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Developing CakeApp-Based Infographics to Support Teaching Speaking in Tourism Vocational High Schools

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Abstract

The integration of digital learning tools has become increasingly important in English as a Foreign Language (EFL) instruction, particularly in vocational high schools where students are required to develop workplace communication skills. Previous studies have reported the effectiveness of mobile applications in supporting language learning; however, limited attention has been given to providing practical pedagogical guidance that helps teachers integrate such applications into speaking instruction, especially in tourism vocational contexts. As a result, many English teachers continue to face difficulties in translating digital platforms into structured and meaningful classroom speaking activities. To address this gap, this study aimed to develop CakeApp-based infographics that function as practical teaching speaking ideas for tenth-grade English teachers in a tourism vocational high school. The study employed a Design and Development (D&D) research approach using the ADDE model, which consisted of analysis, design, development, and evaluation stages. Data were collected through syllabus analysis, classroom observation, teacher interviews, expert judgment, and user review. The findings indicated that the developed infographics achieved an excellent level of quality in terms of content relevance, instructional clarity, visual design, and practicality. Expert and user evaluations further confirmed that the infographics effectively assist teachers in integrating CakeApp into speaking instruction. Therefore, this study concludes that CakeApp-based infographics can serve as pedagogical guides that support interactive and context-based speaking activities in tourism vocational education.

Keywords: CakeApp; Infographics; English; Speaking; Vocational; Tourism

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1. Introduction

Information and Communication Technology (ICT) has brought significant changes to the learning process for EFL students, particularly at the vocational high school level. From a theoretical perspective, the integration of ICT in vocational education is strongly grounded in constructivist learning theory, which emphasizes that learners actively construct knowledge through meaningful interaction, authentic tasks, and real-world problem solving (Burston,

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2014). ICT facilitates these processes by providing multimodal resources, interactive learning environments, and opportunities for contextualized practice that reflect workplace realities. In vocational education, where learning objectives are closely related to practical skills and job readiness, ICT serves as a pedagogical tool that bridges classroom instruction with industry demands (Yang et al., 2023).

Empirical evidence further supports these theoretical perspectives ICT integration has been shown to positively influence students' learning outcomes and motivation. Artini et al., (2020) reported that the use of ICT contributes to the improvement of EFL students' achievement and learning motivation in Vocational High Schools. In tourism vocational education, the development of learning media that supports language skills is essential, as students are required to master communication skills to address real challenges in the tourism industry. In line with this, Santosa et al., (2020) found that ICT-based teaching and learning processes are more effective than traditional instructional approaches. Therefore, English teachers in tourism vocational high schools are encouraged to enhance the learning process by utilizing advanced technologies or digital learning media that address students' learning needs. Furthermore, teaching English in Vocational High Schools should align with English for Specific Purposes (ESP) to prepare students for the real workplace context (Flowerdew, 2013)

The use of appropriate digital tools has transformed learning habits by providing easier access to learning through extensive internet networks, particularly in language skill development. Through the application of advanced technologies and various digital media, learners can benefit from more flexible and engaging learning experiences. Numerous applications have been developed to support the learning process, such as e-learning platforms and mobile applications like CakeApp. These platforms serve as effective learning environments that promote technology integration in classrooms (Yasa et al., 2024). Specifically, instructional platforms such as CakeApp facilitate interaction during the learning process. However, in the Indonesian context, many educators, especially those teaching speaking skills in EFL classrooms, still require effective learning activities and strategies to support student engagement (Devira, 2020). Learning effectiveness can be enhanced through the appropriate use of learning media, instructional strategies, learning systems, and collaborative approaches that support students in mastering the target language. In this regard, ICT offers diverse forms of instructional media that can function as teaching resources, providing information to assist teachers in lesson planning and supporting students' English skill development (Khanom, 2018).

