

Developing Infographics to Teach Speaking Through CakeApp for Tourism Students

 <https://doi.org/10.31004/jele.v10i5.1173>

*Ketut Aya Sasmita, Iga Lokita Purnamika Utami, Dewa Ayu Eka Agustini^{abc} 

¹²³Universitas Pendidikan Ganesha, Indonesia

Corresponding Author: ayasasmita30@gmail.com

ABSTRACT

Enhancing students' speaking abilities requires integrating technology into language training, particularly in professional settings like tourism. For vocational high school (SMK) students working in the tourism industry, speaking is an essential skill because they must be able to interact with foreign tourists. The goal of this project is to create infographics based on CakeApp that will help Grade XII tourism students at Buleleng's vocational high schools learn how to speak. The study uses Richey & Klein, (2005) Design and Development (D&D) framework in conjunction with the ADDE (Analysis, Design, Development, Evaluation) model. The end result is a collection of infographics made to help teachers of English incorporate CakeApp into their speaking lessons. With an average score of 91.5%, expert validation results show that the infographics are of extremely high quality. These results imply that infographics based on CakeApp successfully improve students' speaking practice. From a practical standpoint, the product provides teachers at tourism vocational schools with an invaluable teaching tool.

Keywords: *Infographics, CakeApp, Vocational Education, ESP, Teaching Speaking, Tourism*

Article History:

Received 28th June 2025

Accepted 29th October 2025

Published 31st October 2025



INTRODUCTION

In the current era of digital transformation, incorporating technology into language instruction is crucial for enhancing students' speaking abilities, particularly in a professional setting. One of the fundamental skills in learning English is speaking, which is crucial for students in the tourism industry attending vocational high schools (SMK). This is due to the fact that the tourism industry needs employees who can interact with foreign visitors in a variety of service contexts (Widodo, 2016). Therefore, the most crucial and vital elements of effective language learning are speaking abilities. According to Sumadi, (2010), are the capacity to articulate a sound or words that express, state, and transmit an idea, feeling, or thought. according to (Santosa et al, (2024), Speaking is fundamentally an active, fruitful, and impromptu oral communication skill. For students majoring in tourism at vocational high schools, mastery of this skill is becoming more and more important. given that the Mandalika Special Economic Zone and other tourist destinations are part of the ongoing growth of the Indonesian tourism industry.

Even though speaking abilities are crucial, teaching them is still fraught with difficulties. According to Derakhshan et al, (2016), oral language proficiency necessitates both message-transmission abilities and an understanding of the language used (vocabulary, grammar, and the use of proper forms for particular purposes). Contextual learning materials and approaches are becoming more and more necessary when learning English for Specific Purposes (ESP), like tourism (Sudana et al., 2024). There are still many barriers to speaking instruction in tourism vocational schools, including a dearth of creative and contextual learning materials and low student motivation for active speaking practice.

As digital technology advances, using language-learning apps like CakeApp is an additional way to help students become more proficient speakers. Students can improve their

speaking abilities on their own and have fun with CakeApp's interactive features, which include conversation videos, pronunciation drills, and automatic feedback (Wu & Kuwajima, 2022). Additionally, CakeApp offers a ton of fascinating English fractions-related video clips. CakeApp videos have excellent audio quality and transcription, which helps viewers comprehend the content (Rahmani et al., 2021). The software is an excellent tool for improving students' speaking abilities when used with video clips of English conversations. Still, a lot of educators have not been able to use CakeApp to help their students become more proficient speakers. As a result, when teaching speaking skills, teachers must obtain examples or instructions for using CakeApp learning materials. Technology that can condense all of the Cakeapp illustrations or procedures into brief and engaging ones is required so that teachers can quickly comprehend how the illustrations or procedures help students develop their speaking abilities. Therefore, one tool that can assist in implementing the use of CakeApp for students' speaking skills is the use of infographics.

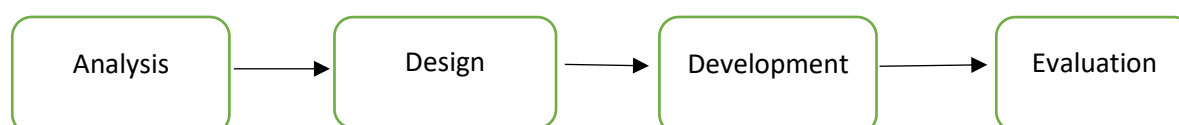
Information and graphics are combined to create infographics. This idea conveys information to readers in a clear and simple manner by using data and design. Infographics show various formats that have been widely used for this application and are distinguished by graphics, large and long text, and vertical layouts that present various facts (Pertiwi & Kusumaningrum, 2021). It has been demonstrated that using infographics as a teaching tool increases students' motivation to learn and their comprehension of concepts, particularly when learning English (Nhan & Yen, 2021). Contextual infographics can convey information succinctly, visually, and with ease, which makes them ideal for assisting with real-world speaking instruction in the tourism industry (Santosa & Yasa, 2025). Teachers can utilize infographics as a tool to help students practice speaking by using CakeApp. Gebre, (2018) asserts that infographics help audiences or readers quickly and easily understand complex material by visualizing data or information relevant to a given topic. As a result, instructors can teach students how to use CakeApp by using infographics. In order to give teachers ideas for teaching speaking skills and to help them understand how to use CakeApp to help students learn English, infographics with visually appealing designs and CakeApp, which offers a variety of helpful features, are a great combination.

