indonesian culture to deepen my understanding.	4.6	Urgently Needed
13	I feel that the local cultural information in the BIPA module can improve my understanding of Indonesian.	4.8	Urgently Needed
14	The Book Creator app-based BIPA module allows me to learn independently.	4.5	Urgently Needed
15	I feel there is a need for discussion or collaboration features in the module to enrich the learning experience.	4.4	Need
16	Explanations of local culture in easy-to-understand language and context are needed.	4.7	Urgently Needed
17	The ethnopedagogy-based e-module will help me understand Indonesian more deeply and contextually.	4.6	Urgently Needed
18	The use of audio-visual media in the BIPA module is very helpful in remembering Indonesian words and phrases.	4.5	Urgently Needed
19	I feel interested in using the Book Creator application which allows me to study the material independently.	4.3	Urgently Needed
20	I understand Indonesian better through e-modules that present material from local Indonesian culture.	4.7	Urgently Needed

This table showed the results of the analysis of the needs of foreign students for ethnopedagogy-based e-modules with the Book Creator application. The average score on each statement indicated the level of student need for certain features of the e-module. Most statements showed an average value between 4 and 5.

The above data was also supported by the results of interviews that show that students feel that elements such as visual illustrations, local cultural elements, audio-visual features, and interactive exercises are very important in helping them understand Indonesian better. Thus, the results of this questionnaire indicate that foreign students urgently need ethnopedagogy-based e-modules that integrate various elements of Indonesian culture and technology to facilitate the Indonesian learning process.

4.2. Student Perception

The following was a table of student perceptions of ethnopedagogy-based e-modules using the Book Creator application in Indonesian learning. These results were obtained from 210 students, with a score range of 1 to 5, where 1 means “Disagree,” 5 means “Strongly agree,” and other numbers indicate the level of approval.

Table 5.
Students' Perception Results.

No	Statement	Ranges	Meaning
1	I feel that ethnopedagogy-based e-modules can deepen my understanding of Indonesian culture.	4.6	Urgently Needed
2	The use of the Book Creator application makes learning Indonesian more interesting.	4.5	Need
3	I feel that the interactive features in Book Creator are very useful for learning Indonesian.	4.7	Urgently Needed
4	E-modules containing Indonesian local culture help me understand the context of Indonesian better.	4.8	Urgently Needed
5	I believe that learning with a local culture approach makes Indonesian more relevant to learn.	4.7	Urgently Needed
6	The use of e-modules helps me to be more independent in learning Indonesian.	4.5	Need
7	I find the Book Creator app easy to use and facilitates my learning process.	4.4	Need
8	The module with an ethnopedagogical approach motivates me to better understand Indonesian society and culture.	4.6	Urgently Needed
9	I feel that the cultural elements in the module make the Indonesian language material easier to remember.	4.7	Urgently Needed
10	E-modules that are digital-based make learning Indonesian more flexible and can be accessed at any time.	4.5	Need
11	I am interested in using the BIPA e-module which presents cultural information from various regions in Indonesia.	4.7	Urgently Needed
12	The audio and video features in the e-module make it easier for me to understand the correct pronunciation of Indonesian.	4.6	Urgently Needed
13	The use of the Book Creator application provides a more interactive and fun learning experience.	4.7	Urgently Needed
14	I feel that the explanation of local culture in the module enriches my understanding of Indonesian.	4.8	Urgently Needed
15	I feel that the Book Creator app makes it easy to learn independently at my own pace.	4.5	Need
16	Learning materials related to local culture make me more interested in learning Indonesian.	4.6	Urgently Needed
17	I feel happy learning Indonesian through e-modules that showcase Indonesia's cultural diversity.	4.8	Urgently Needed
18	I feel comfortable using the Book Creator app to learn Indonesian in a digital format.	4.6	Urgently Needed
19	Including local cultural elements in Indonesian language learning increases my interest in learning.	4.7	Urgently Needed
20	I feel more confident communicating in Indonesian after learning about the local culture presented	4.7	Urgently Needed

This table showed the results of students' perception of ethnopedagogy-based e-modules with the Book Creator application. The results obtained showed that most of the students agreed or strongly agreed with the existing statements, indicating that they felt the benefits of the ethnopedagogical approach in the e-module. A high average score (4 to 5) indicates that students feel a positive impact.

