

# Identifying 21st-Century Approaches in the Teaching and Learning of Language Subjects – A Systematic Literature Review

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To Link this Article: <http://dx.doi.org/10.6007/IJARPED/v14-i2/24994> DOI:10.6007/IJARPED/v14-i2/24994

**Published Online:** 04 April 2025

## Abstract

This study aims to identify 21st-century approaches used in the teaching and learning of language subjects through a systematic literature review. With the rapid advancement of technology and evolving educational needs, traditional language teaching methods have become less effective in meeting the demands of contemporary students. This study examines various modern approaches, including project-based learning (PBL), flipped learning, the integration of technology and digital tools, gamification, and collaborative elements within language teaching. Through an analysis of literature from various empirical studies, the findings indicate that 21st-century approaches not only enhance student engagement and motivation but also enrich their learning experiences through deeper interactions, the development of critical thinking and problem-solving skills, and improved communication abilities. The collaborative elements in language teaching foster cooperation and interaction among students, allowing them to learn from one another and develop social skills. Additionally, the integration of technology in language teaching enables more flexible learning with greater accessibility, allowing students to learn at their own pace and access learning materials from anywhere. In conclusion, 21st-century approaches in language teaching and learning equip students with relevant skills to navigate the challenges of the modern era, making learning more effective and meaningful.

**Keywords:** 21st-Century Approaches, Systematic Literature Review, Language Subject Learning, Collaborative Learning, Technology In Language Teaching

## Introduction

In the era of rapid globalization and digitalization, the education system faces increasingly complex challenges in ensuring that students are well-prepared for a rapidly evolving world. The 21st century has witnessed significant transformations in nearly all aspects of life, including education. The need to master 21st-century skills, such as critical thinking, creativity, collaboration, and digital literacy, has become more crucial than ever. In this context, the teaching and learning of language subjects are no exception to these changes.

Language subjects play a vital role in shaping individuals who are competent in communication, analytical thinking, and social interaction. However, traditional language teaching methods, which are often teacher-centered and one-directional, need to be reassessed. More dynamic, interactive, and student-centered pedagogical approaches are critical to ensuring that students not only master the language but can also apply it effectively in diverse real-world contexts.

This study aims to identify teaching and learning approaches for language subjects that align with the demands of the 21st century. Through a systematic literature review, this research will collect and analyze studies conducted globally to identify best practices and innovative methods in language teaching. These approaches will include the integration of digital technology, project-based learning, collaborative learning, and the incorporation of 21st-century skills into the language curriculum. This systematic literature review will not only provide a comprehensive overview of the latest approaches in language teaching but will also highlight the effectiveness of these methods in improving student achievement. Additionally, this study will discuss the practical implications for educators and policymakers in their efforts to enhance the quality of language education in Malaysia. By understanding and applying 21st-century teaching and learning approaches, it is hoped that language education in Malaysia can be strengthened, ultimately producing a generation of students who are better equipped to face future challenges and opportunities.

### **Literature Review**

This study aims to identify 21st-century approaches in the teaching and learning of language subjects through a systematic literature review. Over the past decade, technological advancements and changes in educational needs have driven adaptations and innovations in language teaching methods. This research collects and analyzes articles published between 2019 and 2024 to understand how 21st-century approaches are applied and their effectiveness in language teaching contexts.

#### *Technology-Based Learning*

Technology plays a crucial role in 21st-century education. The use of digital tools such as mobile applications, social networking sites, and online learning platforms has become commonplace in modern classrooms. A study by Jintavee Khlaisang and Pornpimol Sukavatee (2022) found that Mobile-Assisted Language Learning (MALL) and Virtual Learning Environments (VLE) not only enhance students' communication skills but also improve their motivation and acceptance of English language learning (Khlaisang & Sukavatee, 2022). Similarly, research by Nurul Ashikin Izhar et al. (2023) emphasized that online learning offers greater flexibility and access to diverse learning resources, thereby enhancing the quality and effectiveness of learning.

#### *Project-Based and Collaborative Learning*

Project-based and collaborative learning approaches are essential in developing critical thinking and problem-solving skills. Project-based learning (PBL) supported by technology has proven effective in enhancing students' critical thinking and problem-solving abilities. A study by Parisa Arabloo et al. (2022) demonstrated that PBL helps students develop critical and collaborative skills through projects that require analysis and evaluation (Arabloo, Hemmati, Rouhi, & Khodabandeh, 2022). Similarly, the use of online discussion forums in English for

Specific Purposes (ESP) instruction has been shown to improve students' linguistic skills and confidence in sharing their opinions (Jamalai@Jamali & Krish, 2021).

