



E-Module Speaking Based Gamification to Improve Students' Intercultural Understanding

Hanifah*, Elsa Ernawati Nainggolan

English Language Education, Universitas Maritim Raja Ali Haji, Tanjungpinang

*Corresponding Author. Email: Hanifah@Umrah.ac.id

Abstract: This study aims to develop a "gamified" e-module so that students' intercultural understanding improves in the Speaking for General Communication course. The subjects of this study were students in the second semester of the English Education study program at Universitas Maritim Raja Haji. This research used the Research and Development method with Thiagarajan's 4D model, which had been modified to 3D (define, design, and development). This research instrument used interviews, student questionnaires, and validation forms. The data analysis techniques of this research were descriptive analysis and descriptive statistics. Based on the findings of the first stage, it was determined that an e-module for the speaking course was required because there were no learning resources developed specifically for online classes and the existing learning source was insufficient for the student's current needs. Based on the analysis results, e-module topics, language features, and learning objectives were determined. In the second stage, the e-modulus was designed with four components: cover, introduction, content section, and closing section. In the final stage, the e-module validation results showed that the speaking e-module for general communication was valid and could be used in an online class.

Article History

Received: 13-10-2022

Revised: 25-11-2022

Accepted: 14-12-2022

Published: 17-01-2023

Key Words:

E-Module; Speaking;
Gamification;
Intercultural
Understanding.

How to Cite: Hanifah, H., & Ninggolan, E. (2023). E-Module Speaking Based Gamification to Improve Students' Intercultural Understanding. *Jurnal Paedagogy*, 10(1), 20-31. doi:<https://doi.org/10.33394/jp.v10i1.6399>



<https://doi.org/10.33394/jp.v10i1.6399>

This is an open-access article under the [CC-BY-SA License](https://creativecommons.org/licenses/by-sa/4.0/).



Introduction

Changes in the learning process happen rapidly to keep up with the requirements of the circumstances in this digital age. One of those changes is the learning process, which occasionally requires online or hybrid learning. Teachers and students only meet in person for classes when learning online. Instead, they communicate digitally from their homes through computers and smartphones (Park & Kim, 2021). Due to this, educators must adapt their instructional materials so that they may be used to engage learners in online learning. Learning intercultural communication skills is essential for foreign language learners, given the expansive possibilities of global contact unrestricted by distance or speaker background. Due to this, teachers are now required to provide their pupils with intercultural communication learning resources.

In the Universitas Maritim Raja Ali Haji (UMRAH) English language study program, one of the language courses is English for General Communication. This course is a compulsory and crucial subject as it provides basic communication skills. Upon completion of the course, it is expected that the students will be able to communicate in informal or formal English and actively practice daily conversations. However, the learning sources for this course need to be developed. There are several reasons for it; the first reason; there is no electronic book, handout, module, or worksheet available. It becomes an obstacle for the students to follow the learning activities, especially in an online class. The second reason is



following integrating intercultural understanding in speaking material. It is essential to insert intercultural values to strengthen students' English proficiency and positive attitudes in line with their local cultural affiliations. Since attending an online class is probably less exciting than attending an offline class, another reason to develop the learning sources is the significance of providing engaging learning materials to boost students' enthusiasm for speaking. Media that students enjoy, such as games, can be the answer.

The existence of appropriate sources in teaching speaking, especially English, for foreign language learners is critical for achieving the educator's goals. Integrated learning resources with cross-cultural understanding are the perfect combination to meet learners' needs for adaptability and attitude in communication in the global community (Baker, 2012). Intercultural understanding means learners can communicate appropriately in the target language after recognizing both the target and source cultures. Understanding the target language culture will help students recognize, interpret, and react to interlocutors or avoid certain situations that tend to cause misunderstandings due to cultural differences (Sunardi Y, 2019). It also helps students to use the target language more accurately and fluently in communication (Maulana, 2020). On the other hand, understanding the local culture will help students realize the linguistic underpinnings of their artistic side. As a result, the communication skills they possess will be broader and wiser.