The data above was also supported by the results of interviews that show a very positive response from students about the importance of digital teaching materials, especially the Book Creator application. The students conveyed the importance of this application, especially related to their understanding of Indonesian culture, increased interest in learning, and the use of interactive features in the Book Creator application.

4.3. Student Motivation

The following was a table of student motivation results with a total of 210 respondents that show the average results of extrinsic motivation (average 4, Agree) and intrinsic motivation (average 5 and 4, Strongly Agree and Agree):

Table 6.
Students' Motivation.

No.	Extrinsic motivation	Range	Meaning
1	I am motivated to attend BIPA courses because of academic awards (Grades or certificates).	4.1	Agree
2	I attended BIPA courses because of the demands of my study programme or job.	4.2	Agree
3	I feel that BIPA courses can improve future career opportunities.	4.3	Agree
4	My family or friends encourage me to learn Indonesian through the BIPA programme.	4.0	Agree
5	The facilities provided by the BIPA programme motivate me to take this course.	4.1	Agree
6	I am motivated to attend BIPA courses because the lecturers provide good support.	4.5	Agree
7	The BIPA programme provides opportunities to meet friends from various countries, so I am enthusiastic.	4.6	Strongly Agree
8	I attended BIPA courses because the institution provided subsidies or incentives.	4.1	Agree
9	I am motivated to learn because I feel that BIPA courses are useful for my study or research.	4.2	Agree
10	The flexible schedule and access to BIPA materials motivate me to actively participate.	4.4	Agree

Table 6. Continue....

No.	Intrinsic motivation	Range	Meaning
1	I enjoy learning Indonesian because I like the learning process.	5.0	Strongly Agree
2	I attend BIPA courses because I want to master Indonesian without coercion from other parties.	5.0	Strongly Agree
3	I learnt Indonesian because I was interested in the language system and its structure.	5.0	Strongly Agree
4	I feel satisfied when I successfully complete the tasks in BIPA lectures.	4.8	Strongly Agree
5	I enjoy the challenge of learning Indonesian vocabulary and grammar.	4.9	Strongly Agree
6	I study Indonesian in BIPA courses because I feel it is an important part of my personal development.	4.9	Strongly Agree
7	I am motivated to take BIPA courses because I want to understand more about Indonesian culture and customs.	5.0	Strongly Agree
8	I feel happy when I can speak or write Indonesian well.	4.8	Strongly Agree
9	I study Indonesian because I enjoy getting to know a new language, not because of academic obligations.	5.0	Strongly Agree
10	I feel that learning Indonesian in the BIPA programme is an experience that gives me personal satisfaction.	5.0	Strongly Agree

Based on table, the results of this motivation finding showed that the average score of 4 (Agree) shows that external factors play a considerable role in encouraging them to learn and extrinsic with an

average score of 5 and 4 (Strongly Agree and Agree). This shows that students are motivated to attend BIPA lectures because they want to understand more deeply the culture and habits of the Indonesian people while also being able to increase their career opportunities in the future.

This data was also supported by the results of interviews; students have the motivation to take BIPA lectures, which are driven by external factors such as academic awards, career opportunities, support from family or friends, and facilities provided by the BIPA program. Meanwhile, the intrinsic motivation of students was very high, with many students feeling happy and satisfied in learning Indonesian, due to a personal desire to master the language and understand Indonesian culture. Showed that they were highly motivated by internal factors, such as interest in Indonesian language and culture as well as personal satisfaction in the learning process.

4.4. Lecturers' Perception

The following table illustrates the results of lecturers' perceptions of the need for ethnopedagogy-based digital teaching materials in BIPA learning. In this table, there were 10 statements with the average results of extrinsic motivation being 4 (Agree) and intrinsic motivation being 5 and 4 (Strongly Agree and Agree) from 45 lecturer respondents.

Table 7.
Lecturer Perception.

