

BOOSTING GERMAN VOCABULARY ACQUISITION THROUGH ANIMATION

 <https://doi.org/10.30598/PEJLaC.v5i1.pp21-29>

Rita Fransina Maruanaya¹ , Calvin Karuna² , Juliaans Eliezer Rulland Marantika³ ,
Patresia Silvana Apituley⁴ , Wilhemina Ascaria Tuhumena⁵ .

¹ Institute of Vocational Education and Vocational Didactics, Technische Universitaet Dresden, Germany

^{2,3,4} Department of German Language Education Pattimura University, Jl. Ir.M Putuhena, 97233, Indonesia

⁵ Graduate School, Technology and Vactional Education State University of Yogyakarta, Jl. Colombo, 55281, Indonesia

Abstract

This research aimed to determine the effect of using animation media on increasing the mastery of German vocabulary among senior high school students at SMA Negeri 1 Seram Barat, Indonesia. The study employed a quantitative methodology, utilizing a quasi-experimental design that included an experimental group and a control group. The research sample consisted of the control group, class XI.5, and the experimental group, class XI.1. Thirty students were enrolled in each class. The data collection technique used pre- and post-tests with a question sheet containing twenty questions as a collection instrument. The experimental class used animation media for learning, while the control class used static pictures. Data analysis procedures were conducted using SPSS to perform normality tests, homogeneity tests, and hypothesis tests employing parametric statistical methods, namely the independent samples t-test and effect size test. The study's findings revealed a difference in the average mastery of German vocabulary scores between the group that used animation media and the group that relied on conventional whiteboard media. The analysis indicated that the experimental class using animation media surpassed the control class in average mastery of German vocabulary scores, achieving mean scores of 16.23 and 14.53, respectively. This indicates that there is a significant difference in the average level of mastery of German vocabulary among the students in the experimental class, who used animation media, and those in the control class, who used static picture media. The effect size calculated using Cohen's d yielded a significant value of 0.92, indicating a large effect size classification. The deployment of animation media was therefore an effective pedagogical instrument in this case study, enabling a significant advancement in students' German vocabulary proficiency at SMA Negeri 1 Seram Barat.

Keywords: *Learning Media, Digital Media, Animation Media, German Vocabulary*

Article Information:

Correspondency author's email:
ritafransina.maruanaya@tu-dresden.de

Article submitted: 06/05/2025

Last Revision: 10/06/2025

Article Accepted: 16/06/2025

Article Published: 23/06/2025

Copyright © Rita Maruanaya, Calvin Karuna, Julians Marantika, Patresia Apituley, Wilhemina Tuhumena

RESEARCH ARTICLE 

Publisher: Universitas Pattimura
(Manage by Language Study Center)



This work is licensed under [Creative Commons Attribution License 4.0 CC-BY International license](https://creativecommons.org/licenses/by/4.0/)

INTRODUCTION

Man kann nicht nicht kommunizieren. Jede Kommunikation hat einen Inhalts- und einen Beziehungsaspekt (Watzlawick, et al, 2017). Paul Watzlawick, a communication expert from Austria, proposed this communication axiom. According to this axiom, humans are inherently dependent on communication with others. In addition, Watzlawick proposed that all communication activities are comprised of content and relationship elements. The function of the content aspect is to convey information or messages to the recipient, while the relationship aspect provides information about how the message is perceived. Consequently, every message

conveyed in communication is not merely informative but also contains statements that require and influence the perception and response of the recipient. In accordance with the aforementioned perspective, Sheep (2016) asserts that communication is a process of sharing. This entails the exchange of ideas, thoughts, and opinions among the participants. Effective communication is defined as the successful transmission of the sender's message to the recipient, resulting in a mutual understanding of the content. This implies the necessity of conveying ideas, thoughts, and opinions with the utmost clarity and precision, thereby ensuring that the recipient experiences a connection with the sender's internal emotional state or perception.