In this age of technology, the media used in the learning process prescribes students' learning motivation. The more accessible the media are to the students, the more motivated they are to study (Majuri, Koivisto, & Hamari, 2018), (Saleem, Noori, & Ozdamli, 2022). Games are one of those learning tools that can be used without and with technology. It is frequently used in the learning process due to its effectiveness in increasing students' motivation to learn (Jusuf, 2016) and enhancing students' creativity and retention (Caponetto, Earp, & Ott, 2014). The term "gamification" is used in educational field to represent the utilization of game design in a non-game context (Deterding, Khaled, Nacke, & Dixon, 2011). It is regarded as the phenomenon of presenting various experiences similar to that of playing games at the time of learning (Hamari, Koivisto, & Sarsa, 2014), (Werbach, 2014). Or it is also defined as the modification of learning design refers to the games design (Dichev & Dicheva, 2017).

This study aims to create a "gamification"-based e-module. It can improve students' intercultural understanding in the Speaking for General Communication course. Due to the absence of e-books, handouts, modules, or worksheets for this course, it was crucial to conduct this research. It makes it difficult for students to engage in educational activities, particularly in online classrooms. It is then essential to incorporate intercultural values to reinforce students' English skills and positive attitudes in line with their local cultural affiliations. Therefore, it is important to develop student learning resources, one of which is to develop "gamification" based e-modules that can be used as an exciting learning media to increase students' interest in speaking.

Research Method

This study was a modified 4-D model developed by Thiagarajan and Semmel and consisted of four steps: define, design, development, and dissemination. The development step used in this study was modified and reached only a limited testing (development) step (Noto, 2014).



Research Procedures

Define

Define was the first step to establishing the terms of learning requirements. This step has five stages: front-end analysis, student analysis, concept analysis, task analysis, and specifications of the learning objectives. The first stage, front-end analysis, was carried out to determine the fundamental problems or issues that would be solved in the development of the e-module. The front-end analysis step as a preliminary study was carried out by conducting an unstructured interview with an English lecturer at an English language study program who taught English for General Communication. The second stage, student analysis, aimed to determine the needs of the students regarding the e-module. In collecting the data, the students needed an analysis questionnaire as the research instrument was used (Kho, Pradana, Raden, & Lampung, 2019).

Table 1. The Blueprint of Need Analysis Questionnaire

Aspect	Indicator	Question Number
Present Situation Analysis	Mention the important of the course	1,2
	Mention the opinion about the media used	3,4
Learning Situation Analysis	Mention the opinion about intercultural topic	6,8,9
Target Situation Analysis	Mention the preferred learning activities	5
	Mention the preferred learning content	7,10

The third stage, concept analysis, was conducted to select, detail, and systematically define the relevant concept to be taught or presented in the e-module. It was carried out by analyzing characteristics, syllabi, and lesson plans in the Speaking for General Communication course. The fourth stage, task analysis, aimed at identifying the main activities needed in each unit and analyzing the appropriate framework for each sub-topic in the e-module. In the last stage, the learning objectives specification relied on the concept analysis and task analysis results.

Design

The second phase, designing the e-module, was created by creating speaking material and activities or exercises based on the syllabus and lesson plan. Other components of the e-module consist of a cover, a list of content, related audio or video, and related games.

Development

The last step of this research was the development step. This step aims to validate the product's initial design through expert appraisal and testing of the product in the field. The product was validated by four material experts and two media experts.

Table 2. The Blueprint of Material Expert Validation

Aspect	Indicator	Question Number
Content feasibility	Content scope	1,2,3,4,5
	Content accuracy	6,7,8,9,10,11,12
	Content relevancy	13,14,15
	Encourage communication skill	16,17,18,19,20
	Improve intercultural understanding	21,22,23,24,25



Presentation Feasibility	Presentation technique	26,27,28
	Presentation supporting elements	29,30,31
Language Feasibility	Suitability of competence	32,33,
	Effectiveness of the language used	34,35,36

Tabel 3. The Blueprint of Need Analysis Questionnaire

Aspect	Indicator	Question Number
The appearance of the product	ISO standard	1,2
Cover format	Layout	3,4,5,6
	The letter used	
	Illustration	11,12
Content format	Layout of the content	13,14,15,16,17,18,19, 20,21,22
	Typographic of the content	23,24,25,26
	Illustration of the content	27,28,29,30

The subjects in this study were all parties involved in designing and developing the e-module speaking. It is based on gamification, which was done to improve students' intercultural understanding. There were two English lectures as a material validator, two learning media lecturers as media validators, and a speaking lecture in the English Education Study Program that teaches speaking for a general communication course. Other participants were 40 students in Universitas Maritim Raja Ali Haji (UMRAH), an English language study program that took English for General Communication in semester two and consisted of 15 male and 25 female students.