One of the emerging learning media is CakeApp, a mobile application that can be freely downloaded from the Apple Store or Google Play Store. Wahyuni et al., (2022) emphasized that language educators need mobile applications or platforms that offer engaging features and enjoyable content supported by internet connectivity to facilitate English learning. The rapid process of digitalization has strengthened educational systems and empowered students to improve teaching and learning activities. The integration of technology in education, however, requires careful planning to minimize the risk of ineffective implementation (Kartika & Budiarta, 2025). Teachers need not only advanced technological tools but also appropriate instructional strategies and clear guidance on how to use these technologies effectively. Such guidance can be provided through instructional resources that explain the step-by-step use of

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platforms or mobile applications like CakeApp. CakeApp functions as a digital learning tool that assists teachers in facilitating, supporting, and enhancing students' learning experiences, encouraging enthusiasm and improving learning outcomes (Paramita et al., 2022). Through CakeApp, English teachers can design interactive and engaging speaking activities based on the materials and content provided within the application. This approach offers an alternative way to stimulate students' learning motivation and develop their speaking proficiency. Nevertheless, teachers often rely on practical learning materials from various external sources to complement their instruction.

To optimize speaking activities in the classroom, teachers require technological support and well-structured learning designs to plan and implement instructional activities effectively. However, EFL teachers in tourism vocational high schools have rarely applied CakeApp in speaking classes. Therefore, teachers need access to learning activity ideas that are specifically designed for tourism vocational contexts. Learning activities should be systematically structured and presented with engaging topics, supported by visual references such as infographics that help teachers design communicative and interactive lessons using CakeApp. Infographics serve as instructional media that provide clear information on how to operate CakeApp based on specific lesson topics. According to (Syarifuddin et al., 2022), infographics are visual media that present data and information through detailed concepts and topics in an easily understood format. Consequently, teachers need to be able to utilize CakeApp as a speaking medium with the support of infographic-based technological illustrations that explain its systematic use (Sasmitha et al., 2025).

This research conducted a preliminary study at SMK Negeri 2 Singaraja through interviews with an English teacher of tenth-grade students in the odd semester. The findings revealed that the teacher, who taught English for Specific Purposes, had never used CakeApp in classroom instruction. The primary reason was the teacher's lack of knowledge regarding CakeApp, including its features, content, and effective classroom implementation for speaking instruction. The teacher acknowledged that CakeApp was unfamiliar and that no prior training or experience related to its use had been provided. This situation raises questions about teachers' awareness of CakeApp and its instructional potential. It is important to note that CakeApp is designed to serve as a guideline for teachers in improving their teaching practices rather than as a student-centered application. The teacher commonly used tools such as quizzes, Mentimeter, Google Classroom, and conventional teaching methods. According to the teacher, the use of technology and digital devices in language learning has a significant impact on students' learning development. Therefore, teachers need to integrate innovative technologies such as CakeApp and develop creative learning activities using this application. In line with instructional innovation, teachers can utilize CakeApp infographics that provide teaching ideas and structured speaking activities. Through the use of these infographics, teachers are expected to enhance students' speaking skills, prepare them for internships, and equip them with professional communication skills required in the tourism industry.

Research Questions

The research questions addressed in this study are as follows:

1. How is the infographic-based CakeApp teaching speaking idea developed?

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2. How is the quality of the developed infographic-based CakeApp teaching speaking idea?

This study contributes to English language teaching in vocational education by developing and evaluating infographic-based CakeApp teaching speaking ideas grounded in multimodality, ICT, and ESP. The results provide practical guidance for English teachers in tourism vocational high schools to implement effective and engaging speaking instruction. In addition, this study offers a reference for future research on the development and quality of ICT-based and multimodal learning media.

2. Method

In this study, the researcher employed the ADDE model proposed by Richey and Klein (2007). The model consists of four main stages: analysis, design, development, and evaluation. This model was selected because it provides a systematic and flexible framework for developing educational products that are responsive to learners' needs and instructional contexts. The process of the development is shown in Figure 1.

