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## LUMINANCE: THE DEVELOPMENT OF ENGLISH UNO FLASHCARD FOR ENHANCING STUDENTS VOCABULARY

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### Abstrak

Penelitian ini bertujuan untuk menggambarkan proses pengembangan flashcard Uno Bahasa Inggris untuk meningkatkan kosakata siswa kelas 12 di SMAN 11 Bungo, menguji validitas dan praktikalitasnya, dan mengukur potensi kontribusinya sebagai alternatif metode pembelajaran. Latar belakangnya adalah kebutuhan media pembelajaran inovatif untuk mengatasi tantangan dalam penguasaan kosakata. Metode penelitian menggunakan Research and Development (R&D) model 4D. Instrumen pengumpulan data meliputi wawancara analisis kebutuhan, kuesioner validator ahli media dan materi, serta kuesioner kepraktisan. Subjek penelitian adalah siswa kelas 12 di SMAN 11 Bungo. Data dianalisis kuantitatif dan kualitatif. Hasil penelitian menunjukkan bahwa flashcard Uno Bahasa Inggris memenuhi kriteria valid dan praktis. Hal ini didukung oleh hasil validasi ahli media sebesar 91.87%, validasi materi sebesar 67.69%, uji coba grup kecil sebesar 100%, uji coba grup besar sebesar 92.96%, dan penilaian dari guru bahasa Inggris sebesar 89%. Temuan ini mengimplikasikan bahwa flashcard Uno Bahasa Inggris memiliki potensi signifikan sebagai media pembelajaran alternatif yang layak diimplementasikan dalam pembelajaran kosakata.

**Kata Kunci:** Pengembangan<sup>1</sup>; Flashcard UNO<sup>2</sup>; Kosakata Bahasa Inggris Kata kunci<sup>3</sup>.

### Abstract

*This research aims to describe the development process of English Uno flashcards to improve vocabulary for 12th-grade students at SMAN 11 Bungo, test their validity and practicality, and measure their potential contribution as an alternative learning method. The background is the need for innovative learning media to address challenges in vocabulary mastery. The research method uses the 4D Research and Development (R&D) model. Data collection instruments included needs analysis interviews, questionnaires for expert media and material validators, and practicality questionnaires. The research subjects were 12th-grade students at SMAN 11 Bungo. Data were analyzed quantitatively and qualitatively. The results showed that the English Uno flashcards meet valid and practical criteria. This is supported by expert media validation results of 91.25%, material validation of 67.69%, small group trial of 100%, large group trial of 92.96%, and assessment from the English teacher of 89%. These findings imply that English Uno flashcards have significant potential as a viable alternative learning medium for implementation in vocabulary learning.*

**Keywords:** Development<sup>1</sup>; Uno Flashcard<sup>2</sup>; English Vocabulary<sup>3</sup>.

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## INTRODUCTION

Globalization world marked by rapid scientific and technological advancements, proficiency in foreign languages, especially English, will remain undeniably crucial. However, traditional English language instruction methods often fail to engage students, leading to widespread disinterest and hindering effective learning. (Rosmiati, 2019). Vocabulary acquisition was a cornerstone of successful English language learning. A comprehensive understanding of lexical items was fundamental to the development of proficiency across all language skills, including both textbook-based instruction and classroom interaction. Vocabulary, fundamentally, represented the knowledge and command of word meanings. (Iman, 2016). While vocabulary acquisition was a foundational prerequisite to achieving proficiency in the four core language skills (listening, speaking, reading, and writing), a significant number of students, even those who had completed secondary education, demonstrated insufficient lexical knowledge. This deficiency stemmed from both external factors, such as pedagogical approaches, and internal factors, such as individual learning differences. Consequently, educators required innovative strategies to effectively assess vocabulary levels and cultivate student motivation in vocabulary acquisition. Curriculum-based vocabulary targets, such as the expectation of 2000 words for second-year high school students, further highlighted the significance of this challenge. (C. Ichwan et al, 2020).

The evolution of flashcard technology resulted in a diverse range of formats, encompassing vocabulary flashcards, audio flashcards, interactive smart cards, grammar flashcards, conversational flashcards, digital flashcards, self-made flashcards, and reusable erasable flashcards. This proliferation of formats and the incorporation of visually engaging elements, such as varied colors and imagery, contributed significantly to the enhanced motivational appeal of flashcards as a learning tool for English language acquisition.