In this study, data were analyzed using descriptive analysis and descriptive statistics. Descriptive analysis was used to analyze qualitative data from interviews, student questionnaires, and validation forms. Descriptive statistics were used to analyze data from student responses. The steps in descriptive analysis data were data condensation, data displaying, drawing, and verifying conclusions (Daniel & Harland, 2018). The following is the formula for descriptive statistic:

$$p = \frac{f}{n} \cdot 100\%$$

Where:

F = Frequency

N = Number of Cases

P = Percentage

The data will be categorized using percentage interpretation as follow (Habibah, 2019);

- 76% - 100% = Very Valid
- 51% - 75% = Valid
- 26% - 50% = Not Valid Enough
- 0% - 25% = Invalid

Results and Discussion

Define

Font end analysis

The front-end analysis step was carried out by conducting an unstructured interview with a lecturer to determine the basic speaking problem for a general communication course. Through the unstructured interview, the English teacher said that the speaking material used



in the class was a printed book, and there was no learning material developed. The lecturer explained that the online and offline classes used the same book. It infers that online and offline classes' learning designs or learning activities are the same since both classes use the same book source. After analyzing the sourcebook entitled *Survival English*, published in 1982, it was discovered that the book does not offer a variety of activities and that the information needs to be updated if the concept in the current era of global communication is considered.

Developing an e-module is one of the solutions to solve the problem since an e-module is an interesting learning source that can be used in offline classes and online classes (Marzuqi & Sihkabuden, 2016). E-module helps students to learn more effectively due to the design of the e-module can be developed in line with the specific learning objective and media used in an online class (Fitriani, Amelia, & Marianingsih, 2017). Moreover, e-module provides many components that printed books do not offer, such as animations, audio, videos, and games to motivate the students to be involved in the learning process (Komikesari et al., 2020).

Students Analysis

From the survey, it was found that most students (92,5%) disagreed with the statement that the speaking book used was interesting. Meanwhile, almost all students agreed (97.5%) that intercultural competencies are essential when communicating, but they considered that the available speaking books needed to provide an understanding of these competencies (95.3%). Integrating intercultural material into language learning sources is essential to help students master the target language quickly but not forget to preserve their first language values (Lwin, 2016); (Maulana, 2020). The existence of intercultural material in learning sources sgives students opportunities to broaden their communication skills (Baker, 2012). The students can compare the target language and the source language from the intercultural concept in their learning sources. Then, it helps them to gain intercultural understanding.

Concept analysis

In this stage, the syllabus and speaking lesson plans for the general communication course were analyzed, and the language functions included in the e-module were determined. The appropriate intercultural topics for each chapter were chosen from the source language (Riau Islands) culture and the target language point of view. The language functions and topics used as the basis for developing the e-module are as follows:

Table 4. The Language Functions and Topics for E-Module

No	Language Function	Topic
1	Congratulating and Complimenting	Dressing Custom
2	Thankfulness, Gratitude, and appreciation	Heroes
3	Comparing and Contrasting	Culinary
4	Giving suggestion and offer	Games
5	Giving opinion, agree or disagree with an opinion	Celebration

Specification of learning objectives

At this stage, the learning objectives were determined based on the fond-end analysis, student analyses, and previous content analysis. The learning objectives were adjusted to improve students' speaking skills for basic communication in daily settings. The learning



objectives were classified after the topic chosen. The topics and learning objectives can be seen in Table 5 below:

Table 5. The Learning Objectives for the E-Module

No	Topic	Learning Objectives
1	Dressing Custom	<ol style="list-style-type: none"> 1. The Students are able to identify expression of congratulating and complimenting 2. The Students are able to use expression of congratulating and complimenting 3. The students are able to distinguish dressing custom in source culture (Kepulauan Riau) and target culture
2	Heroes	<ol style="list-style-type: none"> 1. The students are able to use expression of thankfulness, gratitude and appreciation. 2. The students are able to describe Kepulauan Riau Heroes. 3. The students are able to describe heroes in target culture.
3	Culinary	<ol style="list-style-type: none"> 1. The students are able to use expression of Comparing and Contrasting things 2. The students are able to describe Kepulauan Riau Culinary 3. The students are able to describe Culinary in target culture
4	Games	<ol style="list-style-type: none"> 1. The students are able to use expression of Giving suggestion and offer 2. The students are able to describe traditional games in Kepulauan Riau 3. The students are able to describe Games in target culture
5	Celebration	<ol style="list-style-type: none"> 1. The students are able to use expression of giving opinion, agree or disagree with an opinion 2. The students are able to describe about celebration in Kepulauan Riau 3. The students are able to describe about celebration in target culture