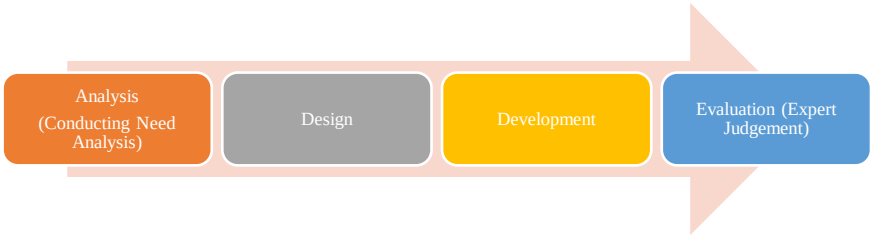

Figure 1. ADDE Process

This research was conducted at SMK Negeri 2 Singaraja, a tourism-oriented vocational high school, selected based on preliminary interviews indicating that English teachers rarely utilized interactive digital learning media in speaking instruction. Although several digital tools such as Quizizz, Google Forms, Google Classroom, and YouTube had been implemented, teachers had not explored other innovative platforms, highlighting the need for more creative learning materials aligned with the Merdeka Curriculum. The school is also equipped with adequate learning facilities, which support the implementation of infographic-based learning using the CakeApp application. In this study, the research subject was an English teacher who taught tenth-grade students, chosen due to the teacher's central role in influencing students' speaking skill development and providing insights into instructional challenges and the effectiveness of infographic-based media in speaking contexts. The research object focused on the development and evaluation of the quality of infographic-based CakeApp media aimed at enhancing tenth-grade students' English speaking abilities. This included examining both the development of creative instructional media and its potential influence on students' understanding of speaking topics presented through infographics.

In this study, a syllabus-based matrix format was used for document analysis to examine the suitability of existing learning materials for development. The matrix contained essential components of the learning program, including learning objectives, teaching materials, learning activities, and evaluation, which helped identify alignment between the syllabus and the needs of developing infographic-based learning materials. The document

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analysis matrix consisted of several key columns, namely serial numbers, learning objectives, learning topics, and subtopics. The serial number column functioned as a reference for sequencing, while the learning objectives column outlined the speaking competencies that students were expected to achieve. The learning topic column presented the main instructional content in accordance with the Kurikulum Merdeka syllabus, and the subtopic column identified areas requiring further elaboration related to the developed materials. This matrix served as a practical and strategic guide to ensure that all critical syllabus components were systematically incorporated into infographic-based speaking instruction for tenth-grade students at SMK Negeri 2 Singaraja. In addition to document analysis, interviews were conducted to gain deeper insights into the teacher's perceptions and experiences in teaching speaking. Interviews allow researchers to explore participants' subjective realities through flexible or structured questioning. An English teacher who taught tenth-grade students at SMK Negeri 2 Singaraja was interviewed using a guide to collect comprehensive information regarding speaking activities, instructional resources, learning media, and challenges encountered during classroom instruction. The data obtained from the interviews served as the foundation for the needs analysis in developing infographic-based speaking materials for tourism vocational high school students.

In addition to expert judgment analysis, document analysis in the form of syllabus analysis was conducted to support the qualitative findings. Quantitative data analysis also employed a five-point Likert scale, where 1 represents strongly disagree, 2 disagree, 3 neither agree nor disagree, 4 agree, and 5 strongly agree. The Likert-scale data were analyzed by calculating individual scores, determining the mean score across respondents, computing the standard deviation, and interpreting the results in relation to the research objective, particularly the quality of the developed product. To further assess the quality of the infographic-based learning media, expert judgment data were analyzed using the Mean Ideal (Mi) and Ideal Standard Deviation (SDi) formulas (Nurkancana & Sunartana, 1992).

Table 1. Criteria of Product Assessment

Score	Criteria
Score ≥ 85	Very Good
70 ≤ Score < 85	Good
50 ≤ Score < 70	Average
30 ≤ Mean < 50	Below Average
Mean < 30	Poor

3. Findings

To answer the first research question concerning how the infographic media was developed, this study adopted the ADDIE model, which consists of five stages: analysis, design, development, implementation, and evaluation.

Analysis Phase

The analysis of potentials and problems in this study was conducted based on the results of classroom observations and interviews with English teachers at SMK Negeri 2 Singaraja.

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The findings of this analysis served as the basis for identifying instructional needs and challenges related to speaking instruction. The results of the analysis are presented in Table 2.

Table 2. Analysis Results

Identification	Conditions
Learning media	1. Class 10 learning syllabus. 2. It is very rare to find media based on computer-based learning in the learning process.
Teachers conditions	1. Teachers said that they often use PowerPoint and Canva for learning tools and never utilise learning tools like digital learning apps. 2. Teachers need innovation in learning media, especially computer-based learning media, such as using online learning applications to attract students' attention to the material being presented.
Classroom learning analysis	1. Still teacher-centered with limited student engagement or interaction.