In the domain of communication, the role of language is paramount. The use of language as a medium or tool is indispensable for effective communication. Language facilitates interaction both verbally and in written form. According to Fridani (2014), language can be defined as a system of signs or symbols that are arranged in a regular pattern with the aim of expressing thoughts or ideas from one person or group of people to another. She further elaborates on this point, underscoring that human communication encompasses a multifaceted array of modes. In addition to verbal language, which involves the transmission of messages through spoken words, human communication encompasses non-linguistic modes such as body language, encompassing gestures like nodding, thumbs-up, and waving, facial expressions like smiling, frowning, and wide-eyed expressions, and non-linguistic sounds like grumbling, crying, laughing, and screaming. To communicate effectively, it is essential to master language skills, as well as to understand the various types of communication mentioned above. In the contemporary era of globalization and technological advancement, language's role in facilitating connections among individuals from diverse linguistic and cultural backgrounds has become increasingly significant. Consequently, the necessity to acquire foreign languages is becoming increasingly apparent. The acquisition of a foreign language can lead to a broadening of employment prospects, an enhancement of knowledge, and the establishment of cooperative relationships in the domains of politics, culture, and business.

German is one of several foreign languages that is currently being studied in Indonesia. Within the Indonesian National Education Curriculum, German stands as one of several foreign languages taught in both high schools and vocational schools. The Ministry of Education, Culture, Research, and Technology (2022) assert the importance of German proficiency for the nation's future generation, emphasizing its global utilization across various sectors, particularly education, science and technology, tourism, arts and culture, and diverse professional fields. In the field of education, Germany provides numerous scholarships for Indonesians pursuing scientific research and further study. Furthermore, Germany offers substantial prospects for the young Indonesian demographic, specifically those with a minimum high school or vocational school diploma, to partake in the Education and Work Training (*Ausbildung*) program for various professions, spanning a duration of three to three and a half years. Upon completion of the *Ausbildung* program, participants are presented with the prospect of securing employment within German companies, aligning with their respective academic disciplines. It is imperative that educational institutions, particularly high schools and vocational schools in Indonesia, support this valuable opportunity by equipping prospective graduates with a strong command of the German language, in accordance with the standards stipulated in the education curriculum.

The acquisition and perfection of language skills can be conceptualized as a multifaceted endeavor that encompasses the cultivation of listening, speaking, reading, and writing competencies. The following definitions outline the four aforementioned skills: 1) Listening

skills are defined as the activity of listening to a message or information with the aim of understanding the content or meaning of what is conveyed by the sender of the message.2) Speaking skills are defined as the ability to pronounce articulation sounds or words that aim to transfer ideas, ideas or feelings to the listener.3) Reading skills are defined as a cognitive process that aims to know and understand information or messages conveyed in writing.4) Writing skills are defined as the ability to convey ideas, ideas or feelings and various other information through writing (Widyantara & Rasna, 2020). The interconnectedness of these four skills implies that mastering one aspect will aid in mastering others. To illustrate this, consider the importance of listening in the context of learning to pronounce specific words. If students can comprehend how to pronounce certain words effectively, they will be able to pronounce those words correctly. Furthermore, words that have been comprehended through the listening process can be employed appropriately according to the context that is to be conveyed in speaking or writing activities. In relation to reading activities, students find it easier to understand the meaning of a written message if they have mastered the words written in the text being read. This example demonstrates that the four skills are inseparable in the process of language acquisition (Noermanzah, 2018).

As asserted by Zeeland & Schmidt (2013), the learning process for languages should encompass the four aspects previously mentioned. It is crucial to recognize the pivotal role of vocabulary in the transmission of content and information, both oral and written. According to Loraine (2008), vocabulary constitutes the foundation of language learning; it represents a collection of words from a specific language and plays a pivotal role in comprehending all facets of language skills, including listening, speaking, writing, and reading. Mastery of a specific vocabulary is conducive to effective communication by facilitating the conveyance of information, ideas, and emotions to the intended recipient. The evidence suggests that the more vocabulary a student masters, the better their ability to understand the messages they hear and convey themselves, and the higher their capacity to express their ideas and thoughts through speaking and writing. Consequently, it can be posited that a prerequisite for attaining proficiency in German is vocabulary mastery. The acquisition of a substantial German vocabulary has been shown to positively impact students, enhancing their comprehension of both oral and written messages, as well as their ability to articulate information effectively in both verbal and written German.