Design

In this stage, the framework of the e-module was developed. It consisted of a cover, introductory section, content, and closing section. The concept of gamification can be seen through the design of the e- module since many parts of the e- module provide students with enjoyable, challenging, and appealing activities (Chia & Hung, 2018). Each chapter in the e- module has an online game. It can be played by the students in class or at home. The inserted online games are supposed to assist students in participating more in the learning proses (Xiong, Pan, & Qiao, 2017); (Urh, Vukovic, Jereb, & Pintar, 2015). The idea is in line with (Caponetto et al., 2014) who stated that games enhance students' creativity and retention. The design of each section can be seen as follows:

Cover

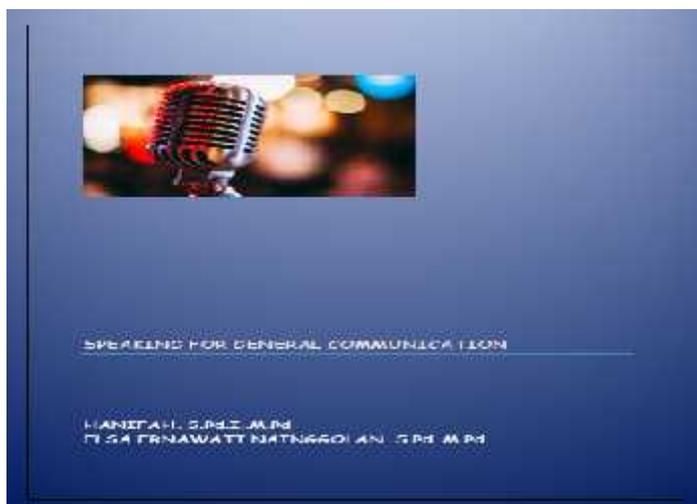


Figure 1. E-Module Cover

Introductory Section

TABLE OF CONTENTS	
PREFACE	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	iv
CHAPTER I. What a Beautiful Dress	1
CHAPTER II. Let's Appreciate our Heroes	13
CHAPTER III. Enjoying on Dining Table	28
CHAPTER IV. Let's Play a Game	36
CHAPTER V. What Do You Think About Celebration?	47
REFLECTION	68
ABOUT WRITERS	99

Figure 2. Topic of E-Module

Content

The content section consists of five chapters of material where each chapter is presented in sequence: learning objectives, warmer, language functions, speaking activities 1 (dialogue), speaking activities 2 (cases/problem solving), and games. The warmer section is a section that introduces students to the topic. The exercises in the warmer section are straightforward, such as vocabulary exercises. The second part is language function, which describes linguistic material crucial for helping the students express their ideas in speaking. The third part is speaking activity one, which presents audio and video of a conversation designed related to the language function and the topic of dialogue related to the Riau Islands' culture. The next is activity 2, which presents intercultural cases that the students will solve. The cases provided are related to the source and target culture, so the students need to compare both cultures to solve the cases. Then, in the end, there are online and offline games related to the topic or the language function.



CHAPTER 3

DIVERSITY ON DINING TABLE



Copyright © 2023

Language Functions: Comparing and Contrasting

Learning Objectives:

1. The students are able to use explanation of Comparing and Contrasting things.
2. The students are able to describe English and Indonesian Culinary.
3. The students are able to describe Culinary in target culture.

WARMER

Before we start our discussion, let's confirm these words on the box below. Once you have found a word, give mention in our class! Do it in pairs.