#### *Gamification and Augmented Reality*

Gamification and augmented reality (AR) technologies provide engaging and interactive approaches to language learning. A study by Zahra Cheraghi and Hengameh Omranpour (2023) found that gamification in flipped classrooms enhances student engagement and motivation while improving their vocabulary learning performance in English (Cheraghi & Omranpour, 2023). Additionally, research by Mus'ab Sahrim et al. (2023) indicated that AR facilitates Arabic vocabulary learning by providing a more relevant and meaningful real-world context for students.

#### *Blended Learning*

Blended learning combines online and face-to-face instruction to provide a more comprehensive learning experience. Tuti Alawiah et al. (2022) stated that blended learning, along with the integration of media and technology, offers flexibility in terms of time and place of learning while enhancing global awareness, technological literacy, and alignment with industry demands (Alawiah et al., 2022). Collaborative learning is also a key component of 21st-century education, where students are encouraged to work in groups and actively interact to achieve shared learning objectives.

#### *Use of Social Networking Sites (SNS)*

The use of social networking sites (SNS) such as Facebook, YouTube, Twitter, and WhatsApp in English language teaching has demonstrated effectiveness in improving students' language skills and motivation. A study by Siok Yong Tan and Melor Md Yunus (2023) found that SNS facilitates teamwork and collaboration among students, enhances their confidence in communicating and interacting in English, and provides a more flexible and accessible learning environment.

#### *21st-Century Skills in Language Education*

21st-century approaches emphasize the development of critical skills such as critical thinking, creativity, collaboration, and digital literacy. Research by Esra Karakaş Kurt and Ahmet Güneyli (2023) highlighted that the application of Gardner's multiple intelligences theory and the use of language learning technologies improve students' communication and collaboration skills, enabling them to learn in more relevant and meaningful ways.

#### *Application of Augmented Reality (AR)*

The use of augmented reality (AR) technology in language learning has also gained increasing attention. A study by Mus'ab Sahrim et al. (2023) found that AR in Arabic vocabulary learning not only enhances student engagement and interest but also helps them master pronunciation and understand real-world contexts more effectively. From the literature analysis conducted, it is evident that 21st-century approaches such as technology integration, project-based learning, gamification, and flipped learning have demonstrated significant effectiveness in language teaching and learning. These approaches not only enhance students' language skills but also develop critical competencies required for success in an increasingly complex global landscape. Therefore, the integration of 21st-century approaches

into the education system is essential to ensure the success and effectiveness of language learning in the modern era.

### **Research Objectives**

The primary objective of this systematic literature review is to identify and synthesize key sources related to 21st-century approaches in the teaching and learning of language subjects. Specifically, this study aims to:

1. Identify 21st-century approaches used in language subject teaching and learning.
2. Analyze the effectiveness of these approaches in enhancing students' language skills and overall learning experience.
3. Provide insights for educators and policymakers on best practices for integrating 21st-century teaching strategies into language curricula.

### **Research Methodology**

According to Guzzo et al. (1987), conducting a comprehensive literature review is essential to identify all relevant studies related to the research topic. To ensure that the selected articles align with the scope of this study, a thorough and detailed search of all related literature was conducted, followed by a screening process to identify articles that are relevant to the research questions and themes.

As an initial step, keywords related to 21st-century approaches in language teaching and learning were used to retrieve articles from two online databases: SCOPUS and EBSCO. SCOPUS provides extensive abstracts and citations across various disciplines, including language, arts, and sciences. A total of six articles were retrieved from the SCOPUS database, while nine articles were obtained from the EBSCO database.

The keywords used in the search included:

1. "21st century language teaching"
2. "21st century skills language learning"
3. "Technology in language education"
4. "Collaborative language learning"
5. "Innovative language teaching methods"

A systematic approach was applied to identify relevant articles, ensuring that the selected studies aligned with the research topic. The search process involved entering relevant keywords and filtering results based on document titles, document types, authors, publication years, and sources. The selected documents were then assessed to ensure their relevance to the study's theme. Only peer-reviewed studies published in academic journals (excluding magazines, conference proceedings, and newspapers) between 2019 and 2024 were included in this review. Furthermore, the selected studies were required to be published exclusively in English or Malay to ensure consistency in the analysis.

