

Research Article

The Development of a Learning Medium for A1-Level Vocabulary on the Topic “Freunde, Kollegen und Ich”

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Abstract: The objective of this study was to develop a vocabulary enhancement learning medium for A1-level students, specifically focused on the theme "Freunde, Kollegen und ich" to improve reading comprehension skills via the QuizWhizzer platform. The investigation was conducted at the Language Laboratory of the Foreign Languages Department, Faculty of Languages and Arts, Universitas Negeri Medan. Adopting a development research design, an interactive learning medium was constructed to facilitate A1-level vocabulary acquisition. A descriptive qualitative methodology was employed to analyze the research processes. The development process was guided by the framework proposed by Richey and Klein, which encompasses three distinct phases: 1) the planning phase, 2) the development phase, and 3) the evaluation phase. The data and corresponding data sources utilized in this study comprised specialized vocabulary materials including nouns, verbs, and adverbs along with exemplary reading texts extracted from the A1-level textbooks Netzwerk Neu A1 (under the theme "Freunde, Kollegen und ich") and Studio d A1. This development research successfully yielded an interactive learning medium hosted on the QuizWhizzer platform, consisting of 70 practice items structured as short texts and concise sentences tailored to the A1 proficiency level. The outcome of this research is accessible via the following URL: <https://bit.ly/hasilmediaQuizWhizzer>. Within the QuizWhizzer platform, two distinct assessment formats were implemented: multiple-choice and true/false questions. Following the initial construction of the learning medium, both the instructional content and the platform configuration were subjected to rigorous expert validation. The evaluation results indicated that, following necessary revisions and subsequent content re-validation, the instructional material achieved a score of 92 points, whereas the media design received 95 points. Both evaluations fell within the "excellent" category. Consequently, the developed QuizWhizzer learning medium is deemed highly appropriate and effective for integration into A1-level German language instruction.

Keywords: A1 Level; Learning Medium; Reading Comprehension; Vocabulary; QuizWhizzer.

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1. Introduction

Language constitutes the most critical medium of communication in human life. In foreign language instruction, vocabulary holds a pivotal significance as it establishes the fundamental basis for reading comprehension. The German language encompasses four primary language skills to be mastered, including reading proficiency. At the A1 level, reading proficiency involves word recognition and contextual understanding. Without an adequate vocabulary, students encounter substantial difficulties in comprehending written texts.

Vocabulary is widely acknowledged as a "central foundation" for students to actively utilize the German language. In German pedagogy, vocabulary is understood as the totality of all words within a language, forming the most essential basis for both oral and written language skills. Therefore, it is unsurprising that vocabulary acquisition represents one of the most formidable challenges in foreign language learning, particularly in German. The German lexicon can be categorized into ten parts of speech: verbs, nouns, adjectives, pronouns, articles, adverbs, particles, prepositions, conjunctions, and interjections (Andriani et al., 2024:1550). The vocabulary specific to the theme "Freunde, Kollegen und Ich" predominantly comprises nouns, verbs, and adverbs. In German, nouns are words used to denote persons, objects, or locations. A defining characteristic of German nouns is that they are always capitalized and are typically accompanied by an article, such as der, die, or das.

Verbs are words that express actions, activities, or states; they constitute the predicate and are conjugated according to the subject and tense. An adverb is defined as a word that describes a verb, an adjective, or another adverb. In other words, supplementary information regarding how, when, where, or to what extent an action occurs is provided by an adverb.

At Universitas Negeri Medan, the textbook "Netzwerk neu A1" is utilized within the German Language Department. One of the core themes in this textbook is found in Chapter 2, titled "Freunde, Kollegen und ich." Within this thematic area, a vocabulary focus must be mastered by the students, which encompasses: i) hobbies, ii) days of the week, and iii) professions.