Words to find:

Spaghetti	skull	although	both
ice tea	Candulak	similarly	either
Pizza	London	But	too
Hamburger	Earl	however	also

O	E	A	L	T	H	O	U	G	H	F	D	U	K	O	E	S	D	L	O	R	L		
O	O	I	D	K	O	G	E	R	B	H	O	W	E	N	E	K	Q	S	I	Z	Z	A	
S	A	N	O	S	H	R	H	S	E	L	O	T	I	A	N	H	H	O	H	K	E	D	K
S	P	A	O	H	B	T	T	I	S	T	H	T	F	S	T	H	H	M	H	H	A	N	
A	T	A	L	I	G	O	O	H	V	U	O	H	I	G	D	E	K	T	C	A	H	E	
K	D	U	G	H	A	D	D	I	A	B	S	I	V	I	D	I	S	I	T	H	A	N	
M	I	F	B	H	Z	N	V	L	H	I	K	D	M	R	A	G	E	L	I	C	H	E	
A	P	F	I	Z	Y	B	H	A	M	H	E	R	S	D	S	D	H	S	T	A	P	T	
R	E	O	N	A	A	W	K	B	X	A	M	D	O	L	I	A	L	E	Y	T	I	H	
E	E	O	I	F	Q	A	L	S	O	M	E	K	L	B	X	D	A	H	W	I			
S	K	S	L	M	E	T	Y	N	S	O	P	S	O	A	S	K	O	R	E	I	N		
P	D	S	W	C	A	T	P	M	N	C	F	S	C	A	T	H	E	E	K	E	T		

36 | Diversity on Dining Table

LANGUAGE FUNCTION

We can increase our understanding and learn more about two things by understanding the similarities and differences between both of them. Usually, this process involves analysis. We have to compare the specific parts as well as the whole. Comparison may also be a beginning of evaluation. For example, by comparing the taste of a local culinary and culinary from abroad, we can decide which is more suitable to our taste.

SOCIAL FUNCTION

To compare and contrast between different and similar things. Use comparing and contrasting between local and target cultural culinary.

LANGUAGE FEATURES

- Using comparison words to compare similar culinary.
- Using contrast words to contrast different culinary.

BREAKING ACTIVITIES

ACTIVITY

Watch the video and take your turn!

Watch the video by clicking the link below and take a look at the script. Practice the conversation and find out which words are suitable that show compare and contrast.

<https://youtu.be/8L3t3a>

Ego: Hello, how are you?
Both: I'm fine, thank you. How about you?
Ego: I'm fine too.
Ego: Did I meet you before from language school?
Both: Yes, that's right.
Ego: What kind of snacks did you eat at your school level? Since we are from the same culture, I'm going to guess you love "right" Indonesian.
Both: Actually, yes, we do.
Ego: So, that's your kind of cookies called *Beras*. It looks like *Ames* but smaller and the color is dark brown. It looks sweet and I think it really matches it. Do you like drinking coffee as well?
Both: Well, yes! I will bring you some later. But, how about your food usually? You are from Texas, right?
Ego: Yes, I'm from *Dallas* city, and at my place, I love snacks called *Kris* being *Break*. I compare with *Beras* because, being *Break* is more sugar like small *chocolate* candies.
Both: How does it taste like?
Ego: Similar with *Beras* because, they're sweet and also matches if we eat it while drinking coffee as well.