Vocational tourism schools' current English-speaking teaching materials typically lack interesting, useful, and technologically integrated content that is suitable for communication needs in the real world. Many resources lack the creative teaching tools and contextualized speaking exercises that teachers need to deliver successful lessons (Ratminingsih et al., 2017). While prior research has demonstrated the efficacy of CakeApp in improving students' speaking skills in general junior and senior high school settings (Wahyuni & Fitri, 2023 ; Octavianita et al., 2022 ; Chaniago, 2022 ;Hermawati et al., 2023), there is currently a dearth of studies on its use in vocational tourism education. Furthermore, the use of infographics as instructional aids to assist teachers in implementing CakeApp-based speaking training for students studying tourism has not been examined in any previous research.

In order to close that gap, this study uses CakeApp to create successful infographics for instructional ideas, providing useful assistance to English teachers in creating engaging and relevant speaking lessons for tourism education. providing useful assistance to English teachers in creating engaging and relevant speaking lessons for tourism education. enhancing the speaking skills of Grade XII tourism students. CakeApp provides interactive and contextual language practice that improves student engagement, while infographics are selected for their visual appeal, clarity, and capacity to convey educational concepts succinctly. The main objective of this study is to improve students' ability to communicate effectively with foreign visitors and better prepare them for the world of tourism. This study aims to improve the instructional quality of SMK tourism teachers by providing a useful, tech-enabled teaching resource.

METHOD

This study employs the ADDE (Analysis, Design, Development, and Evaluation) learning approach in conjunction with the design and development (DnD) model put forth by Richey & Klein, (2005). The design and development strategy aims to create a visually appealing infographic that will help English teachers at the vocational high schools in Buleleng better understand how to use CakeApp to teach speaking. This study also examines the effectiveness of infographics in teaching high school students enrolled in a tourism vocational program CakeApp speaking skills. The design and development (D&D) approach is a useful technique for creating technology-based learning resources and instructional learning concepts. The infographics for this study will be made using an iterative cycle that includes analysis, design, development, and testing. To ensure the effectiveness and usefulness of the final findings, cooperation between researchers, educators, and users is also necessary for this study. The final product of the study is an oral learning tool that is based on an infographic and was created using CakeApp's ADDE (Analysis, Design, Development, and Evaluation) learning methodology.



The four stages of ADDE (Analysis, Design, Development, and Evaluation) are used to collect ideas for speaking skills instruction using infographics based on Cakeapp. This methodological framework is used to systematically produce infographics based on CakeApp, which is used to teach speaking skills to 12th-grade students at vocational high schools specializing in tourism.

Analysis Stage

At this stage, an analysis is conducted on the learning needs of students and the difficulties encountered by teachers in teaching speaking skills. As part of the data collection process, English teachers at SMKN 1 Singaraja were interviewed in the first semester. The purpose of the interviews with teachers was to identify a. difficulties in integrating digital learning resources, b. low enthusiasm and participation of students during speaking practice, and c. the need for creative materials that are in line with the curriculum. A document analysis of the school's syllabus and learning objectives was also conducted to ensure that the final product meets curriculum requirements.

Design Stage

At this stage, the results of the analysis became the basis for a structured and planned infographic teaching concept tailored to the results of the analysis that had been carried out. At this stage, the researcher determined the visuals, color scheme, icons, layout, and scope of the infographic content created. The content was made aesthetically pleasing and created using design software such as Canva and Adobe Illustrator. References to CakeApp content, such as speaking exercises, pronunciation guides, and dialogue conversations, were also integrated. All of these elements were aligned with the curriculum objectives, and the students' skill levels were also incorporated into the design.

Development Stage

At this stage, infographics are created based on previously established design specifications. During this process, more comprehensive development is carried out, paying attention to visual design and language learning content that can improve clarity and engagement. Infographics are improved during the review process with media and content experts who provide feedback on the product being created. In this phase, the infographics become easy-to-use learning materials as visual media and interactive technology are used in the classroom.