Table 1

*Keywords Used for Article Search*

Keywords Used for Article Search		
Database	Keywords Used	Final Number of Articles After Screening
SCOPUS	1. 21st century language teaching 2. 21st century skills language learning 3. technology in language education 4. collaborative language learning 5. innovative language teaching methods	6
EBSCO		9
Total Articles		15

Based on Table 1, the selection of primary articles consists of 15 articles obtained from two databases: SCOPUS and EBSCO. Therefore, specific inclusion and exclusion criteria were applied to ensure that the selected documents are highly relevant, of good quality, and aligned with the theme of this study for a meaningful critical review.

*Publication Year Criteria*

Only articles published between 2019 and 2024 were included, while those published before 2019 were excluded. This criterion ensures that the selected articles remain relevant to the latest 21st-century learning environments. Older studies may discuss outdated educational technology trends that might no longer be effective in the modern learning era.

**1. Peer-Review Requirement**

The selected articles had to be peer-reviewed. Peer-reviewed publications ensure that the research is valid, based on expert knowledge in the respective field, thereby preventing the inclusion of unreliable findings. Articles that did not meet this peer-review criterion were removed during the screening process. Additionally, conference proceedings and book chapters were excluded from the selection.

**2. Relevance to Education and Technology**

The inclusion and exclusion criteria were also applied to filter out articles that did not focus on the field of education and technology. Articles that did not evaluate the role of visual media learning among students in primary and higher education institutions, those that merely described learning strategies rather than the benefits of using visual media learning, and those that focused solely on infographic-based learning were excluded. This filtering process ensures that the study focuses on a broader application of visual learning media rather than being limited to specific platforms such as infographics or audiovisual aids. The visual media platforms discussed in this study offer diverse visual support tailored to different types of learners. These platforms provide more than just static graphics and animations, accommodating both individual and collaborative learning experiences effectively.

**Research Findings**

The data from the selected articles were analyzed using a content analysis approach. Each article was examined to identify the types of 21st-century approaches and their benefits in language teaching and learning. The data were analyzed descriptively to classify the different 21st-century approaches and their advantages, as well as to understand how these

approaches influence student engagement, motivation, and academic performance in language learning.

Researcher/Year/ Country/ Database	Article Title	Type of Language Subject	Type of 21st- Century Approach	Benefits of Using 21st-Century Approach in Language Teaching and Learning
Meghry Nazarian, Negmeldin Alsheikh, Mohamed Alhosani (2023)	Between Vision and Revision: English Language Teachers Accentuating Their Voices about  21st Century Skills	English Language	1. Problem- Solving and Critical Thinking 2. Collaborative Learning	1. Enhances Academic Achievement 2. Facilitates the Learning Process 3. Encourages Collaboration and Interaction
United Arab Emirates (UAE)				
Scopus				
Tuti Alawiah, Abdul Hakim Yassi, Nasmilah, Abidin Pammu (2022)	Proposed 21st Century Learning Themes in English Classrooms	English Language	1. Blended Learning 2. Integration of Media and Technology in Teaching and Learning 3. Emphasis on Topics Such as Global Awareness, Finance, Economics, Business, Health, Literature, and the Environment	1. Increased Global Awareness: Students become more aware of global issues. 2. Development of Technological Literacy: Mastering technology skills through the use of digital tools. 3. More Flexible Learning: Blended learning provides flexibility in time and place of study. 4. Mastery of 21st- Century Skills: Enhances critical thinking, problem-solving, communication, and collaboration skills.
Indonesia				
Scopus				

				5. Relevance to Industry Needs: The 21st-century curriculum prepares students for challenges in the workforce.
Jintavee Khlaisang dan Pornpimol Sukavatee (2022)	Mobile-Assisted Language Learning to Support English Language Communication among Higher Education Learners in Thailand	English Language	1.Mobile-Assisted Language Learning (MALL) 2.Virtual Learning Environment (VLE)	1. Flexible and Interactive Learning: Enables learning to take place anytime and anywhere. 2. Improved Communication Skills: Enhances listening, speaking, reading, and writing skills in English. 3. Higher Motivation and Acceptance: Students are more motivated and receptive to using these learning tools. 4. Ease of Use: The application is user-friendly and has a positive influence from peers. 5. Self-Directed Learning: Students can set and manage their own learning goals. 6. Integration of Formal and Informal Learning: Combines formal and informal learning through
Thailand				
Scopus				