No.	Statement	Range	Meaning
1	I am interested in learning Indonesian through local culture and traditions.	4.3	Agree
2	I feel I understand Indonesian better when learning through the context of Indonesian culture.	4.5	Strongly Agree
3	Ethnopedagogy-based BIPA learning makes it easier for me to understand the daily life of Indonesian people.	4.4	Agree
4	I need more learning materials related to local traditions such as customs, music, dances and ceremonies.	4.2	Agree
5	I find the use of Indonesian folklore, legends and myths very helpful in learning the language.	4.6	Strongly Agree
6	Indonesian local culture-based learning such as videos, folk songs and traditional games are important in my learning process.	4.5	Strongly Agree
7	I find it easier to learn new vocabulary through real cultural contexts (e.g. through food, traditional clothing, or social activities).	4.3	Agree
8	I would like BIPA learning to connect the material more often with the diversity of regional cultures in Indonesia.	4.4	Agree
9	Ethnopedagogy-based learning improves my ability to interact with local communities in Indonesia.	4.5	Strongly Agree
10	I need more cultural practice-based learning activities such as participating in traditional activities or cultural festivals.	4.4	Agree

Based on table, it reflects a very high score with a range of 4.2 to 4.7. This showed that the lecturer's perception that the integration of ethnopedagogy in BIPA learning, especially by introducing local Indonesian culture, is needed and has a positive influence on the learning process.

The above data was also supported by the results of interviews with teachers, which show that local culture-based learning, such as folklore, music, and dance, received a high positive response. This also indicates that this material can make it easier for foreign students to associate the language with a real cultural context.

4.5. Lecturer Needs

The following was a table of the results of lecturers' needs related to ethnopedagogy-based digital teaching materials in BIPA learning with a total of 45 respondents. Based on the questionnaire given, the results showed that most lecturers felt that they felt a great need (score 5) or needed (score 4) various elements that support ethnopedagogy-based learning.

Table 8.
Lecturer Needs.

No	Statetements	Range	Meaning
1	I understand the concept of ethnopedagogy in BIPA teaching.	4	4
2	The ethnopedagogical approach is important to apply in BIPA teaching to introduce Indonesian local culture to foreign students.	5	5
3	Ethnopedagogy-based BIPA learning is effective in integrating language and culture learning.	5	5
4	I feel the need to improve my skills in applying ethnopedagogy through digital teaching materials.	5	5
5	I need digital resources (e-books, videos, apps) based on local culture to help teach ethnopedagogy-based BIPA.	5	5
6	Ethnopedagogical teaching is more interesting and relevant when using digital technology such as culture-based learning videos or interactive apps.	4	4
7	I need digital materials that showcase various local cultures in Indonesia so that students can better understand the language context.	5	5
8	Digital technologies, such as e-learning applications and interactive platforms, help convey Indonesian culture to students in more depth.	5	5
9	I feel the need to collaborate with technology developers to create digital teaching materials based on local culture.	4	4
10	Digital teaching materials that integrate local cultural aspects with BIPA teaching help students understand the language better.	5	5
Total Score			4.8

Based on table, the results of this questionnaire showed that lecturers urgently need an ethnopedagogical approach in BIPA learning. The high average score (average 4.8) confirms that almost all lecturers feel it is important to integrate aspects of local Indonesian culture in language teaching, as well as the use of digital technology that supports these methods.

The data above was also supported by the results of interviews related to lecturers' expectations for ethnopedagogy-based BIPA learning. Lecturers feel that they need to have the skills to use digital teaching materials based on local culture to improve students' understanding of Indonesian language and culture. In addition, collaboration with technology developers is considered important to create more effective teaching materials.

5. Discussion

Learning Indonesian for Foreign Speakers (BIPA) in various countries is growing, in line with the increasing global interest in learning Indonesian as an international language. This is especially important in the context of BIPA, because language is not just a grammatical rule, but also a way of communicating in a particular culture [27, 28]. The use of apps like Book Creator allows for more dynamic teaching, combining text, images, audio, and video to introduce aspects of Indonesian culture, such as regional music, dance, and folklore, which strongly supports language learning.

Research by Liu, et al. [29] showed that the use of multimedia in language learning increases student engagement and accelerates their understanding of the language and culture being taught. Diana and Purnomo [30] found that cultural integration in teaching materials can improve language comprehension and increase students' intrinsic motivation. With Book Creator, lecturers can create materials that are interactive and easily accessible to students around the world, increasing the flexibility and affordability of learning [31]. Meanwhile, Dewi [32] shows that ethnopedagogy-based teaching materials equipped with local cultural elements can enrich students' learning experiences, make learning more contextual, and make it easier for them to interact with Indonesian society.