Evaluation Stage

At this stage, the final product was assessed, with two media experts and two content experts conducting the expert validation process. Standards in pedagogical assessment,

clarity, visual quality, content, content accuracy, and alignment with learning objectives were used to evaluate the infographics (Dewantari et al., 2021). Input was collected using validation sheets and the results of the analysis to determine the quality of the product. The effectiveness and usefulness of infographics in supporting speaking instruction were also evaluated by English teachers. Necessary changes were made to improve the final product.

By applying this approach, this study aims to develop a tool with quality teaching by utilizing technology that can assist teachers in the process of effective speaking learning for students in the context of tourism.

FINDINGS AND DISCUSSION

Result

The goal of this project is to create infographics that teach speaking skills to SMK Pariwisata class XII students using the Cakeapp application. The D&D stages, needs analysis, design, product development, and product evaluation are used to carry out the development process. The study's findings are methodically displayed as follows:

Need Analysis Result

In-depth interviews with English teachers at SMKN 1 Singaraja were used to conduct the needs analysis for this study. Semi-structured interviews were used to learn about the challenges teachers face when teaching students to speak, the difficulties students and teachers face, and the needs of using learning media to improve speaking skills. The goal of this activity was to create cakeapp-based infographic media that is relevant to the travel industry.

Speaking is one of the most difficult skills to teach SMK Pariwisata students because many of them struggle to express their thoughts or opinions in English, according to the findings of interviews with English teachers at SMKN 1 Singaraja. According to the instructor, the majority of pupils lack the courage to actively voice their opinions or use English in class. Despite having a basic understanding of the language, the majority of students are also not accustomed to actively using it. Students' primary challenges are a lack of proficiency in tourism-specific vocabulary, a lack of confidence when speaking, and a lack of opportunities to practice in authentic settings that mimic the workplace. As a result, students are more likely to rely on written materials and be passive during speaking learning activities, which hinders their ability to communicate effectively.

Additionally, direct observations revealed that teachers are more likely to employ instructional teaching strategies like project-based learning, problem-based learning, role-playing, peer work, etc. Teachers encounter difficulties in every step of the teaching process when it comes to students' speaking performance, even though these teaching methods are intended to help students develop their speaking abilities (Faisal Razi1 et al., 2015). Furthermore, students continue to struggle with vocabulary mastery, proper pronunciation, and articulating their thoughts while learning. Teachers have responded to this by directly addressing students who are deficient in speaking by providing them with additional speaking practice time; however, this has proven less successful because many students still lack these skills and teaching time is extremely limited.

Furthermore, rather than giving students relevant context, learning frequently concentrates on memorization and repetition (Artini et al., 2011). A lot of the time, students don't comprehend what they are creating. Students are uncomfortable, bored, and less motivated to learn when using this method. By displaying the completed assignments in front of the class, teachers help students develop their speaking abilities. For example, presenting a guide to a Bali tourist destination in front of the class. Not all students have the same opportunity or enough time to learn the material, and they only memorize the assignments without comprehending what is being presented (Ratminingsih et al., 2023). Speaking abilities are also crucial in the tourism sector when interacting directly with international visitors. Therefore, teaching that does not address these particular needs will not adequately prepare students for challenges in the workplace. Therefore, a teaching method that inspires students to learn is required. Teachers must give students reinforcement in order to increase their

motivation to learn speaking skills (Utami & Prestridge, 2018). For example, they can give students extra points or values to make them more engaged and motivated to learn. Gardner, (2012), claim that when students present themselves as capable of learning English at a level appropriate to their educational background and freely express their psychological needs for success, they become more motivated to learn. The study's findings demonstrated that one of the factors influencing students' success in learning the target language is their level of self-integrity.

Understanding one's own thoughts and the subject matter is more important for learning than merely memorizing facts from multiple sources (Stage et al., 1989, p. 35). This needs to be taken into account in the classroom by observing how eagerly students participate in class instruction (Ratminingsih et al., 2024). by keeping an eye on whether students find it difficult to solve problems and learn how to use technology to improve their language skills. One example is the use of CakeApp, which tests students' knowledge of particular subjects by asking them to answer questions. If they are successful, they receive points. Teachers at SMKN 1 Singaraja have identified the students' ineffective communication and lack of awareness of the target language as their biggest challenges. For students to achieve the best learning outcomes, teachers must therefore offer a strategic learning process that includes learning activities and interactions. In keeping with the integration of technology and innovation in speaking skills learning for EFL students, researchers give English teachers a research product about the use of infographics as a teaching idea using Cakeapp in students' speaking skills. Teachers must be adept at using technology in order to improve their skills and creativity in the classroom (Henriksen et al., 2018). Teachers at SMKN 1 Singaraja will have new ideas for teaching speaking skills that are relevant to the curriculum thanks to the infographics this researcher produced. With the aid of this research product, teachers can provide engaging lesson plans, learning designs, and Cakeapp usage guidance to help students develop their speaking abilities in the classroom. Speaking skills are essential for preparing students for careers in the tourism sector or two other fields.