				technology and social networks.
Nurul Ashikin Izhar, Nor Asniza Ishak, Siti Mastura Baharudin (2023)	A Bibliometric Analysis of 21st Century Learning Using Scopus Database	No specific language subject mentioned.	Online Learning (E-Learning)	<ol style="list-style-type: none"> <li>1. Accessibility and Flexibility: Allows students to learn anytime and anywhere.</li> <li>2. Wide Range of Learning Resources: Provides access to various learning materials through the internet.</li> <li>3. Interactivity and Collaboration: Enhances interaction and teamwork through technology.</li> <li>4. Improved Technological Skills: Enhances students' technological proficiency.</li> <li>5. More Engaging Teaching: Delivers more interactive and engaging lessons using technology.</li> </ol>
Malaysia				
Scopus				
Mazura Jamalai@ Jamali dan Pramela Krish (2021)	Fostering 21st Century Skills Using an Online Discussion Forum in an English for Specific Purpose Course	English for Specific Purposes (ESP)	Use of Online Discussion Forum (ODF)	<ol style="list-style-type: none"> <li>1. Enhanced Linguistic Skills: Improves knowledge of syntax structure, pronunciation, spelling, and grammar.</li> <li>2. Flexibility: Allows discussions to</li> </ol>
Malaysia				



Scopus				<p>take place anytime and anywhere.</p> <p>3. Reference Documentation: Enables systematic storage and retrieval of ideas.</p> <p>4. Increased Confidence: Provides opportunities for shy students to express their opinions.</p> <p>5. Critical Thinking Skills: Encourages critical thinking and diverse perspectives.</p> <p>6. Leadership and Time Management Skills: Develops leadership and time management abilities.</p> <p>7. Digital Skills: Enhances technological proficiency essential for globalization.</p>
Eka Nurhidayat, Januarius Mujiyanto, Issy Yuliasri, Rudi Hartono (2023)	Technology Integration and Teachers' Competency in the Development of 21st-Century Learning in EFL Classrooms	English as a Foreign Language (EFL)	Technology integration in learning involving the use of digital tools and applications such as WhatsApp, Zoom, Edmodo, Canva, and Kahoot for teaching and learning.	1. Enhancing Student-Centered Learning: Students take greater responsibility for their learning process and have the freedom to explore topics in-depth, fostering collaboration
Indonesia				

Scopus				<p>and critical thinking.</p> <ol style="list-style-type: none"> <li>2. Improving Digital Literacy Skills: Equips students with essential digital skills for creating, analyzing, evaluating, and communicating information.</li> <li>3. Integrating Blended Learning: Provides flexibility and more options for students to learn at their own pace and access online learning materials.</li> <li>4. Teacher Training: Innovative training for teachers helps them effectively integrate technology into EFL teaching strategies.</li> </ol>
<p>Etcoy, Diam Maru P. Joverto, Aeryel Kassandra A. Paligutan, Ma. Julia Andrea E. (2023)</p>	<p>ESL Pedagogy in Philippine Colleges: Issues and Reforms through 21st Century Teaching Perspective</p>	<p>English as a Second Language (ESL)</p>	<ol style="list-style-type: none"> <li>1. Student-Centered Approach</li> <li>2. Collaborative and Communicative Learning</li> <li>3. Communicative Language Teaching (CLT)</li> </ol>	<ol style="list-style-type: none"> <li>1. Increased Student Engagement and Motivation: Interactive activities and student-centered learning enhance interest and motivation.</li> <li>2. Better Communication Skills: Develops essential communication skills necessary for real-world success.</li> <li>3. More Meaningful and Relevant</li> </ol>
Philippines				
Ebsco				