The needs of foreign students in learning BIPA cover various aspects, ranging from understanding the language itself to understanding the related Indonesian culture. According to Coyle [33] effective learning involves not only teaching language but also cultural context, which makes learning more meaningful and relevant. Based on the results of this study, foreign students showed that there is a huge

need for learning materials that combine language with local culture, as reflected in ethnopedagogy-based e-modules. Students feel that to truly understand Indonesian, they must also understand the cultural values underlying the language [34, 35] stated that language teaching that ignores cultural context can lead to difficulties in intercultural communication. Therefore, e-modules that present Indonesian cultural content in every learning not only teach students about the Indonesian language but also about how to use the language in relevant social contexts.

Motivation in BIPA learning also plays an important role for students. These motivations are divided into two categories: extrinsic and intrinsic motivations. Extrinsic motivation includes external factors such as academic awards, career opportunities, and incentives from educational institutions. Dörnyei [36] emphasized that extrinsic motivation plays a major role in encouraging students to attend BIPA lectures, especially among students who see Indonesian as a skill that can improve their career or academic opportunities. The study found that the majority of foreign students are interested in learning Indonesian for extrinsic reasons, such as getting a certificate or preparing for study or work in Indonesia. On the contrary, intrinsic motivation is related to personal satisfaction obtained from the learning process itself. Reinders [37] revealed that intrinsic motivation is stronger and longer-lasting because students learn because they are genuinely interested in the language and culture they are learning. Based on the results of this survey, many students admitted that they enjoyed the challenges of learning Indonesian and felt satisfied when they managed to understand aspects of Indonesian culture. They consider this learning not only as an academic obligation but also as a valuable personal experience.

Regarding perceptions, most of the students who participated in this study gave a positive perception of the use of ethnopedagogy-based e-modules. They feel that the material presented in digital format through the Book Creator application is very helpful in understanding Indonesian cultural concepts. Multimedia features, such as images, videos, and sounds, allow students to better understand and remember learning materials in a more engaging and interactive way. Godwin-Jones [38] noted that the use of technology in language learning can increase student engagement, and this study shows that students are more engaged and interested in BIPA learning, which is presented in a multimodal manner. However, there are some differences in perception between students and lecturers regarding the effectiveness of this e-module. Lecturers tend to focus more on the suitability of e-modules with the curriculum and long-term learning goals. They considered this e-module to be very helpful in creating a more flexible learning experience that can be accessed at any time, but they also noted the need for further adjustments to increase student engagement outside the classroom [39]. Meanwhile, students feel that the cultural elements in the module make the learning material more vivid and memorable. This is in line with the findings reported by Coyle [33] which states that culture should be an integral part of language learning, not just a separate supplement.

In addition, lecturers also play an important role in the successful implementation of this e-module. They need to be provided with further training on the use of technology in teaching and how to integrate this technology in a way that is appropriate to the curriculum and learning objectives. Schneider and Kramsch [35] emphasized the importance of faculty involvement in the application of technology to ensure that technology is used in a way that supports meaningful learning. The proposed e-module will provide a more engaging and comprehensive learning experience, incorporating multimedia elements that support language learning in the digital world. Therefore, the further. The development of this e-module was highly encouraged, especially to improve the accessibility and flexibility of BIPA learning around the world.

6. Conclusion

This study showed that ethnopedagogy-based e-modules with the help of the Book Creator application have great potential in improving Indonesian learning for foreign speakers. The results of this study showed that ethnopedagogy-based modules assisted by the Book Creator application are very relevant and effective in supporting Indonesian learning for foreign speakers (BIPA). This was reflected

in the perception of students who, on average, achieved a score of 4.7, showing a high appreciation for the module in terms of its relevance and benefits. Student motivation, both intrinsic (4.8 on average) and extrinsic (4.7 on average), indicates a very strong enthusiasm for BIPA learning with an ethnopedagogical approach. In addition, the aspect of student needs for modules received the highest score with an average of 4.8, emphasizing the importance of the presence of modules based on local cultural values to support their learning process. From the lecturer's perspective, the need for the module is also considered high with an average score of 4.7, while the lecturer's perception is at 4.6, showing positive support for the development and implementation of this module. These findings underscore that lecturers not only see this module as a relevant teaching tool but also as a means to improve the effectiveness of BIPA learning.

The main conclusion of this study was the need for further development and wider application of similar modules in various educational institutions offering BIPA programs. This approach can improve the quality of learning by integrating modern technology and local cultural elements, which are relevant to supporting the diversity of international student backgrounds. This also makes a significant contribution to strengthening Indonesian cultural identity in language learning.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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