Document Analysis Result

To guarantee that the materials created adhere to the relevant curriculum. The researcher examined the ATP and syllabus utilized by grade 12 students at SMKN 1 Singaraja during the odd semester. The English curriculum that the teachers of the tourism department at SMKN 1 Singaraja provided is the main subject of this analysis. The acquired syllabus serves as the foundation for creating educational resources in the form of infographics that combine speaking exercises with Cakeapp content. Finding pertinent subjects and learning goals that require improvement in order to become more creative teaching materials is the aim of this syllabus analysis. To ensure that the developed content is in line with the needs of students and the context of vocational learning being pursued, the researcher records and assesses it using a syllabus analysis matrix.

The researcher hopes to create speaking exercises that are both pedagogically sound and applicable to real-world situations by coordinating the infographic content with the syllabus under analysis. As evidenced by the lesson plan and learning exercises, the primary goal is to help students become more proficient speakers. The purpose of this speaking exercise is to mimic actual communication tasks that students would encounter in a setting related to the tourism industry. The importance of a hands-on, experiential learning approach is emphasized in the learning demonstration activities that are conducted. This approach helps students develop the communication skills necessary in the tourism industry. A matrix table of the syllabus analysis's findings is shown in the section that follows. It includes learning objectives and topics that are utilized in infographic-based speaking materials for grade XII students at SMKN 1 Singaraja that use Cakeaap.

Table 1. Matrix of Syllabus Analysis

No.	Learning Objective	Material/topic	Sub topic
1.	a. Students are able to design an interesting tour itinerary, and are able to explain the details of the trip clearly to the tour participants.	Tour Planning	a. Design tour itinerary b. Reason for choosing a touris destination

Developing Infographics to Teach Speaking Through CakeApp for Tourism Students

	b. Students are able to convey the reasons for choosing a tourist destination orally with logical arguments, including the uniqueness, attractiveness, and relevance of the destination for tour participants.		c. Explain the details of the trip
2.	a. Students can verbally explain the flight reservation process to customers. b. Students are able to convey important flight-related information, such as the flight number, schedule, and baggage policy, clearly. c. Students are able to answer customer questions or requests related to reservations and ticketing, and provide satisfactory solutions in challenging situations.	Airline Reservation and Ticketing	a. Flight Reservation b. Flight related information c. Flight number, schedule, and baggage policy, clearly. d. Answer customer question and request.
3.	a. Students can discuss digital marketing strategies with clients. b. Students can interact with customers/clients on social media.	Digital Marketing	a. Discuss digital marketing strategiest b. Interact with clients
4.	a. Students can communicate with related parties, such as vendors, service providers, and event participants, when conducting negotiations. b. Students are able to communicate with clients regarding the project.	MICE (Meetings, Incentives, Conferences, Exhibitions)	a. Communication with related parties b. Negotiations c. Communication with clients
5.	a. Students are able to handle ground handling service situations, such as check-in, boarding, and baggage handling processes in accordance with applicable standards. b. Students are able to conduct formal conversations related to the ground handling process.	Ground Handling	a. Handle ground handling service b. Handling Check in c. Handling Boarding

Product Development Process

The development process in this study yielded five infographics based on the needs analysis and the teacher's ATP or syllabus analysis. In order to help students at SMKN 1 Singaraja improve their speaking abilities in professional settings, infographics were created as a teaching tool. The topics chosen were adjusted to the syllabus or ATP obtained from the teacher, including Airline Reservation and Ticketing, Digital Marketing, MICE, Ground handling, and Tour planning. After that, these subjects were examined and modified to fit modern work procedures.

There are various elements in the infographics that are created, including: 1. Tourism vocabulary, which includes terms that are frequently used in the travel and tourism sector and that are pertinent to the industry's circumstances. 2. A QR code that offers more comprehensive educational resources and information about the subject to be studied, 3. Role play, which is explained in an engaging manner and that students can use immediately in conversation, helps them comprehend the order of conversation (e.g., starting a conversation, addressing customer complaints, helping guests, and concluding interactions with guests). 4. Speaking exercises, which include activities set up in pairs (pair work) to allow students to practice the language as it is used in everyday conversations. In order to meet the needs of teachers in teaching speaking skills, content and design (including text, color, shape, and visuals on the topic and content of Cakeapp) were taken into consideration during the creation of the infographic component of teaching speaking students based on Cakeapp. A number of

procedures have been used in the product development process, including syllabus analysis, infographic design related to CakeApp content, and expert revision of the infographics until all of them meet the requirements for teaching speaking skills to vocational high school tourism teachers.