The importance of vocabulary in learning this language is why it is taught in schools, especially at the secondary level. The vocabulary taught from grade X to grade XII is meticulously curated to align with specific themes, which integrate listening, speaking, writing, and reading skills. Teachers are tasked with the formidable challenge of preparing effective learning plans that incorporate an effective methodology, media and learning scenarios to motivate students to learn optimally.

An analysis of the interview conducted with a German language teacher at SMA Negeri 1 Seram Barat, dipped in the province of Maluku, reveals the persistent challenges faced by the students in acquiring German vocabulary. It was observed that the students' vocabulary remains at a relatively rudimentary level, impeding effective communication in both oral and written German. The subject teacher has endeavored to enhance his students' proficiency by implementing diverse learning methodologies, including guessing games and conversations, as well as utilizing media such as word cards and pictures featured in textbooks. However, these attempts have not yielded the desired results, with the students continuing to demonstrate a lack of proficiency in the targeted vocabulary.

In the contemporary digital era, a plethora of technology-based learning media is available to support the learning process in the classroom. Animated videos are one such medium that effectively enhances students' German vocabulary proficiency. According to Mayer and Moreno in Widyaningrum (2024), animation can be defined as audiovisual media presented in the form of moving images and equipped with sound. Furthermore, Ardian and Munadi in Melati et al. (2023) posit that animated videos present moving images with sound that are more interesting and very useful in helping students understand complex material better. Animated learning materials offer students the opportunity to participate actively in the learning environment. In addition, Farastuti (2021) asserts that animated videos are a captivating and humorous medium, possessing the distinctive capacity to convey information visually and interactively by integrating multiple elements, such as images, movement, color and sound. This characteristic affords educators the capacity to capture students' attention, thereby fostering their motivation and interest in the learning process.

The aforementioned theories can be strengthened by the findings of previous research conducted by Annisa and Muryanti (2022) on the effectiveness of utilizing animated videos on the mastery of early childhood English vocabulary. The findings of this study suggest that animated videos are efficacious in enhancing early childhood vocabulary mastery. The magnitude of this enhancement was found to exceed 85% in comparison to the participants' pre-exposure vocabulary proficiency. While the target group of the aforementioned study differs significantly from that of high school students, particularly with regard to age and the subject matter, the application of animated media in educational settings is a cross-cutting principle. It is essential that the content of the animated video is in line with the learning objectives to be achieved, the material and the needs and circumstances of the students. Consequently, based on the above-mentioned problems and backgrounds, it is necessary to conduct research on the effect of using animated media on students' German vocabulary acquisition.

The learning process undertaken in this study is outlined as such: 1) in the experimental class. The teacher presents an animated video with an animal theme, students respond to the teacher's questions about the video's theme, students document the words they identify in the video, students provide a concise summary of the video's content, students complete a table with the names of animals and articles, students articulate the names of animals in both singular and plural forms along with their articles, students illustrate a picture of one of the animals on paper and present it verbally, students collaborate in groups to perform pantomimes about animals and are identified by other groups, students participate in a quiz, specifically a matching pictures with words activity. In the control class, the learning process is almost identical to that observed in the experimental class. The distinction lies in the utilisation of media by the instructor. In the control class, the teacher employs static image media displayed on the board and image media presented in the German language textbook.

METHODOLOGY

A quantitative methodology was employed, with a quasi-experimental design consisting of an experimental group and a control group. The research sample consisted of the control group, class XI.5, and the experimental group, class XI.1. There were thirty students enrolled in each class. The data collection technique involved pre- and post-tests with a 20-question sheet as the data collection instrument. The experimental class used only static pictures while the control class used animation as the medium of learning. Data analysis procedures were conducted using SPSS to perform normality tests, homogeneity tests, and hypothesis tests

employing parametric statistical methods, namely the Independent Samples t-test and effect size test.