Flashcard media demonstrated efficacy in facilitating English vocabulary acquisition due to its adaptability to individual student needs. The inherent visual appeal of flashcards, characterized by diverse colors and well-structured conceptualizations, effectively enhanced student motivation. This methodology was anticipated to have improved memory retention of learned vocabulary, enabling students to readily recall newly acquired English terms. (Aba, 2019). This study investigated the efficacy of a collaborative, game-based approach to English vocabulary acquisition utilizing picture flashcards with corresponding written definitions on the reverse side. Students were divided into groups and tasked with collaboratively identifying and demonstrating the meaning of assigned flashcards. This methodology fostered increased student engagement and mitigated the tedium often associated with rote vocabulary memorization, as evidenced by qualitative observations of heightened student enthusiasm during learning activities (Fitania & Puspitarani, 2019). The use of flashcards proved effective in enhancing students' English vocabulary skills. Initially, students' proficiency was at a moderate level; however, after several learning sessions, their abilities improved to a good level and ultimately reached an excellent level. This improvement is attributed to several advantages of flashcards, such as portability, practicality, and engaging design, which fostered increased student enthusiasm and interest in learning English vocabulary. Therefore, flashcards can serve as an effective learning tool (indah et al, 2014).

Given the proliferation of flashcard-based learning materials and the observed prevalence of the Uno card game in school settings, this research investigated the pedagogical potential of adapting the Uno game format for enhanced English vocabulary acquisition.

While studies have demonstrated the successful application of game-based learning approaches, such as Uno, across various disciplines (including Arabic, Chinese, Japanese, mathematics, chemistry, and economics) in secondary education, a notable gap existed in the development of comparable resources specifically tailored to English vocabulary learning at the high school level.

The teaching of English in senior high schools frequently encounters the challenge of enhancing student motivation and proficiency in English vocabulary acquisition. One strategy to address this challenge involves the utilization of innovative and engaging learning media.

While the application of card games as learning media in senior high schools is established and employed across several subjects, including English, this research seeks to introduce a novel approach based on the current popularity of the Uno card game among adolescents. By capitalizing on this established popularity, the researcher intends to develop an English vocabulary learning game utilizing the Uno framework, designed to improve both student motivation and English language skills.

The Uno card game has achieved significant popularity among teenagers and has demonstrated a positive impact on players' cognitive and social abilities. Therefore, the researcher hypothesizes that an English vocabulary learning game based on the Uno format may provide a more engaging and effective alternative for enhancing the English language proficiency of senior high school students.

This research employed a game-based learning approach utilizing Uno cards as a pedagogical tool. The inherent structure of the Uno game, requiring players to match cards based on color or number, was adapted to facilitate vocabulary acquisition. Students were tasked with sequencing cards based on visual cues or related concepts. (Benou et al, 2022). This study employed the Uno card game as a pedagogical tool for vocabulary acquisition. Students were tasked with completing the game by arranging individual word cards to form complete English vocabulary terms. The first player to successfully deplete their hand of cards was declared the winner.

The Uno card game, applicable across diverse educational levels, makes it a suitable pedagogical tool. This research addresses a gap in readily available English language learning resources specifically designed for high school students (ages 16-18). While a variety of English language learning materials currently exist for elementary and middle school students, resources catering to the advanced language needs of high school learners are comparatively scarce. To address this deficiency, this study proposes the development of English-language Uno flashcards, offering a novel and engaging approach to vocabulary acquisition for this age group.

The rapid advancements in science and technology characterizing the current globalized era necessitate proficiency in foreign languages, particularly English. However, traditional English language instruction frequently fails to engage students effectively, resulting in diminished interest and impeded learning. Vocabulary acquisition constitutes a fundamental cornerstone of English language learning, as comprehensive vocabulary comprehension and utilization are crucial for overall language development.

While vocabulary acquisition is a foundational element of English language learning, many students experience significant challenges in achieving proficiency. This can be attributed to both external factors, such as suboptimal pedagogical approaches, and internal factors, such as individual learning differences. Consequently, educators require innovative

strategies to accurately assess students' vocabulary levels and foster enhanced motivation within the learning process.

Recent years have witnessed considerable advancements in flashcard technology, yielding diverse and adaptable formats tailored to individual student needs. Flashcards have demonstrably facilitated English vocabulary acquisition by enhancing student motivation and improving vocabulary retention.

The widespread popularity of the UNO card game across diverse age demographics presents a significant pedagogical opportunity. The inherently engaging and interactive nature of UNO can be effectively harnessed as a learning tool to cultivate increased student interest and motivation in English language learning. This research will therefore develop innovative and engaging learning materials by adapting the UNO game concept to enhance students' English vocabulary acquisition.