The theme "Freunde, Kollegen und ich" was selected because it had already been covered by the third-semester students of Class B, as determined by an online survey conducted on September 3, 2025, via a WhatsApp group. The survey was distributed to 29 students utilizing Google Forms. The theme "Freunde, Kollegen und ich" represents vital learning content at the A1 level due to its direct relevance to the students' social lives. Based on the gathered questionnaire data, it was revealed that 79.3% of the students had not yet mastered the required vocabulary, and 75.9% experienced difficulties in memorizing words related to this topic. The difficulties identified pertain not only to memorizing word meanings but also to correct spelling and long-term vocabulary retention. From the data, it is evident that 51.7% of the most frequent difficulties in vocabulary acquisition involve long-term retention. This situation consequently results in low reading comprehension scores when students encounter texts related to the theme "Freunde, Kollegen und ich."

These findings indicate that vocabulary instruction is not yet implemented optimally and requires support through learning media that align with student characteristics. Prior to this study, interactive, quiz-based learning media for the theme "Freunde, Kollegen und ich" had not been utilized by the students. The expansion of vocabulary related to this topic can be significantly facilitated by an interactive learning medium. The questionnaire data further demonstrate that an interactive learning medium capable of providing immediate feedback is required by the students. It was stated by the students that a quiz-based interactive medium—equipped with images, simple sentence exercises, and engaging features—could ease the comprehension of word meanings and enhance vocabulary retention for the theme "Freunde, Kollegen und ich."

In the digital era, education is expected to align with rapid technological advancements. Various digital learning media are currently available and can be exploited to meet these educational demands. Learning media are defined as instruments that support the teaching-learning process, ensuring that the information conveyed by educators becomes clearer and can be better comprehended by students.

One of the media that can be deployed to resolve the challenges experienced by students is the QuizWhizzer platform. This web-based platform is easily accessible and offers interactive learning activities whereby learning motivation is increased. QuizWhizzer is recognized as an effective medium for the interactive delivery of instructional content, assisting learners in achieving their learning objectives. This learning medium is equipped with visual illustrations to prevent student boredom. The integration of images serves to support and clarify student understanding during the learning process. The quiz formats constructed within QuizWhizzer consist of multiple-choice and true/false questions, which can help consolidate students' vocabulary comprehension while simultaneously supporting their reading skills. The conceptual design of the QuizWhizzer medium is based on two functions: multiple-choice and true/false formats. The learning medium covers three subthemes—hobbies, days of the week, and professions—with a total of 70 tasks. To ensure a balanced and structured exercise design, 50 tasks are allocated to the multiple-choice format, and 20 tasks are allocated to the true/false format. While these game formats can be accessed free of charge, they are restricted to a limited number of attempts. Through a premium subscription, all features and advanced quiz types of QuizWhizzer can be fully unlocked. Ultimately, vocabulary acquisition for the theme "Freunde, Kollegen und ich" is supported, and reading proficiency at the A1 level is fostered by this learning medium.

2. Literature Review

The Development Model

A development model is defined as a conceptual framework utilized for the planning, designing, and evaluation of a product. The present study is grounded in the theory proposed

by Richey and Klein. The development model by Richey and Klein consists of three core phases: Planning, Production, and Evaluation, which is abbreviated as the PPE model (Richey & Klein, 2005). Through this systematic approach, it is ensured that the resulting outcomes are of high quality and remain relevant to the initial objectives. Furthermore, existing problems within the learning process can be addressed effectively, thereby providing practical benefits for educational purposes.

The Concept of Learning Media

Learning media are defined as instructional tools that can be utilized to convey learning-related information in an easily comprehensible manner. It is stated by Magdalena et al. (2021:316) that learning media encompass both hardware and software designed to serve as conduits for delivering instructional content. The deployment of these media is intended to render the learning process clearer, more efficient, and more goal-oriented. Furthermore, it is explained by Hafniati et al. (2022:282) that learning media function as aids that facilitate the delivery of instructional materials while simultaneously clarifying the intended message, thereby enabling the learning process to be conducted more effectively and efficiently.

Learning media constitute a critical factor within the teaching and learning process. The integration of learning media into instructional activities can stimulate new interests and desires, as well as enhance learning motivation. It is asserted by Wulandari et al. (2023:1) that learning media represent a vital component of the instructional process that can assist educators in delivering lesson content, thereby fostering learners' interest and enthusiasm for the subject matter.

Based on these expert perspectives, learning media can be conceptualized as instructional aids that support educators in conveying content comprehensibly, while concurrently increasing learners' interest and active participation. Therefore, the strategic utilization of appropriate media is deemed crucial for effectively achieving learning objectives and establishing an engaging educational environment.