Table 2 presents the results of the needs analysis related to learning media, teacher conditions, and classroom learning practices. The findings indicate that the learning media used in Grade 10 classes are primarily based on the existing syllabus, with limited integration of computer-based or digital learning media. Media that utilize digital applications are rarely found in the learning process, suggesting minimal use of innovative technology in classroom instruction. In terms of teacher conditions, the analysis reveals that teachers mainly rely on conventional digital tools such as PowerPoint and Canva. The teachers reported that they have never utilized digital learning applications, indicating limited exposure to or familiarity with app-based learning media. As a result, teachers expressed a need for innovation in learning media, particularly computer-based and online applications, to attract students' attention and enhance learning effectiveness.

Furthermore, the classroom learning analysis shows that instructional practices remain predominantly teacher-centered, with limited student engagement and interaction. This condition suggests that students have fewer opportunities to actively participate in learning activities, especially in communicative language practice such as speaking. Overall, the results highlight a gap between the availability of digital learning technologies and their actual implementation in classroom practice. These findings underline the need for innovative, technology-based instructional media that support student-centered learning and increase engagement, particularly for developing speaking skills in vocational education contexts.

Design Phase

Based on the identified needs and problems, the researcher developed infographic-based learning media integrated with CakeApp to support speaking instruction in a tourism vocational school context. The development process consisted of several stages and produced seven infographic products. At this stage, the learning media and instructional content were designed based on the syllabus and established learning objectives, which were aligned with the Merdeka Curriculum. The infographic learning material was developed to support the use of CakeApp by providing speaking concepts for English teachers teaching tenth-grade students

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in the odd semester at SMK Negeri 2 Singaraja, a tourism vocational high school. The design process focused on ensuring that the content addressed the specific needs of vocational students and supported communicative competence relevant to the tourism sector.

The researcher selected infographics as the learning media to support the teaching of speaking concepts for tenth-grade English teachers at SMK Negeri 2 Singaraja during the odd semester. The infographic learning media was designed with dimensions of 800 × 2000 pixels (approximately 10 × 23 cm) to ensure clarity and readability. This media was intended to meet students' learning needs and function as a supplementary instructional resource that supports both classroom instruction and independent learning, allowing students to access and understand the material anytime and anywhere. The infographic was developed using the Canva application, which provides various features for designing visual and textual content. All components of the infographic learning media were designed entirely by the researcher without external assistance.

The next stage focused on determining the format and layout of the infographic learning media prior to the testing phase. Several design alternatives were prepared to identify the most appropriate format for presenting the learning content and instructional guidance. The development process involved organizing visual elements, including images, text, color schemes, and interactive features, to enhance clarity and engagement. The Canva application was utilized to design these components and ensure consistency throughout the media. The selected format also included clear instructions for using the infographic as a teaching resource, supporting both teachers and students in the learning process.

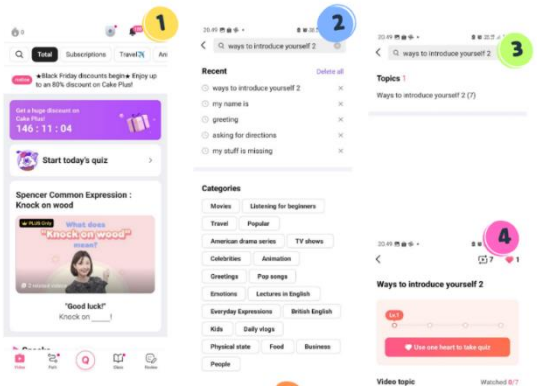

Figure 2. The Designing Phase

Figure 2 illustrates the designing phase of the infographic-based CakeApp teaching speaking idea. The design process consists of several sequential steps to ensure that the selected materials align with the learning objectives and speaking topics. First, the researcher accessed the CakeApp interface to explore available learning features and content related to speaking practice. Second, relevant keywords related to the speaking topic, such as "ways to introduce yourself," were searched to identify suitable learning materials. Third, the topic was selected from the available categories to ensure its relevance to students' speaking needs and curriculum requirements. Finally, the selected topic was reviewed to examine its content structure, level

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of difficulty, and learning activities provided within the application. This step allowed the researcher to determine how the content could be transformed into infographic-based teaching ideas that support structured speaking activities. Overall, the designing phase focused on selecting appropriate topics and materials from CakeApp as the basis for developing infographic media for teaching speaking in vocational English classrooms.