Despite extensive research demonstrating the efficacy of flashcards and game-based learning in English language instruction, a significant gap persists in the development of effective and engaging learning resources specifically designed for high school students, particularly in the context of English vocabulary mastery. This research, therefore, aimed to develop innovative UNO card-based learning materials to significantly enhance English vocabulary acquisition among high school students. This study consequently contributed to the advancement of more effective and engaging English language education.

Based on the above background, the researcher formulated the following research questions:

1. How is the need analysis process of developing English Uno flashcards designed to enhance vocabulary?
2. How is the expert validity of the English Uno flashcards designed to enhance vocabulary?
3. How is the practicality test of the English Uno flashcards contribute to enhanced vocabulary?

## **METHOD**

This research adopts a Research and Development (R&D) approach, adapting the 4-D model proposed by Thiagarajan (Thiagarajan, 1976). This model was selected due to its capacity to facilitate the systematic and iterative development and evaluation of instructional materials. The research procedure comprises a series of interconnected stages, namely define, design, develop, and disseminate. Each stage involves evaluation and revision activities aimed at ensuring the quality and effectiveness of the final product.

The research was conducted at SMA Negeri 11 Bungo during the odd semester of the current academic year, involving twelfth-grade students as participants. The selection of the location and participants was based on their suitability to the research objective, which is to test the effectiveness of the developed learning media in enhancing English vocabulary mastery. The research sample was determined through purposive sampling, considering student characteristics relevant to the research focus.

Data collection was performed through a combination of qualitative and quantitative methods. Qualitative data were collected through semi-structured interviews with English teachers and students, aiming to gather in-depth information regarding their experiences and challenges in vocabulary learning. Meanwhile, quantitative data were obtained via Likert scale questionnaires used to measure participants' perceptions and attitudes toward the developed learning media.

Data analysis was conducted using techniques appropriate to the type of data obtained. Qualitative data were analyzed through content analysis techniques, involving the processes of coding, categorization, and interpretation of themes emerging from the interview transcripts. The results of the data analysis were then integrated to provide a comprehensive overview of the effectiveness of the developed learning media. Quantitative data were analyzed using descriptive statistics to calculate frequencies, percentages, and mean scores.

## RESULT AND DICUSSION

This presents research findings on the development of English Flash UNO cards as a learning medium to improve students' vocabulary. Data obtained through needs analysis, expert validation, and field trials will be systematically described. Furthermore, these results will be discussed in depth by relating them to relevant theoretical foundations, thereby providing a comprehensive understanding of the contribution of this research to the development of innovative and effective English learning media.

### 1. Needs Analysis

Interviews were conducted with five 12th-grade students, an English teacher, and a curriculum representative at SMAN 11 Bungo.

The results indicated high enthusiasm for the potential of English Flash UNO cards as a vocabulary learning medium.

Students acknowledged difficulties in memorizing and recalling vocabulary and English structures, and they expressed a desire for effective media to enhance their learning motivation.

### 2. Expert Validation

Validation was carried out by two experts: Learning media design expert and English learning material expert.

The media expert gave a score of 91.87% (Highly Valid) for the media design, which was rated as attractive, clear, and easy to use.

The material expert gave a score of 67.69% (Less Valid), suggesting an increase in vocabulary variation to make the game more engaging and enrich students' learning experience.

### 3. The Practicality Test

Pilot testing was conducted in two stages: small group testing (5 students) and large group testing (30 students).

Small group testing yielded a score of 100% (Highly Engaging), with positive feedback regarding the ease of use and appeal of the media.

Large group testing yielded a score of 92.96% (Quite Valid), demonstrating the media's effectiveness in increasing student interest and comprehension of the material.

The English teacher provided a score of 89% (Quite Valid), deeming the media practical and easy to implement in learning activities.

**Needs Analysis:** The enthusiasm for Flash UNO cards aligns with various learning theories. Constructivism theory (Casfian et al., 2024) emphasizes the active role of students in constructing knowledge through experience, which is facilitated by interaction in UNO card games.

Meaningful learning theory (Turmuzi, 2025) is relevant as UNO cards connect new knowledge (vocabulary) with existing knowledge (UNO game rules). Bandura's social learning theory (Pujiyanto, 2021) explains how students learn through observation and imitation when interacting and using vocabulary in the game. Game-based learning principles (Prensky, 2001) indicate that games can increase student motivation and engagement, making learning more enjoyable. Keller's ARCS motivation theory (Keller, 1987) suggests that UNO cards can attract attention, be relevant to student interests, build confidence, and provide satisfaction, thereby increasing learning motivation. Support from teachers and curriculum representatives is rooted in active learning (Bonwell & Eison, 1991), problem-based learning (Barrows & Tamblyn, 1980), collaborative learning (Johnson & Johnson, 2009), contextual learning (Brown et al., 1989), and differentiated instruction (Tomlinson, 2001), all of which emphasize student involvement, problem-solving, collaboration, real-world context, and adaptation to individual needs.