				<p>Learning: Authentic and relevant tasks make learning more meaningful.</p> <p>4. Improved Student Confidence: Students gain confidence in practicing and interacting in English without fear of mistakes.</p> <p>5. 21st-Century Skills Development: Enhances critical thinking, problem-solving, collaboration, and creativity.</p>
Esra Karakaş Kurt dan Ahmet Güneyli (2023)	Teaching the Turkish language to foreigners at higher education level in Northern Cyprus: An evaluation based on self-perceived dominant intelligence types, twenty-first-century skills and learning technologies	Turkish as a Foreign Language	<p>1. Use of Language Learning Technology (such as computers, the internet, media, and mobile technology)</p> <p>2. Application of Gardner's Multiple Intelligences Theory</p> <p>3. 21st-Century Skills Development, including communication and collaboration skills, creativity and innovation, critical thinking and problem-solving, reflection, and metacognitive awareness.</p>	<p>1. Enhanced Communication and Collaboration Skills: Encourages teamwork and effective communication.</p> <p>2. Increased Creativity and Innovation: Helps students apply prior knowledge to new situations and work creatively with others.</p> <p>3. Critical Thinking and Problem-Solving: Enables students to analyze complex problems and make decisions based on evidence and reasoning.</p> <p>4. Reflection and Awareness: Encourages students to think</p>
Cyprus				
Ebsco				

				<p>about their own thought processes and synthesize information.</p> <p>5. Student-Centered Learning: Allows students to take control of their own learning and study at their own pace.</p> <p>6. Technology Integration in Learning: Enriches learning through the use of digital tools and interactive platforms to enhance language proficiency.</p>
Siok Yong Tan, Melor Md Yunus (2023)	Sustaining English Language Education with Social Networking Sites (SNSs): A Systematic Review	English as a Second Language (ESL)	Use of Social Networking Sites (SNS) such as Facebook, YouTube, Twitter, Telegram, WhatsApp, Edmodo, and others in English language teaching.	<p>1. Enhances Language Skills: The use of SNS helps improve communication, reading, writing, grammar, and vocabulary skills.</p> <p>2. Increases Student Motivation and Engagement: SNS encourages students to actively participate in learning through platforms they are familiar with.</p> <p>3. Promotes Collaboration: Facilitates teamwork and collaboration among students.</p> <p>4. Boosts Confidence: Students become more confident in communicating</p>
Malaysia				
Ebsco				

				<p>and interacting in English through SNS.</p> <p>5. Provides More Flexible and Accessible Learning: Enables students to learn anytime and anywhere, offering greater flexibility.</p> <p>6. Improves Learning Quality: Using SNS in education enhances learning through interactive and engaging methods.</p>
Kai Nan Lahpai (2019)	<p>A Study of Teachers' and Learners' Perception and Competence on the Use of Digital Literacies in the English Language Classroom at the Maija Yang Institute of Education, Kachin State, Myanmar</p>	English as a Second Language (ESL)	The Use of Digital Literacy in English Language Teaching, Including the Use of Digital Tools Such as the Internet, Computers, social media, and Mobile Technology.	<p>1. Enhances the Four Language Skills: Helps improve listening, speaking, reading, and writing skills.</p> <p>2. Increases Student Engagement and Motivation: Students become more interested and motivated to learn through the use of digital technology.</p> <p>3. Expands Access to Learning Resources: Students can access a wide range of rich and diverse online learning materials.</p> <p>4. Encourages Self-Directed Learning: Enables students to learn</p>
Myanmar				
Ebsco				

				<p>independently and manage their own learning process.</p> <p>5. Develops Digital Literacy Skills: Both students and teachers enhance essential digital literacy skills for the 21st century.</p> <p>6. Promotes Critical Thinking and Problem-Solving: The use of digital technology encourages students to think critically and solve problems creatively.</p>
<p>Mus'ab Sahrim, Nor Fatini Aqilah Mohamad Soad, Lily Hanefarezan Asbullah (2023)</p>	<p>Augmented Reality Technology in Learning Arabic Vocabulary from the Perception of University Students</p>	<p>Arabic Language</p>	<p>The Use of Augmented Reality (AR) Technology in Arabic Vocabulary Learning.</p>	<p>1. Enhances Student Engagement: AR captures students' attention and interest, making learning more interactive and engaging.</p> <p>2. Improves Oral Communication Skills: AR provides simulated conversation scenarios where students can interact with virtual characters or classmates.</p> <p>3. Encourages Self-Directed Learning: Students can explore and learn vocabulary independently at their own pace.</p> <p>4. Enhances Pronunciation Mastery:</p>
<p>Malaysia</p>				
<p>Ebsco</p>				