Figure 1. Sample of Infographic Design "Airline Reservation and Ticketing"

With the help of the cakeapp content already included in the infographic, teachers will find it easier to teach speaking skills in the first infographic design with the topic "Airline Reservation and Ticketing." For more thorough and in-depth information, scan the QR code in the infographic. Teachers can better teach speaking skills for airline reservations and ticketing by using the information in this infographic, which includes key phrases, tourism vocabulary, role-playing, assignments, and assessments. By following the infographic guide, teachers can improve their students' motivation to learn and their speaking abilities. Every component has been created in compliance with the specified learning objectives so that teachers can follow the guidelines and achieve successful learning outcomes in the classroom.

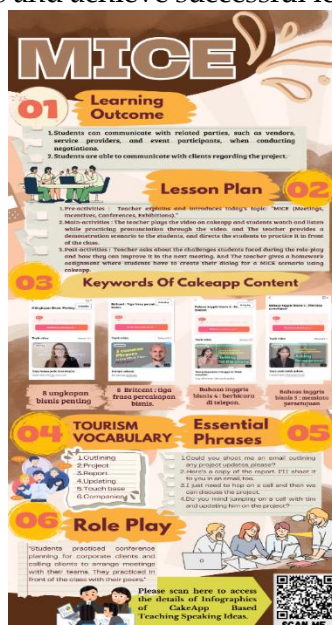


Figure 2. Sample of Infographics Design "MICE"

Researchers are more concerned with students' learning of key phrases, scenario demonstrations, and mouse-related vocabulary for the second infographic design on the topic of "MICE." Students will engage in a lot of role-playing in this activity to help them learn the language more rapidly and how to deal with clients from other countries. A lot of Cakeapp

content is included in the infographic so that students can practice speaking in line with the content and gain a deeper understanding of it. On the other hand, having all the materials at their disposal will assist teachers in getting ready and forcing students to practice speaking using the materials.



Figure 3. Sample of Infographics Design "Digital Marketing".

In order to make learning easier for students, the information is presented in an infographic design with the topic "Digital Marketing" in a way that is more straightforward, understandable, and relevant. Students can learn key phrases, tourism vocabulary, and scenario demonstrations from the infographic. Simpler, more aesthetically pleasing, with eye-catching colors, hierarchical information, and balanced elements, is the infographic design. Teachers can access Cakeapp's video learning contexts and more comprehensive content through QR codes, which encourage more active learning. because it has been thoughtfully arranged in accordance with learning objectives, making it easily accessible to both teachers and students. In order to encourage students to put what they have learned into practice, the infographic also offers project-based assignments.

Expert Validation Result

Two professionals with expertise in their respective domains validated this study. to evaluate the effectiveness of infographics in teaching students how to speak using Cakeapp. Two experts evaluated infographics using two criteria: media and product design evaluation and content expert evaluation. Validation was conducted using a Likert scale-based assessment sheet instrument (1-5) that covers a range of assessment components in accordance with learning media quality standards.

In the first assessment, content experts assessed a variety of assessment aspects, such as the following: grammar, depth of content, appropriateness of learning materials with learning objectives, appropriateness of learning strategies, interactivity of content in learning, and increasing student learning motivation with the content used. Taking these factors into consideration, the evaluation results showed that the first content expert had an average validation score of 73 out of 80, or 91 %, which is in the "very good" category. The results of the study showed that the second expert scored 74 out of 80, or 92.5%, on average, which is in the "Very Good" range. On the subjects of expressive authenticity and interactive learning, both experts produced superb assessment notes that can increase students' motivation to learn. Furthermore, the information is delivered in a clear and succinct manner that satisfies students' needs and improves their abilities at the Tourism Vocational School. The experts also shared their thoughts to guarantee that each topic has a student assessment and video references.

Table 2. Result of Content Expert Judgment Rubric

Assessor (judges)	Percentage
© 2021 The Author. This article is licensed CC BY SA 4.0. visit Creative Commons Attribution-ShareAlike 4.0 International License.	

Expert 1	91 %
Expert 2	92,5%

The researcher then assessed several aspects of the evaluation by media and design experts, such as interactive design, creative design, effective media use, design results that work with different hardware and software, choosing the right application type for design, and consistency in the use of elements across infographics. Considering these variables, the study's results showed that the first media and design expert gave an average validation score of 36 out of 40, or 90%, which is in the "Very Good" range. The results of the study showed that the second expert scored an average of 37 out of 40, or 92.5%, which is in the "Very Good" range. Both specialists offered perceptive assessments of the researcher's methodology. The experts also commended the infographic's design, emphasizing how the elements and color scheme make for a visually appealing composition. The experts also provided some design suggestions, like using letters to make the text seem clearer and easier to read and adding several icons that match the provided content.