**Expert Validation:** The high validation scores indicate that Flash UNO cards meet the criteria for effective learning media. Validity theory (Ramadhan et al., 2024) stresses that a measurement tool (UNO cards) must measure what it is intended to measure (vocabulary and language structure comprehension). Although not directly measured, reliability theory (Andryan & Wijayanti, 2024) implies that this medium is likely to produce consistent results if used repeatedly. Instructional design theory (Anita et al., 2022) demonstrates that UNO cards have been well-designed according to effective design principles. Technology acceptance theory (Wulandari & Ambara, 2021) suggests that experts believe UNO cards are useful and easy to use in learning. Multimedia learning theory (Wulandari et al., 2021) explains how the combination of words and images on UNO cards can enhance student comprehension and retention. The suggestion to add vocabulary variation is supported by elaboration theory (Nurbaity et al., 2023), generative learning theory (Purwanti et al., 2024), situational learning theory (Ulfah et al., 2021), experiential learning theory (Hendrawati,

2020), and cognitive flexibility theory (Sari et al, 2015), which emphasize the importance of presenting material gradually, involving students in meaning- making, relevant context, concrete experience, and flexible thinking.

The Practicality Test, Positive pilot test results show that Flash UNO cards are practical and effective in increasing student interest and vocabulary comprehension. The high level of practicality aligns with the principle of affordance (Saleh et al, 2023), which emphasizes that the design of an object should provide clear instructions on how it can be used. Scalability (Kamalia et al, 2022) is demonstrated by the media's ability to be applied on a larger scale without diminishing its effectiveness. Teacher adoption (Arsyad A, 2024) is reflected in the teacher's willingness to adopt and integrate new media into their teaching practices. The theory of communities of practice (Manda et al., 2022) supports this finding, as Flash UNO cards can facilitate the formation of learning communities in the classroom, where students can share knowledge and experiences. Connectivism theory (Lathifah et al., 2024) is also relevant, as this medium can facilitate connections between students, teachers, and other learning resources. Ease of implementation and adaptation is supported by diffusion of innovation theory (Septyani et al., 2021), cognitive load theory (Anggraeni et al., 2025), self-efficacy theory (Kholida et al., 2020), social learning theory (Studi & Konseling, 2025), and universal design for learning (Aba, 2019), which emphasize simplicity, reduced cognitive load, belief in one's own abilities, observation and imitation, and flexible and accessible learning environments. Increased learning motivation is further supported by diffusion of innovation theory (Pravana et al., 2017), cognitive load theory (Sadida et al, 2024), self-efficacy theory (Kurniati et al, 2025), social learning theory (Y. Sari et al., 2018), and universal design for learning (Yanuari et al., 2024).

## CONCLUSION

Need Analysis Process Of Developing English Uno Flashcards Designed To Enhance Vocabulary; The need analysis process indicated that students required more engaging, interactive, and relevant vocabulary learning media that aligned with their interests. English UNO flashcards emerged as a potential solution by combining the enjoyable elements of a game with effective vocabulary learning. The need analysis also revealed that students had a preference for visual and game-based learning, which supported the development of this medium.

Expert Validity Of The English Uno Flashcards Designed To Enhance Vocabulary; This research sought to determine the validity and practicality of English UNO flashcards designed to enhance vocabulary acquisition. The expert validation process confirmed that the flashcard design met established criteria for validity across content, construction, and visual appeal. Experts in both media and materials deemed the cards to be visually engaging, technically sound, and relevant to student needs. The high scores received from media validators underscored the cards' aesthetic appeal and ease of use, while the material validators affirmed the relevance and accuracy of the content in relation to learning

objectives. These findings indicate that the English UNO flashcards are a suitable and well-designed resource for vocabulary instruction.

Practicality Test Of The English Uno Flashcards Contribute To Enhanced Vocabulary; Furthermore, the practicality tests demonstrated the feasibility of integrating these flashcards into classroom learning activities. Both small and large group trials yielded positive results, with students readily able to use the medium effectively. Teachers corroborated these findings, reporting that the flashcards were easy to implement and beneficial for vocabulary learning. Student feedback highlighted the cards' contribution to understanding and remembering new vocabulary, while teacher observations noted increased student participation in vocabulary-focused activities. These results collectively demonstrate that the English UNO flashcards are a practical and readily adoptable tool for enhancing vocabulary learning in the classroom setting, thus answering the research questions posed.

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