37 | Diversity on Dining Table

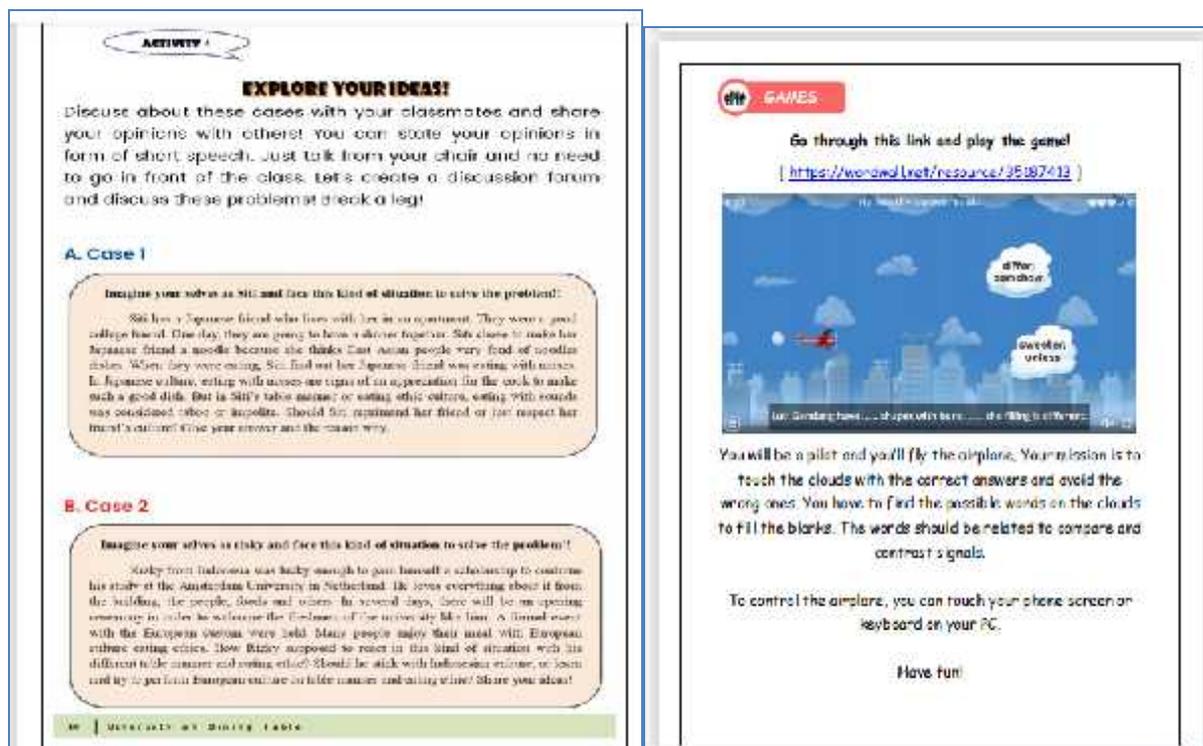


Figure 3. Content of E-Module

Closing section

The closing section consists of a list of references about the author and a glossary. The reference list contains the resources used in the materials or exercises presented in the e-module. The author explains a brief history of the writes of the e-module, and the glossary is the part to help students find the meaning of certain words or terms contained in the e-module.

Development

In this stage, the e-module was validated by the material and media experts. The following is the result of the material validations.

Table 6. The Result of Material Expert Validation

Aspect	Indicator	Percentage	Category
Content feasibility	Content scope	97,5%	Very Valid
	Content accuracy	98,2%	Very Valid
	Content relevancy	95,8%	Very Valid
	Encourage communication skill	100%	Very Valid
	Improve intercultural understanding	100%	Very Valid
Presentation Feasibility	Presentation technique	91,6%	Very Valid
	Presentation supporting elements	87,5%	Very Valid
Language Feasibility	Suitability of competence	97,2 %	Very Valid
	Effectiveness of the language used	87,5 %	Very Valid

Table 6 categorizes the e-module as very valid for all aspects. It shows that the speaking e-module for general communication is suitable for teaching material in terms of content feasibility, presentation feasibility, and language feasibility. Although the e-module is categorized as very valid, there are several suggestions given by the validator, which are



summarized as follows: (1) an instruction need to revise since it does not match the activity (2) some additions to support the material presentations are needed (3) some sentences have to change to be effective.

Table 7. The Result of media expert validation

Aspect	Indicator	Percentage	Category
The appearance of the product	ISO standard	100%	Very Valid
Cover format	Layout	96,9 %	Very Valid
	The letter used	96,9 %	Very Valid
	Illustration	87,5 %	Very Valid
Content format	Layout of the content	96,2 %	Very Valid
	Typographic of the content	84,37%	Very Valid
	Illustration of the content	100%	Very Valid

In Table 7, the module can be used as teaching material from all aspects. Even though the category is very valid, there are some inputs from the validator to improve the module representation. The suggestions given by the validator are summarized as follows: (1) revise some typos and pictures layout, (2) add a variety of letters to make it more interesting, (3) pay attention to the color harmony in the cover and content.

According to the research, it was discovered that the books used in the learning processes in offline and online classes were identical because the two types of classes have the same book sources. The books also did not provide a variety of activities, and the information needed to be updated in the current era of global communication. Therefore, based on the analysis conducted, it appears that developing e-modules based on "gamification" has a positive effect because these e-modules can be used as interesting learning media for students. Gamification, on the other hand, aims to improve user experience, motivation, and engagement by applying game dynamics, game thinking, and game concepts to non-game systems (Strmeki et al., 2016). Meanwhile, the content inserted in intercultural material provides the students an opportunity to explore the tare modules that can support the learning process due to their high usability (Nisa, Wahyu, & Putra, 2020).