The Function of Learning Media

The communication between educators and students within the educational process is significantly facilitated by learning media. Through the employment of these media, instructional content can be conveyed with greater clarity, thereby minimizing the probability of misunderstandings. Consequently, media serve not only as instructional aids but also as instruments for establishing a more effective and conducive learning atmosphere (Hasan et al., 2021:3). According to Sibuea (2024:1), the integration of technology is intended to render the learning experience more interactive and engaging.

Based on these various perspectives, it can be concluded that learning media possess a strategic function in the attainment of educational objectives, as instructional materials can be clarified, motivation can be enhanced, and learning can be rendered more interesting, interactive, and meaningful through their implementation.

The Concept of A1-Level Vocabulary for Reading Comprehension Skills on the Theme "Freunde, Kollegen und ich"

Simple texts regarding oneself, friends, and colleagues can be comprehended by students through the acquisition of A1-level vocabulary. Reading proficiency is defined as the capability to extract meaning and information from a written text. Students are required to possess reading comprehension skills in the German language that align with the Common European Framework of Reference for Languages (CEFR) (Amiroh & Afifah, 2021: 242). According to an investigation conducted by Röthlisberger et al. (2021: 360), reading proficiency is considered paramount for education; consequently, reading and its contributing factors must be thoroughly researched. Vocabulary is widely acknowledged as essential for text comprehension. As the vocabulary size expands, a superior understanding of German texts is achieved by students.

Furthermore, students are expected to be capable of reading and identifying critical information within texts focused on the theme "Freunde, Kollegen und ich." These instructional texts encompass the subthemes of hobbies, days of the week, and professions. During the reading process, everyday A1-level vocabulary must also be grasped by students, which is subsequently utilized to accurately comprehend short texts and concise sentences.

Fundamental words used to express simple ideas, needs, and everyday experiences are encompassed within German vocabulary at the A1 proficiency level. It is asserted that "learning vocabulary denotes the segment of a language's lexicon that is purposefully transmitted through textbooks and is intended to be actively acquired by learners" (Bauer &

Doetjes, 2023: 312). A paramount theme within the A1-level vocabulary framework is represented by "Freunde, Kollegen und ich." This specific topic establishes the foundation for the acquisition of more complex vocabulary at subsequent proficiency levels. The nouns, verbs, and adverbs utilized in this investigation were extracted from the textbooks Netzwerk neu A1 and Studio d A1, which include:

Table 1. A1 Vocabulary Dataset for Hobbies

No	Nomen	Bedeutung
1	das Kino/ die Kinos	Bioskop
2	das Café/ die Cafés	Kafe
3	das Museum/ die Museen	Museum
4	das Restaurant/ die Restaurants	Restoran
5	das Theater/ die Theater	Teater
6	das Stadion/ die Stadien	Stadion
7	das Schwimmbad/ die Schwimmbäder	Kolam renang

No	Verben	Bedeutung
1	Fußball spielen	Bermain bola
2	schwimmen	Berenang
3	kochen	Memasak
4	lesen	Membaca
5	tanzen	Menari
6	reiten	Menunggang kuda
7	joggen	Jogging
8	reisen	Bepergian
9	singen	Bernyanyi
10	fotografieren	Mengambil foto
11	laufen	Berlari
12	backen	Memanggang
13	schreiben	Menulis

Table 2. A1-Level Vocabulary Dataset for the Subtheme "Days of the Week"

No	Nomen	Bedeutung
1	der Montag	Senin
2	der Dienstag	Selasa
3	der Mittwoch	Rabu
4	der Donnerstag	Kamis
5	der Freitag	Jumat
6	der Samstag	Sabtu
7	der Sonntag	Minggu

No	Adverb	Bedeutung
1	oft	Sering
2	zusammen	Bersama
3	am Wochenende	Pada akhir pekan
4	toll	Keren/hebat/bagus
5	wirklich	Benar - benar
6	viel	Banyak
7	morgen	Besok
8	nachts	Pada malam hari
9	Gern	Suka
10	leider	Sayangnya

Table 3. A1-Level Vocabulary Dataset for the Subtheme "Professions"