Development Phase

Following the completion of the infographic learning media design, the next stage involved the development of the actual product. In this phase, the previously designed concepts were realized into tangible products that were ready to be tested and implemented by users.

A total of seven infographic learning media products were developed. Each infographic was integrated with a QR code that links to relevant videos and learning materials sourced from CakeApp to support speaking instruction. The infographic topics were selected based on the syllabus and speaking competencies required for tenth-grade tourism vocational students and included the following:

1. Greeting and Self-Introduction
2. Alphabets and Numbers (Counting and Money)
3. Days of the Week, Time, and Date
4. Asking and Answering Basic Questions, Making Requests, and Offering Help
5. Hotel Vocabulary, Amenities, and Facilities
6. Directional Language: Check-In, Facilities, and Giving Directions
7. Thanking and Farewell

QR codes were generated using an online QR code generator for each of the seven infographic topics. Prior to generating the QR codes, Google Docs was used as a collaborative workspace to brainstorm and organize teaching and speaking concepts. The QR codes linked to digital content including tourism-related vocabulary, key expressions, sample situational dialogues, lesson plans, and speaking assessment rubrics. These QR codes enabled easy access to supplementary learning materials that support both teachers and students. Figure 4.7 presents an example of a QR code developed in this study.

After completing the integration of content and QR codes, the researcher finalized the initial drafts of the seven infographic products. These designs were developed in accordance with the syllabus and learning objectives and were prepared for expert validation and testing. Two examples of the finalized infographic designs are presented to illustrate the final product output.

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Figure 2. The Final Design

After completing the analysis and infographic design stages, the researcher proceeded to develop the infographics intended to enhance students' understanding of the learning materials. This process began with the creation of initial drafts that incorporated appropriate visual and textual elements to present information in an engaging and informative manner. In this study, Canva was used as the primary tool for developing the infographics, as it allows the integration of various design components such as images, graphics, and text to support effective message delivery. The previously developed infographic blueprint served as an essential guideline to ensure that the content structure and flow were consistent with the planned design. The infographic blueprint presented in Table 4.2 was developed based on the curriculum analysis and aligned with the tenth-grade curriculum at SMK Negeri 2 Singaraja.

Implementation Phase

Due to time limitations and the scope of the study, the learning media was not implemented in a full classroom setting. Instead, this phase focused on introducing the final product to the English teacher as the primary end user of the media. During this phase, the developed infographic-based learning media integrated with CakeApp was presented and reviewed to evaluate its practicality, effectiveness, and usability in supporting speaking instruction for tourism vocational students. The implementation phase aimed to obtain user feedback to validate and refine the instructional media prior to wider application. To achieve this objective, the researcher conducted a limited trial and collected user feedback using a User Review Sheet. The evaluation focused on three main aspects: content, design, and practicality. The feedback provided valuable insights into the alignment of the media with learning objectives, the quality of its visual and instructional design, and its feasibility for use in real classroom contexts.

Evaluation Phase

To evaluate the validity of the content presented in the infographic learning media, a content expert judgment process was conducted. Content experts were expected to provide evaluations and constructive recommendations regarding the instructional media developed by the researcher. The validation process was carried out using a refinement sheet, which allowed

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experts to assess the content and offer feedback as a basis for product revision. The results from are shown in Table 2.

Table 2. Evaluation Results

Judges	**Total score**
Expert I (Content Expert)	72
Expert II (Content Expert)	73
Expert I (Media Expert)	36
Expert II (Media Expert)	38

The evaluation conducted by content Expert I resulted in a percentage score of 90%, calculated as 72 divided by 80 multiplied by 100. Meanwhile, Expert II awarded a percentage score of 91%, calculated as 73 divided by 80 multiplied by 100. These results indicate that the infographic, as the primary product of this study, achieved a very good level of quality. The slight difference between the two scores demonstrates strong agreement between the experts regarding the quality and effectiveness of the developed infographic. To determine the overall evaluation, the average score from both experts was calculated using the following formula: the total score from Expert I and Expert II divided by two. The calculation yielded an average score of 72.5, which belongs to excellent category. Based on the results of the product expert assessment, the developed infographic obtained a score of 90% from the first expert and 93% from the second expert. These percentages place the product within the *very good* category (85%–100%), indicating that the infographic meets the required quality standards and does not require further revision.