Table 3. Media and Design Expert Judgment Rubric

Assessor (judges)	Percentage
Expert 1	90%
Expert 2	92,5%

Taking everything into account, the validation results demonstrate that the learning media product, which takes the form of infographics, for teaching speaking skills using Cakeapp, has very high feasibility in terms of both learning content and infographic media and design. According to two experts, it has an overall average value of 91.5%, placing it in the "very valid" category. Two experts' validation offers a solid foundation for moving on to the implementation phase, which involves giving tourism teachers designs and assessing how well the media supports the speaking abilities of SMK Pariwisata students.

Discussion

Infographics were created as supplementary materials for cakeapp-based speaking instruction in English for SMKN 1 Singaraja students. This was done in response to the students' desire for engaging instruction that would boost their motivation and be applicable to the travel and tourism sector. The analysis of documents and all information gathered from teachers served as the foundation for the research product. According to the results, the development process includes infographic design that is tailored to the learning objectives in the teaching and learning process, learning media, and document analysis (ATP / Syllabus). Additionally, the primary purpose of this Cakeapp infographic is to help English teachers support or aid students in developing their speaking abilities through engaging, innovative teaching and learning activities and the learning goals to be met. The infographics are tailored to the real-world communication that occurs in the tourism industry and that students majoring in tourism will primarily encounter, such as managing airport reservations, recommending tourist destinations, digital marketing, and addressing complaints from visitors. This study backs up Marden & Herrington, (2022) claim that asynchronous technology-based communication enhances students' language and cognitive skills in the classroom. Since Cakeapp content includes videos featuring native speakers in the travel industry, students can observe real-world English usage through the integration of QR codes into infographic designs that contain all of the content. This technology's use is consistent with cognitive load theory and multimodal learning (Chen et al., 2012). which places a strong emphasis on using audio-visual aids to support the gradual presentation of information.

Airline reservations and ticketing, digital marketing, MICE, ground handling, and tour planning are the subjects of five infographics that have been created on the subject of vocabulary in the tourism industry (tourism service business). The infographics include speaking exercises, learning objectives, role-playing, key phrases, and vocabulary related to tourism. This infographic's design is tailored to the teacher's ATP and learning objectives to encourage students to actively participate in structured speaking exercises. According to Richards & Rodgers, (2014) ESP learning materials should support students' mastery of language and practical communication skills while also respecting their integrity.

Infographics have been shown to be a useful tool for raising student engagement and motivation in the classroom. With clear visual aids and speaking assignments, students are observed actively engaging in the learning process during pair work and role-playing. Teachers reported that they were able to save time and focus more on feedback exercises by using infographics to explain vocabulary and context. This backs up Derakhshan et al., (2016)'s claim that students' ability to accurately and fluently present real world conversations in the target language is what determines how effective speaking instruction is. This research product combines context, learning media, and content in an approachable manner in accordance with the learning design principles put forth by (Lunga & Howard, 2022). With an average validation value of 91.5% supplied by experts, the results of expert production show that the infographics created are of extremely high quality. These values demonstrate exceptionally high quality in terms of pedagogical relevance, media effectiveness, usability, appealing visuals, and content accuracy. These specifications are in line with Findawati & Suprianto, (2014) standards for product validation, which cover media efficacy, hardware and software compatibility, usability, creative design, and successful media communication.

Additionally, during the product revision process, professional input on grammatical errors, layout consistency, visual aesthetics, and the appropriateness of speech components, all of which show a high level of attention to the ongoing improvement of infographic design and user oriented design was taken into account. The completed infographic serves as a best practice model for integrating technology with learning objectives in addition to offering ESP teachers clear instructions on how to use Cakeapp to teach speaking skills.

CONCLUSIONS

This study aims to design and develop digital learning materials in the form of infographics with teaching ideas using CakeApp to enhance speaking skills among English teachers at vocational high schools (SMK) specializing in tourism, particularly at SMKN 1 Singaraja. Employing the Design, Development, and Evaluation (DDE) model by Richey & Klein (2005) alongside the Design and Development (DnD) approach, data were collected through teacher interviews, document analysis (ATP or syllabus), and expert validation to verify the tools, content, and final products. The instruments used included media and design expert judgment sheets, syllabus matrix analysis, interview guides, infographic blueprints, and content expert judgment sheets, all supporting the product development process. The research began with a needs analysis through document analysis and teacher interviews, followed by infographic design and expert revisions based on feedback and blueprint data. Five travel-related infographics were developed – Airline Reservation and Ticketing, Digital Marketing, MICE, Ground Handling, and Tour Planning – each featuring learning plans, objectives, CakeApp content, key terms, tourism vocabulary, and role-play scenarios. After revisions, the infographics underwent validation by media, design, and content experts, receiving an overall excellence rating for their visual appeal, pedagogical quality, and relevance to workplace communication needs. The final products offer English teachers accessible, technology-based resources that significantly enhance students' speaking confidence and readiness for professional settings. Furthermore, this research supports the integration of infographics in English for Specific Purposes (ESP) contexts and evaluates CakeApp as an interactive language learning platform that bridges general speaking materials with the specialized communication needs of tourism students, while future studies are encouraged to explore broader classroom applications and assess long-term professional impacts.