No	Nomen	Bedeutung
1	der Arzt / die Ärztin	Dokter
2	der Lehrer / die Lehrerin	Guru
3	der Student / die Studentin	Mahasiswa
4	der Kellner/ die Kellnerin	Pelayan
5	der Taxifahrer/ die Taxifahrerin	Sopir taksi
6	der Informatiker/ die Informatikerin	Ahli informatika
7	der Verkäufer / die Verkäuferin	Penjual
8	der Architekt / die Architektin	arsitek
9	der Ingenieur / die Ingenieurin	Insinyur
10	der Friseur/ die Friseurin	Penata rambut
11	der Sekretär / die Sekretärin	Sekretaris
12	der Krankenpfleger / die Krankenpflegerin	Perawat

13	der Journalist / die Journalistin	Jurnalis
14	der Polizist/die Polizistin	Polisi
14	der Pilot/die Pilotin	Pilot
16	der Koch/die Köchin	Koki
17	der Kassierer/die Kassiererin	Kasir
18	der Musiker/die Musikerin	Musisi
19	der Tierarzt/die Tierärztin	Dokter hewan
20	der Mechaniker/die Mechanikerin	Mekanik
No	Verben	Bedeutung
1	lernen	Belajar
2	schneiden	Memotong
3	unterrichten	Mengajar
4	verkaufen	Menjual
5	schreiben	Menulis
6	reparieren	Memperbaiki
7	helfen	Membantu
8	bringen	Membawa
9	kochen	Memasak
10	planen	Merencanakan

QuizWhizzer

QuizWhizzer is conceptualized as a gamified quiz platform that provides an interactive learning experience through a digital game board. Each participant is enabled to advance across the game board in accordance with the number of correct responses provided. Through this mechanism, learning is not merely focused on cognitive evaluation but is also integrated with motivating elements and emotional engagement. The platform was designed to render the learning process more engaging in both offline and online environments. It is explained by Wahyuningtyas et al. (2025:235) that a wide variety of attractive, customizable game board templates are provided by QuizWhizzer, thereby allowing educators to conduct more interactive assessments. Consequently, QuizWhizzer is recognized as a gamified learning medium through which the assessment process is rendered game-based, entertaining, and more effective.

3. Methode

This study employs a qualitative descriptive approach with a focus on research and development (R&D) to produce a learning medium for A1-level vocabulary on the topic "Freunde, Kollegen und ich." The development process is based on the Richey and Klein model, which consists of three main phases: planning, production, and evaluation (PPE). This model is selected because it provides a systematic framework to ensure that the developed learning media is relevant, effective, and aligned with learners' needs.

The primary data source in this study is derived from the textbook "Netzwerk Neu A1", particularly Chapter 2, which covers the topic "Freunde, Kollegen und ich" (pages 18–27). The data include vocabulary items and example sentences categorized into three subtopics: hobbies, days of the week, and professions. Additional supporting data are obtained from internet sources to enrich the learning materials. The research was conducted in the Foreign Language Laboratory of the Faculty of Language and Arts, Universitas Negeri Medan

4. Results and Discussion

Based on the findings of this study, it can be established that QuizWhizzer is highly suitable for vocabulary instruction. The results obtained from this investigation were utilized to construct a learning medium focused on the theme "Freunde, Kollegen und ich," which was derived from the textbooks Netzwerk neu A1 and Studio d A1. This study is underpinned by the development model proposed by Richey and Klein, which encompasses three distinct phases: (1) planning, (2) production, and (3) evaluation.

During the planning phase, students' difficulties in acquiring vocabulary related to the theme "Freunde, Kollegen und ich" were identified. Subsequently, instructional materials and exercises were prepared in accordance with the students' learning needs. In the production phase, the materials extracted from Netzwerk neu A1 and Studio d A1 were integrated into the QuizWhizzer learning medium. The dataset for this study comprises vocabulary items for the theme "Freunde, Kollegen und ich" obtained from both Netzwerk neu A1 and Studio d A1. The structural exercises are focused on nouns, verbs, and adverbs. A total of 70 tasks

were formulated and tailored to meet student needs for vocabulary enhancement. Two specific quiz functions are employed within this learning medium, namely multiple-choice and true/false formats.