Based on the result of material experts, the design of the e-module is beneficial to help students communicate well in the intercultural context. The activities provided in the e-module, namely discussion, dialog, problem-solving, and games, support the main function of a speaking e-module, which is to help students practice their speaking ability in various interesting ways (Simon, 2021). The activities in the e-module are designed based on specific communicative purposes. The first activity is discussion, which gives the students opportunities to share their opinions and ask questions. The second activity is dialog, purposed at making the students participate by completing the dialog in the video or audio interactively. The third activity, problem-solving, required the students to critically compare the source's culture and target culture to increase their intercultural understanding. Another activity is games that are useful to attract the students' attention and motivate them to learn actively.

Moreover, the result of media experts' validation of the e-module shows that all aspects of the e-module are very valid. The content illustration in this e-module gained the highest score among other aspects. However, there are some improvements needed to make it more appealing. It is essential since this e-module is expected to provide a readable text design, effective sentences, and appropriate font size and style. It aligns with the idea that the reader's experience is crucial in creating an e-module (Setiyani, Putri, Ferdianto, & Fauji,



2020). Another aspect that contributes considerably to the e-module is the content arrangements. It was designed systematically, starting from the cover until the closing section of the e-module (Kho et al., 2019). The learning materials given begin from the easy to the complicated one. The ideal organization of the e-module gives students advantages in comprehending the learning material.

Conclusion

The research results conclude that the e-modules speaking development is valid. The results showed that all aspects were valid, and the e-modules can be used in speaking classes. Speaking e-module-based gamification to improve students' intercultural communication has been developed through three steps. The first step was to define that includes some analysis; front-end analysis, student analysis, concept analysis, task analysis, and specifications of the learning objectives. The second step consists of the activities to determine the e-module framework and design each part of the e-module. The next step was a development consisting of material validation and media validation. After conducting the first stage by interviewing the lecturers and distributing questionnaires to the students, it was found that there were no learning media designed for the online class, and the existing learning media was not relevant to the student's current needs. Then, the next step in developing the e-module was to analyze and determine the language functions, topics, and learning objectives for the e-module based on the syllabus and lesson plan.

The research result in the second step showed that the e-module was made into four sections: cover, introductory section, content, and closing section. Moreover, the content of the e-module consists of five chapters presented in sequence: learning objectives, warmer, language functions, speaking activities 1 (dialogue), speaking activities 2 (cases/problem solving), and games. After designing the e-module, it was validated by material and media experts. The result showed that all aspects were very valid, and the e-module could be used in the speaking class.

Recommendation

Based on the findings, the e-module is designed only for online speaking courses. Other learning sources may integrate gamification and intercultural topics, and others can be developed for online and offline classes. The existence of this e-module should facilitate the students to increase their intercultural understanding. Therefore, they can practice their speaking skills in the global community and talk about their culture.

References

- Baker, W. (2012). From cultural awareness to intercultural awareness: Culture in ELT. *ELT Journal*, 66(1). <https://doi.org/10.1093/elt/ccr017>
- Caponetto, I., Earp, J., & Ott, M. (2014). Gamification and education: A literature review. *Proceedings of the European Conference on Games-Based Learning*, 1(2009), 50–57.
- Chia, A., & Hung, Y. (2018). Gamification as Design Thinking. *International Journal of Teaching and Learning in Higher Education*, 30(3), 549–559.
- Daniel, B. K., & Harland, T. (2018). Qualitative data analysis. *Higher Education Research Methodology*, 98–110. <https://doi.org/10.4324/9781315149783-10>
- Deterding, S., Khaled, R., Nacke, L., & Dixon, D. (2011). Gamification: toward a definition. *Chi 2011*.