ACKNOWLEDGEMENTS

The authors would like to express their sincere gratitude to Prof. Dr. IGA Lokita Purnamika Utami, S.Pd., M.Pd., and Dewa Ayu Eka Agustini, S.Pd., M.S., for their valuable input and support throughout the completion of this research. The researcher also extends

sincere thanks to IKIP Siliwangi for the opportunity to publish this article, as well as to all individuals involved in the process of creating this article.

REFERENCES

- Artini, L. P., Nilan, P., & Threadgold, S. (2011). Young Indonesian cruise workers, symbolic violence and international class relations. *Asian Social Science*, 7(6), 3–14. <https://doi.org/10.5539/ass.v7n6p3>
- Chaniago, A. D. (2022). the Effect of Cake Usage As Mobile Assisted Language Learning on Students' English Speaking Skill in Smp Hang Tuah 1 Belawan. *ETERNAL (English, Teaching, Learning, and Research Journal)*, 8(1), 131–144. <https://doi.org/10.24252/eternal.v8i1.2022.a9>
- Chen, F., Ruiz, N., Choi, E., Epps, J., Khawaja, M. A., Taib, R., Yin, B., & Wang, Y. (2012). Multimodal behavior and interaction as indicators of cognitive load. *ACM Transactions on Interactive Intelligent Systems*, 2(4). <https://doi.org/10.1145/2395123.2395127>
- Derakhshan, A., Khalili, A. N., & Beheshti, F. (2016). Developing EFL Learner's Speaking Ability, Accuracy and Fluency. *English Language and Literature Studies*, 6(2), 177. <https://doi.org/10.5539/ells.v6n2p177>
- Dewantari, F., Utami, I. G. A. L. P., & Santosa, M. H. (2021). Infographics and independent learning for English learning in the secondary level context. *Journal on English as a Foreign Language*, 11(2), 250–274. <https://doi.org/10.23971/jefl.v11i2.2784>
- Faisal Razi1, Muslem1, A., & Fitriasia1, D. (2015). TEACHERS' STRATEGIES IN TEACHING SPEAKING SKILL TO JUNIOR HIGH SCHOOL STUDENTS. *English Education Journal*, 6.
- Findawati, Y., & Suprianto. (2014). Bahan ajar multimedia interaktif kewirausahaan SMK menggunakan model pembelajaran problem based learning. *Jurnal Nasional Teknik Elektro Dan Teknologi Informasi*, 3(4), 257–263.
- Gardner, R. C. (2012). Second Language Acquisition: A Social Psychological Perspective. *The Oxford Handbook of Applied Linguistics*, (2 Ed.), April 2018, 1–16. <https://doi.org/10.1093/oxfordhb/9780195384253.013.0014>
- Gebre, E. (2018). Learning with multiple representations: Infographics as cognitive tools for authentic learning in science literacy. *Canadian Journal of Learning and Technology*, 44(1), 1–24. <https://doi.org/10.21432/cjlt27572>
- Henriksen, D., Henderson, M., Creely, E., Ceretkova, S., Černochová, M., Sendova, E., Sointu, E. T., & Tienken, C. H. (2018). Creativity and Technology in Education: An International Perspective. *Technology, Knowledge and Learning*, 23(3), 409–424. <https://doi.org/10.1007/s10758-018-9380-1>
- Hermawati, S., Bte Abdul, N., & AM, S. A. (2023). Effectiveness of Using Cake Application on Students' Pronunciation Skills At Smp Unismuh Makassar. *English Language Teaching Methodology*, 3(3), 309–316. <https://doi.org/10.56983/eltm.v3i3.536>
- Lunga, M. L., & Howard, C. D. (2022). Eureka! An Early Career Designer's Insight on the Design Process. *International Journal of Designs for Learning*, 13(2), 40–54. <https://doi.org/10.14434/ijdl.v13i2.32356>
- Marden, M. P., & Herrington, J. (2022). Asynchronous text-based communication in online communities of foreign language learners: Design principles for practice. *Australasian Journal of Educational Technology*, 38(2), 83–97. <https://doi.org/10.14742/ajet.7370>
- Nhan, L. K., & Yen, P. H. (2021). the Impact of Using Infographics To Teach Grammar on Efl Students' Learning Motivation. *European Journal of Foreign Language Teaching*, 5(5), 85–102. <https://doi.org/10.46827/ejfl.v5i5.3919>
- Octavianita, A., Fitri, N. R., Rafinazly, R., & Ihsan, M. T. (2022). The Effectiveness of Using Cake Application in Improving Students Speaking Skills. *AUFKLARUNG: Jurnal Kajian Bahasa, Sastra Indonesia, Dan Pembelajarannya*, 1(2), 80–85.
- Pertiwi, D. R., & Kusumaningrum, M. A. D. (2021). the Infographic Projects in Speaking Activities. *JELLT (Journal of English Language and Language Teaching)*, 5(1), 52–62.