4. Discussion

This study developed infographic-based media for teaching speaking using the ADDIE model and demonstrated its relevance and quality for tourism vocational education. The analysis stage revealed that speaking instruction was still largely teacher-centered and dependent on conventional media, highlighting the need for innovative, digital, and multimodal learning resources. In response, the infographic media was designed based on Text-Based Language Teaching principles, integrating learning objectives, language focus, tasks, and outcomes relevant to the tourism context.

The quality evaluation results indicate that the developed infographic media achieved an *excellent* level across content, media design, and practicality. Content validation confirmed that the materials were accurate, well-aligned with learning objectives, and appropriate for vocational tourism students. Media validation further demonstrated high quality in terms of visual design, readability, layout organization, and user-friendliness. In addition, user feedback

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showed that the combination of infographics and CakeApp enhanced classroom interactivity, supported student-centered learning, and was easy to implement without requiring advanced technical skills.

These findings are consistent with previous studies highlighting the effectiveness of infographic-based media in improving speaking performance and learner engagement. Sasmitha et al., (2025) reported significant improvements in students' speaking fluency and accuracy through infographic media, while Arochman et al., (2023) found positive student responses toward digital media in English learning. Similarly, Pertiwi and Kusumaningrum (2021) found that infographic project could facilitate the speaking activities. The students showed positive responses in creating infographic, working in group project-based learning (PBL), and presenting the infographic contentan. Overall, this study supports the growing evidence that multimodal digital media can enhance speaking instruction, particularly in vocational education settings.

The findings of this study suggest several pedagogical implications. First, infographic-based media integrated with CakeApp can serve as an effective instructional resource for English teachers in vocational schools, particularly for teaching speaking skills related to tourism. The use of infographics enables teachers to present key speaking elements—such as vocabulary, expressions, and conversational patterns—in a clear, visually engaging, and structured manner, reducing preparation time while improving instructional clarity (Putra et al., 2022). Second, the developed media supports student-centered and technology-enhanced learning by encouraging active participation and independent learning. The accessibility and practicality of the infographic media make it suitable for classroom use without requiring extensive technical training (Andayani et al., 2025). Therefore, English teachers are encouraged to adopt infographic-based digital media as part of their instructional strategies to create more engaging and effective speaking lessons. Finally, this study provides a practical model for instructional media development that bridges theoretical design principles and classroom applicability. Future research may extend this work by implementing the media in full classroom settings to measure its impact on students' speaking performance empirically.

5. Conclusion and Suggestion

This study developed infographic-based learning media integrated with CakeApp to support English speaking instruction at a tourism vocational high school. Using a research and development approach guided by the ADDIE model (analysis, design, development, implementation, and evaluation), the study addressed the development process and quality of the infographic-based teaching ideas. The needs analysis revealed limited use of interactive digital media in speaking classes, highlighting the need for innovative and multimodal instructional resources. Accordingly, the infographics were designed following Task-Based Language Teaching principles and refined through expert validation and user feedback.

The quality evaluation showed that the developed infographics achieved an *excellent* level across content, media design, and practicality. Content validation produced percentage

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scores of 90% and 91%, while media validation resulted in scores of 90% and 93%. User review feedback further indicated that the media were visually engaging, easy to use, and supportive of speaking instruction. Overall, the findings demonstrate that infographic-based media integrated with CakeApp is a feasible and effective instructional tool for enhancing speaking instruction in vocational education contexts.