- Dichev, C., & Dicheva, D. (2017). Gamifying education: what is known, what is believed and what remains uncertain: a critical review. In *International Journal of Educational Technology in Higher Education* (Vol. 14). <https://doi.org/10.1186/s41239-017-0042-5>
- Fitriani, D. E. N., Amelia, E., & Marianingsih, P. (2017). Penyusunan Modul Pembelajaran Berbasis Sains Teknologi Dan Masyarakat (Stm) Pada Konsep Bioteknologi (Sebagai Bahan Ajar Siswa SMA Kelas XII). *Biosfer: Jurnal Pendidikan Biologi*, 10(2), 60–72. <https://doi.org/10.21009/biosferjpb.10-2.8>
- Habibah, S. O. (2019). Pengembangan Bahan Ajar Lembar Kerja Peserta Didik (Lkpd) Berbasis Budaya Lokal Lampung Materi Seni Rupa Mata Pelajaran Seni Budaya Dan Prakarya (Sbdp) Kelas V Sd/Mi. In *Universitas Islam Negeri Raden Intan Lampung*.
- Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does gamification work? - A literature review of empirical studies on gamification. *Proceedings of the Annual Hawaii International Conference on System Sciences*. <https://doi.org/10.1109/HICSS.2014.377>
- Jusuf, H. (2016). Penggunaan Gamifikasi dalam Proses Pembelajaran. *Jurnal TICOM*, 5(1), 1–6. Retrieved from <https://media.neliti.com/media/publications/92772-ID-penggunaan-gamifikasi-dalam-proses-pembe.pdf>
- Kho, S., Pradana, S., Raden, U., & Lampung, I. (2019). A Need Analysis English for Business Course. *English Education: Jurnal Tadris Bahasa Inggris*, 12(2), 139–146.
- Komikesari, H., Mutoharoh, M., Dewi, P. S., Utami, G. N., Anggraini, W., & Himmah, E. F. (2020). Development of e-module using flip pdf professional on temperature and heat material. *Journal of Physics: Conference Series*, 1572(1). <https://doi.org/10.1088/1742-6596/1572/1/012017>
- Lwin, S. M. (2016). Promoting Language Learners' Cross-Cultural Awareness Through Comparative Analyses of Asian Folktales. *TEFLIN Journal - A Publication on the Teaching and Learning of English*, 27(2), 166. <https://doi.org/10.15639/teflinjournal.v27i2/166-181>
- Majuri, J., Koivisto, J., & Hamari, J. (2018). Gamification of education and learning: A review of empirical literature. *CEUR Workshop Proceedings*, 2186(GamiFIN), 11–19.
- Marzuqi, A., & Sihkabuden. (2016). The Development Of Science Learning Module For Childrent With Hearing Impairment. *Jurnal P3LB*, 3(1), 72–76.
- Maulana, A. (2020). Cross Culture Understanding in EFL Teaching: An Analysis for Indonesia Context. *Linguists : Journal Of Linguistics and Language Teaching*, 6(2), 98. <https://doi.org/10.29300/ling.v6i2.3460>
- Nisa, H. A., Wahyu, R., & Putra, Y. (2020). Efektivitas E-Modul dengan Flip Pdf Professional Berbasis Gamifikasi Terhadap Siswa SMP. 05(02), 13–25.
- Noto, M. S. (2014). Perangkat Pembelajaran Matematika Berbasis Smart. *Jurnal Ilmiah Program Studi Matematika STKIP Siliwangi Bandung*, 3(1), 18–32.
- Park, S., & Kim, S. (2021). Is sustainable online learning possible with gamification?—the effect of gamified online learning on student learning. *Sustainability (Switzerland)*, 13(8). <https://doi.org/10.3390/su13084267>
- Saleem, A. N., Noori, N. M., & Ozdamli, F. (2022). Gamification Applications in E-learning: A Literature Review. *Technology, Knowledge and Learning*, 27(1), 139–159. <https://doi.org/10.1007/s10758-020-09487-x>



- Setiyani, Putri, D. P., Ferdianto, F., & Fauji, S. H. (2020). Designing a digital teaching module based on mathematical communication in relation and function. *Journal on Mathematics Education*, 11(2), 223–236. <https://doi.org/10.22342/jme.11.2.7320.223-236>
- Simon, E. (2021). *Issn 2775-507x*. (2003).
- Sunardi Y. (2019). The Importance of Cross-Cultural Understanding in Englishlanguage Learning. *The 3rdIndonesian International Conference on Linguistics, Language Teaching, Literature and Culture*.
- Urh, M., Vukovic, G., Jereb, E., & Pintar, R. (2015). The Model for Introduction of Gamification into E-learning in Higher Education. *Procedia - Social and Behavioral Sciences*, 197(February), 388–397. <https://doi.org/10.1016/j.sbspro.2015.07.154>
- Werbach, K. (2014). (Re) Defining gamification: a process approach, persuasive technology. *Lecture Notes in Computer Science*, 8462, 266–272.
- Xiong, J., Pan, S., & Qiao, Z. (2017). Structure and microwave absorption properties of (Pr,Dy)Ni₄Fe alloy. *Journal of Magnetism and Magnetic Materials*, 426(1), 725–728. <https://doi.org/10.1016/j.jmmm.2016.10.135>