<https://doi.org/10.36597/jellt.v5i1.10026>

- Rahmani, I. L., Sabat, Y., & Putranto, H. R. (2021). The Effectiveness of Cake Apps Towards Students' Speaking Ability to Second Semester Students of English Education Study Program at STKIP PGRI Sidoarjo. *STKIP PGRI Sidoarjo*.
- Ratminingsih, N. M., Artini, L. P., & Padmadewi, N. N. (2017). Incorporating self and peer assessment in reflective teaching practices. *International Journal of Instruction*, 10(4), 165–184. <https://doi.org/10.12973/iji.2017.10410a>
- Ratminingsih, N. M., Gede Budasi, I., Santosa, M. H., Padmadewi, N. N., Artini, L. P., Putu, I., Purandina, Y., Pendidikan, P., Ingggris, B., & Asing, J. B. (2023). Discovery Learning Model Optimizing Digital Thematic Multilingual Dictionary to Improve Literacy Skills. *Journal of Education Technology*, 7(4), 619–628. <https://doi.org/10.23887/jet.v7i4.671>
- Ratminingsih, N. M., Padmadewi, N. N., Nitiasih, P. K., Artini, L. P., & Ana, I. K. T. A. (2024). Does Translanguaging Enhance Learning? Examining EFL Students' Perceptions and Success in Bali. *Voices of English Language Education Society*, 8(3), 605–617. <https://doi.org/10.29408/veles.v8i3.27261>
- Richey, R. C., & Klein, J. D. (2005). Developmental research methods: Creating knowledge from instructional design and development practice. *Journal of Computing in Higher Education*, 16(2), 23–38. <https://doi.org/10.1007/BF02961473>
- Santosa, M. H., & Yasa, I. G. B. K. (2025). Investigation of factors influencing EFL students' satisfaction in online learning: A literature review. *Jurnal Pendidikan Bahasa Inggris Undiksha*, 13(1), 104–115. <https://doi.org/10.23887/jpbi.v13i1.92953>
- Santosa Made Hery, Gusti Ayu Made Trisna Yanti, and L. D. S. A. (2024). THE INTEGRATION OF GOOGLE TRANSLATE AS A MACHINE TRANSLATION AID IN EFL STUDENTS' THESIS COMPOSITION. 27(1), 214–229.
- Sudana, P. A. P., Ratminingsih, N. M., Padmadewi, N. N., & Adnyani, N. L. P. S. (2024). Industry-Driven Task Needs and Syllabus Recommendation for Business English Materials. *International Journal of Language Education*, 8(4), 734–748. <https://doi.org/10.26858/ijole.v8i4.70001>
- Sumadi. (2010). *Pendidikan dan Latihan Profesi Guru (PLPG) Mapel Dalam Pembelajaran Bahasa Dan Sastra Indonesia*.
- Utami, I. G. A. L. P., & Prestridge, S. (2018). How English teachers learn in Indonesia: Tension between policy-driven and self-driven professional development. *Teflin Journal*, 29(2), 245–265. <https://doi.org/10.15639/teflinjournal.v29i2/245-265>
- Wahyuni, K., & Fitri, M. (2023). The Influence of Cake Learning Application on Students' Speaking Ability. *Indonesian Journal of Integrated English Language Teaching (IJIJELT)*, 9(1), 2964–6448. <http://dx.doi.org/10.24014/ijielt.v9i1.24687>
- Widodo, H. P. (2016). Teaching English for Specific Purposes (ESP): English for Vocational Purposes (EVP). *English Language Education*, 5, 277–291. https://doi.org/10.1007/978-3-319-38834-2_19
- Wu, M., & Kuwajima, K. (2022). the Effects of Infographics on Enhancing Language Learning Outcomes and Motivation in a Japanese Efl Context. *European Journal of Foreign Language Teaching*, 6(4), 1–27. <https://doi.org/10.46827/ejfl.v6i4.4515>