				<p>AR helps students listen to and imitate the correct pronunciation of Arabic words.</p> <p>5. Provides Contextual Learning: Students can learn Arabic in real-world contexts, making learning more relevant and meaningful.</p>
Parisa Arabloo, Fatemeh Hemmati, Afsar Rouhi, Farzaneh Khodabandeh (2022)	The Effect of Technology-Aided Project-Based English Learning on Critical Thinking and Problem Solving as Indices of 21st Century Learning	English as a Foreign Language (EFL)	Technology-Aided Project-Based Learning (PBL)	<p>1. Enhances Critical Thinking Skills: The use of technology and PBL helps students develop critical thinking skills through projects that require analysis and evaluation.</p> <p>2. Improves Problem-Solving Skills: Students develop problem-solving abilities by tackling open-ended problems that require creative solutions.</p> <p>3. Promotes Collaborative Learning: Encourages students to work in groups, enhancing teamwork and communication skills.</p> <p>4. Encourages Active and Autonomous Learning: Motivates students to take</p>
Iran				
Ebsco				

				<p>responsibility for their own learning, fostering self-directed learning and autonomy.</p> <p>5. Effective Use of Technology: The integration of technology tools such as WhatsApp, wikis, and blogs facilitates project execution in a more efficient and interactive manner.</p> <p>6. Increases Student Engagement: Helps enhance student engagement through meaningful and real-world projects.</p>
Zahra Cheraghi, Hengameh Omranpour (2023)	The Effect of Gamification on Developing EFL Learners' Vocabulary Learning in Flipped Classes	English as a Foreign Language (EFL)	1. Gamification 2. Flipped Learning 3. Mobile-Assisted Language Learning (MALL)	1. Enhances Student Engagement: Students actively participate in the learning process through engaging game-based elements. 2. Increases Motivation and Performance: Gamification boosts student motivation to learn and achieve better academic outcomes. 3. Flexible Learning: Flipped learning allows students to study anytime and anywhere, providing flexibility in the learning process.
Iran				
Ebsco				



				<p>4. Develops Autonomous Learning Skills: Trains students to learn independently and manage their own learning process.</p> <p>5. Enhances Critical Thinking Skills: Students develop critical thinking and problem-solving skills through activity-based and practical application learning approaches.</p>
Hui-Wen Huang (2021)	Effects of smartphone-based collaborative vlog projects on EFL learners' speaking performance and learning engagement	English as a Foreign Language (EFL)	<p>1. Smartphone Based Collaborative Vlog Projects</p> <p>2. Blended Learning</p>	<p>1. Enhances Student Engagement: Collaborative vlog projects increase student engagement in learning through more interactive and meaningful experiences.</p> <p>2. Improves Language Skills: This project helps students enhance their speaking skills through video tasks that involve real-life language use.</p> <p>3. Develops Digital Media Production Skills: Students learn essential digital media production skills, such as filming, video editing, and vlog creation, which are valuable in the digital era.</p>
China				
Ebsco				

				<p>4. Collaboration and Teamwork: Enhances students' collaboration and teamwork skills through group-based tasks.</p> <p>5. Creativity and Critical Thinking: Encourages students to think creatively and critically when producing engaging and meaningful video content.</p> <p>6. Authentic Learning Experience: Connects classroom learning with real-world experiences, making learning more relevant and meaningful.</p>
<p>Alexandra Dashkina, Aleksandra Kobicheva, Tatiana Lazovskaya, Elena Tokareva, Dmitriy Tarkhov &amp; Irina Guselnikova (2022)</p>	<p>Examining the Effectiveness of Computer-Supported Collaborative Learning for Language Proficiency Purposes</p>	<p>English Language</p>	<p>Pembelajaran Kolaboratif Disokong Komputer (Computer-Supported Collaborative Learning, CSCL)</p>	<p>1. Improved English Language Proficiency: Students show significant improvement in their English proficiency when using collaborative learning approaches supported by technology.</p> <p>2. Increased Student Engagement: Students are more cognitively, emotionally, and behaviorally engaged when learning in a technology-supported collaborative</p>
Rusia				
Ebsco				

				<p>environment.</p> <p>3. Collaboration and Communication Skills: Collaborative activities foster communication and teamwork skills among students.</p> <p>4. Self-Assessment and Instant Feedback: Students can evaluate their own performance and receive immediate feedback through digital tools.</p> <p>5. Student-Centered Learning: Students have greater control over their learning process and can progress at their own pace.</p>
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### Findings and Discussion

This study has identified various 21st-century approaches used in language teaching and learning through a systematic literature review. The analysis clearly indicates that implementing 21st-century methods in language education provides numerous significant benefits, helping students become better prepared for future challenges. Among the identified approaches are project-based learning (PBL), flipped learning, blended learning, gamification, and digital technology integration such as mobile applications and social networking sites.