References

Andayani, W., Murtadho, F., & Lustyantie, N. (2025). The Impact of Infographics on Cognitive Enhancement in English Language Students. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, *13*(1), 743–758. https://doi.org/10.24256/ideas. v13i1.6725

Arochman, T., Jabbar, S. A., Hutabarat, P. S. P., & Ayu, N. S. (2023). Infographics as a Tool to Facilitate English Learning Activities : Student ' s Perceptions. *ENGLISH FRANCA Academic Journal of English Language and Education*, *7*(2), 369–382. https://doi.org/10.29240/ef.v621.5242

Artini, N., Santosa, H., & Suwastini, A. (2020). Investigation of current digital divide between university lecturers and students in the english as a foreign language context in north Bali. *International Journal of Education*, *13*(2), 113–121. https://doi.org/10.17509/ije.v13i2.23828

Burston, J. (2014). MALL: The pedagogical challenges. *Computer Assisted Language Learning*, *27*(4), 344–357. https://doi.org/10.1080/09588221.2014.914539

Devira, M. (2020). Revisiting the implementation of active learning pedagogy in efl classrooms. *Studies in English Language and Education*, *7*(1), 223–236. https://doi.org/10.24815/siele.v7i1.15089

Flowerdew, L. (2013). Needs Analysis and Curriculum Development in ESP. In B. Paltridge & S. S. Eld (Eds.), *The Handbook of English for Specific Purposes* (pp. 325–346). https://doi.org/Wiley-Blackwell

Kartika, N. L. P. I., & Budiarta, L. G. R. (2025). Quizizz in EFL Classroom Learning : Students ' Perception and Challenges. *The Art of Teaching English as a Foreign Language (TATEFL)*, *6*(1), 28–40. https://doi.org/10.36663/tatefl.v6i1.939

Khanom, S. (2018). *Application of ICT in English Classrooms: A Study of the Secondary Schools in Dhaka. BRAC Institute of Languages (BIL)*. *1*(1), 1–43.

Nurkancana, W., & Sunartana. (1992). *Evaluasi Hasil Belajar*. Usaha Nasional.

Paramita, I. G. A. D., Ardika, I. W. D., Setyono, E. Y., Yuliantini, N. N., & Suciani, N. K. (2022). The use of cake application to improve speaking ability. *Journal of Applied Studies in Language*, *6*(2), 214–220. https://doi.org/10.31940/jasl.v6i2.345

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

Journal of Educational Study (JoES)
Volume 6 Issue 1 (2026), 36-48
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https://doi.org/10.36663/joes.v6i1.1123

Putra, I. K. S., Ratminingsih, N. M., IGA Lokita Purnamika Utami, Artini, L. P., Padmadewi, N. N., & Marsakawati, N. P. E. (2022). Infographics in higher education: Instructional media for students' writing proficiency. *Journal of Education Technology*, *6*(3), 560–567. https://doi.org/10.23887/jet.v6i3.48869

Richey, R. C., & Klein, J. D. (2007). *Design and Development Research*.

Santosa, M. H., Pratama, I. P. S., & Putra, I. N. A. J. (2020). Developing Android-Based English Vocabulary Learning Materials for Primary School Students. *JEELS (Journal of English Education and Linguistics Studies)*, *7*(1), 161–185. https://doi.org/10.30762/jeels.v7i1.1467

Sasmitha, K. A., Utami, I. G. A. L. P., & Agustini, D. A. E. (2025). Developing Infographics to Teach Speaking Through CakeApp for Tourism Students. *Journal of English Language and Education*, *10*(5), 1003–1014.

Syarifuddin, Zarro, M., & Lestari, D. (2022). Development of Infographics Learning Medium Using Adobe Illustrator on the Aesan Paksangkong Local Wisdom in Palembang During the Covid-19 Pandemic. In *Advances in Social Science, Education and Humanities Research* (pp. 218–235). Atlantis Press SARL. https://doi.org/10.2991/978-2-494069-63-3_22

Wahyuni, A. P., Hidayat, R., & Nurdianti, M. (2022). Students' Perceptions of The Cake App as A Medium to Teach Vocabulary. *Proceeding Virtual English Education Students Conference*, *1*(1), 75–81.

Yang, C., Guo, R., & Cui, Y. (2023). What Affects Vocational Teachers' Acceptance and Use of ICT in Teaching? A Large-Scale Survey of Higher Vocational College Teachers in China. In *Behavioral Sciences* (Vol. 13, Issue 1, p. 77). https://doi.org/10.3390/bs13010077

Yasa, G. A., Utami, I. G. A. L. P., & Agustini, D. A. E. (2024). Developing infographics of Cakeapp based teaching speaking ideas for tourism vocational high school English teacher in 11th grade at SMK Negeri 2 singaraja. *Lingua Scientia*, *31*(2), 114–128.