Several advantages are offered by QuizWhizzer, including: (1) gamification, which renders the learning process more engaging and increases student motivation; (2) various quiz functions that diversify instructional delivery; (3) practice and homework modes that can be deployed both within and outside the classroom; (4) automated learning outcome reports, allowing educators to monitor performance with ease; (5) an attractive visual design featuring game cards, avatars, and audio; (6) a leaderboard system that enhances student motivation; and (7) immediate feedback, whereby errors can be recognized instantaneously.

The evaluation phase was conducted through a validation process involving a material expert and a media expert. Six aspects were evaluated by the material expert, resulting in five aspects being rated as "excellent" and one as "sufficient," yielding a cumulative score of 92 points. Ten aspects were assessed by the media expert, with eight aspects rated as "excellent" and two as "good," culminating in a total score of 95 points. During the validation process, several recommendations for improvement were also provided. Necessary revisions were performed on the instructional material, followed by a re-validation process with the material expert, which ultimately sustained a score of 92 points. These outcomes indicate that the developed learning medium possesses exceptionally high quality.

Nevertheless, certain limitations were encountered during the development of this learning medium. The complimentary account of QuizWhizzer is restricted to a single quiz function, thereby limiting access to other features. Consequently, a premium Pro account is required, which entails a monthly subscription fee. Upon expiration of the Pro account, the previously constructed quizzes can no longer be modified. Furthermore, the instructional materials must be meticulously adapted to the appropriate quiz functions. A stable internet connection is also deemed imperative, given that QuizWhizzer operates as a web-based platform. Additionally, digital devices such as smartphones, laptops, or tablets are required by the students. Another technical drawback identified is that the text for each question is not fully visible on smartphone or laptop screens, requiring users to scroll across the screen to view the complete question text. However, with the guidance and support provided by the experts, the overall quality of the learning medium was significantly enhanced.

The findings of this study are in alignment with the research conducted by Silaban et al. (2021: 5–7), titled "Die Erstellung eines interaktiven Quiz zur Verbesserung des Wortschatzes mithilfe des Multiple Choice Quiz Makers." The commonalities shared between these two investigations include: (1) both studies yielded web-based learning media; (2) both developed instructional media aimed at enhancing A1-level vocabulary; and (3) both adopted the research and development framework of Richey and Klein.

Conversely, the distinctions lie in the fact that the study by Silaban exclusively utilized the textbook Studio d A1, whereas Netzwerk neu A1 was employed as the primary textbook and Studio d A1 as supplementary material in the present study. Furthermore, six thematic units were developed in Silaban's study, namely "Im Sprachkurs", "Termine", "Zeit", "Berufe", "Ferien und Urlaub", and "Essen und Trinken", whereas only a single theme was constructed in this investigation, namely "Freunde, Kollegen und ich". Another divergence is found in the software implemented; Silaban's study utilized the Multiple Choice Quiz Maker, whereas QuizWhizzer was deployed in this current research.

Based on the comprehensive evaluation phase, it can be concluded that the development of an A1-level vocabulary learning medium for the theme "Freunde, Kollegen und ich" utilizing QuizWhizzer is highly effective. Therefore, this learning medium can be optimally utilized by German language students to enhance their vocabulary mastery.

5. Conclusion

In conclusion, an interactive German vocabulary learning medium for the A1 proficiency level, focusing on the theme "Freunde, Kollegen und ich," was successfully developed via the QuizWhizzer platform by employing the three-phase framework of Richey and Klein, which encompasses planning, production, and evaluation. During the planning phase, students' academic difficulties and instructional requirements were systematically analyzed to formulate the reading comprehension materials. In the production phase, a dataset comprising 70 structural exercises was constructed across six distinct educational games utilizing multiple-choice and true/false formats, which are accessible through

specialized subtheme URLs <https://bit.ly/hasilmediaQuizWhizzer>. Finally, during the evaluation phase, rigorous validation was conducted by experts, yielding an "excellent" score of 92 for instructional content and 95 for media design. Based on these empirical validation outcomes and expert commendations, the developed QuizWhizzer learning medium is deemed highly appropriate and effective for enhancing A1-level German vocabulary mastery.

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