These approaches have been proven to significantly enhance student engagement and motivation. For instance, a study by Meghry Nazarian, Negmeldin Alsheikh, and Mohamed Alhosani (2023) found that incorporating problem-solving and critical thinking in English language teaching improves students' academic performance and facilitates the learning process. Similarly, research by Jintavee Khlaisang and Pornpimol Sukavatee (2022) demonstrated that Mobile-Assisted Language Learning (MALL) and Virtual Learning Environments (VLE) not only enhance students' communication skills but also boost their motivation and acceptance of English language learning. Furthermore, findings by Nurul Ashikin Izhar et al. (2023) showed that online learning offers greater flexibility and access to a wide range of learning resources, ultimately improving the quality and effectiveness of education.

Additionally, 21st-century approaches contribute to the enhancement of students' language proficiency. A study by Mazura Jamalai@Jamali and Pramela Krish (2021) revealed that online

discussion forums in English for Specific Purposes (ESP) instruction helped improve students' linguistic skills, including syntax, pronunciation, spelling, and grammar. This finding was further reinforced by research from Hui-Wen Huang (2021), which found that collaborative smartphone-based vlogging projects significantly improved students' speaking skills through video tasks that involved real-life language usage. These methods not only enhance language proficiency but also encourage students to think creatively and critically when producing engaging and meaningful video content.

21st-century approaches also promote the development of critical thinking and problem-solving skills. For example, a study by Parisa Arabloo et al. (2022) demonstrated that technology-assisted project-based learning (PBL) helps students develop critical thinking and problem-solving abilities through projects that require analysis and evaluation. This suggests that these approaches do not merely focus on language acquisition but also on cultivating essential 21st-century skills such as creativity, collaboration, and digital literacy. Furthermore, research by Esra Karakaş Kurt and Ahmet Güneyli (2023) highlighted that the integration of language learning technology and the application of Gardner's Multiple Intelligences Theory improve students' communication and collaboration skills, allowing them to learn in a more meaningful and relevant way.

One of the most notable advantages of 21st-century approaches is their flexibility and accessibility. Methods such as online learning and MALL enable students to learn anytime and anywhere, offering greater flexibility in time management and learning environments. Research by Eka Nurhidayat et al. (2023) found that the integration of technology in English as a Foreign Language (EFL) learning provided students with access to various digital tools and applications, enriching their overall learning experience. These approaches also enhance students' digital literacy skills, which are essential in today's digital era.

Despite these numerous benefits, there are also challenges in implementing 21st-century approaches. One major challenge is the need for adequate teacher training and proper technological infrastructure. Teachers must be sufficiently trained to use new technologies and methodologies effectively in their teaching practices. Additionally, schools and educational institutions must ensure that they have access to the necessary technology and resources to support these approaches. However, with the right support from schools and educational authorities, these challenges can be addressed, and the long-term benefits far outweigh the difficulties.

Overall, 21st-century approaches in language teaching and learning offer numerous advantages that can significantly enhance students' learning experiences and academic outcomes. These approaches not only help students master language skills but also develop the essential competencies required to succeed in an increasingly complex global landscape. By equipping students with skills such as critical thinking, problem-solving, creativity, collaboration, and digital literacy, we help them become better prepared for future challenges. Therefore, it is crucial to continuously explore and integrate 21st-century approaches into our education system to ensure that students are well-equipped to thrive in a rapidly evolving world.

### Implications of Findings

The findings of this study provide several important implications for the teaching and learning of language subjects in the context of the 21st century. The adoption of 21st-century approaches such as project-based learning (PBL), flipped learning, gamification, and digital technology integration has the potential to enhance the quality of language education. These approaches not only facilitate language comprehension and mastery but also promote critical skills such as critical thinking, creativity, and collaboration. More interactive and student-centered teaching makes learning more meaningful and relevant, thereby increasing student interest and motivation (Esra Karakaş Kurt & Ahmet Güneyli, 2023).

Teachers play a crucial role in implementing 21st-century approaches, making continuous training and professional development essential. Educators need to be equipped with the necessary skills to integrate technology into their teaching and to effectively incorporate 21st-century approaches into the curriculum. This includes training in the use of digital applications, online learning platforms, and modern teaching methodologies such as project-based learning and flipped learning (Parisa Arabloo et al., 2022). Additionally, the curriculum should be redesigned to incorporate 21st-century approaches that emphasize critical thinking, problem-solving, and digital literacy. A flexible and adaptive curriculum can provide students with a holistic and integrated learning experience. For example, collaborative projects that combine technology with social skills can help students connect their learning to real-life situations (Zahra Cheraghi & Hengameh Omranpour, 2023).

To support the implementation of 21st-century approaches, educational institutions must ensure the availability of adequate technological infrastructure. This includes stable internet access, digital devices such as computers and tablets, and online learning platforms (Kai Nan Lahpai, 2019). Investment in educational technology is crucial to ensure that all students have equal access to the necessary tools and resources for effective learning. Moreover, educational authorities must take a proactive role in supporting the integration of 21st-century approaches in education. This includes developing guidelines for schools, investing in technological infrastructure, and providing teacher training programs. Additionally, education policies that support the use of technology and innovative teaching approaches should be formulated and implemented (Etcoy Diam Maru P., 2023).

21st-century approaches also help students develop the skills necessary to succeed in a rapidly evolving and complex global landscape. According to Parisa Arabloo et al. (2022) and Zahra Cheraghi & Hengameh Omranpour (2023), skills such as critical thinking, creativity, collaboration, and digital literacy are essential for students' future higher education and career success. Therefore, integrating these approaches into language teaching and learning can provide students with a competitive advantage in the workforce. Approaches such as online learning and Mobile-Assisted Language Learning (MALL) offer greater flexibility, allowing students to learn anytime and anywhere. This is particularly beneficial in situations where face-to-face learning is not feasible, such as during the COVID-19 pandemic (Siok Yong Tan & Melor Md Yunus, 2023). Moreover, access to various digital learning resources enhances students' learning experiences.

Thus, the findings of this study highlight the importance of 21st-century approaches in improving language teaching and learning. By leveraging technology and innovative learning

methodologies, students can be equipped with the necessary skills and knowledge to succeed in the future. In line with the views of Esra Karakaş Kurt & Ahmet Güneyli (2023) and Zahra Cheraghi & Hengameh Omranpour (2023), it is crucial for schools, teachers, and education authorities to work together in integrating 21st-century approaches into the education system to ensure effective and successful learning in the modern era.

### Conclusion

Through a comprehensive literature review, this study has found that 21st-century approaches in the teaching and learning of language subjects have a significant impact on the quality of education. Approaches such as project-based learning, collaborative learning, gamification, and digital technology integration have demonstrated effectiveness in enhancing language proficiency, student engagement, and motivation to learn. Previous studies also highlight that these approaches help develop critical skills essential for the 21st century, including critical thinking, problem-solving, creativity, and collaboration.

The integration of digital technology in language education, as evidenced by the analyzed studies, not only facilitates access to diverse learning resources but also provides greater flexibility in the learning process. For instance, Mobile-Assisted Language Learning (MALL) and Virtual Learning Environments (VLE) allow students to learn anytime and anywhere, thereby improving their motivation and acceptance of language learning.

Project-based and collaborative learning also play a crucial role in enhancing students' social skills and interactions. Collaborative activities not only foster communication and teamwork skills but also encourage students to learn from one another. Furthermore, approaches like gamification and augmented reality (AR) have been proven to increase student interest and engagement, making the learning process more interactive and enjoyable.

The findings of this study indicate that integrating 21st-century approaches in language teaching and learning is crucial to ensuring that students acquire relevant skills and are well-prepared for the future. Therefore, it is essential for educators, policymakers, and educational institutions to continuously support and promote the adoption of these approaches in the education system. By understanding and implementing these methods, language education in Malaysia can be enhanced, ensuring that students are better equipped to face the challenges and opportunities of the 21st century.

This study contributes to existing knowledge by synthesizing 21st-century language teaching approaches, emphasizing the role of technology-enhance and student-centered learning. It validates the effectiveness of strategies such as project-based learning, gamification, and digital integration in fostering critical thinking, creativity, and collaboration. Contextually, it addresses the evolving educational landscape, providing evidence-based insightful curriculum design, teacher training, and classroom implementation. In the Malaysian context, this research highlights the need to integrate digital tools and collaborative learning to enhance student engagement and language proficiency. By bridging theory and practice, it ensures language education remains dynamic, relevant, and effective in preparing students for the demands of the modern world.

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