RESULT AND DISCUSSION

The researcher conducted 16 treatments, consisting of 8 in the experimental class using animated video media conducted by the researcher and 8 in the control class using static pictures conducted by the German teacher. The research presents the following data:

Table 1. Comparison of pre-test and post-test of experimental and control class

Experimental Class				Control Class			
sample	pre-test	post-test	Difference	sample	Pre-test	post-test	Difference
1	10	17	7	31	13	16	3
2	10	16	6	32	8	12	4
3	9	16	7	33	10	14	4
4	13	17	4	34	11	16	5
5	10	15	5	35	10	14	4
6	11	16	5	36	12	16	4
7	12	18	6	37	10	12	2
8	10	14	4	38	13	18	5
9	8	14	6	39	11	14	3
10	11	15	4	40	14	17	3
11	11	17	6	41	10	13	3
12	11	15	4	42	12	15	3
13	13	18	5	43	11	13	2
14	9	14	5	44	9	12	3
15	11	18	7	45	14	19	5
16	10	16	6	46	7	11	4
17	11	18	7	47	11	13	2
18	9	15	6	48	10	13	3
19	14	19	5	49	12	15	3
20	10	15	5	50	10	14	4
21	12	18	6	51	11	16	5
22	13	18	5	52	11	15	4
23	10	16	6	53	12	15	3
24	12	17	5	54	13	16	3
25	14	19	5	55	11	13	2
26	11	17	6	56	8	12	4
27	8	13	5	57	10	13	3
28	10	16	6	58	11	15	4
29	8	13	5	59	13	17	4
30	12	17	5	60	12	17	5
Total	323	487	164	Total	330	436	106
Average	10,77	16,23	5,47	Average	11	14,53	3,53

As demonstrated in Table 1 above, the mean pre-test score of the experimental class is 10.77, and the mean post-test score is 16.23 out of a maximum score of 20. The difference between the pre-test and post-test scores of this experimental class is 5.47. This score difference indicates that the experimental class's score after undergoing treatment involving animated media has increased. In contrast, the control class exhibited an average pre-test score of 11 and

an average post-test score of 14.53 out of a maximum score of 20, indicative of a score difference of 3.53. These data also demonstrate an enhancement in vocabulary mastery in the control class subsequent to the implementation of static image media. However, a comparative analysis reveals that the average increase in vocabulary mastery in the experimental class, which is 5.47, exceeds that of the control class, which only achieved an average score of 3.53.

Table 2. Results of the normality test using the Liliefors test

Class		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic ^c	df	Sig.
Vocabulary Learning Outcomes	Pre-Test	.145	30	.107	.950	30	.165
	Experimental Class						
	Post-Test	.143	30	.120	.948	30	.152
	Experimental Class						
	Pre-Test	.145	30	.108	.954	30	.215
	Control Class						
	Post-Test	.146	30	.105	.963	30	.360
	Control Class						

In the normality test above, the number of data items (N) is 30 in each experimental and control class. The Kolmogorov-Smirnov value in the experimental class in the pre-test is 0.107 and in the post-test 0.120. Conversely, the sig Kolmogorov-Smirnov value in the control class is 0.108 in the pre-test and 0.105 in the post-test. The criteria for measuring normality in the test indicate that a significant value greater than 0.05 suggests that the experimental and control classes' data are normally distributed.

Table 3. Results of the test of homogeneity variance

		Levene Statistic	df1	df2	Sig.
Vocabulary Learning Outcomes	Based on Mean	1.253	1	58	.268
	Based on Median	1.324	1	58	.255
	Based on Median and With adjusted df	1.324	1	57.55	.255
	Based on trimmed mean	1.239	1	5	
				58	.270

The homogeneity test, as indicated by the mean, yielded a significant value of 0.268, which is greater than 0.05. This value indicates that the data is homogeneous. This finding indicates that the two distinct classes utilized in the study are homogeneous classes. Consequently, it is feasible to conduct a study on both classes.

As Table 4 shows, the significant value (sig.) of the Levene's test for variance is $0.268 > 0.05$. Consequently, it can be deduced that the data variance for the experimental and control classes is equivalent or homogeneous. The data mentioned above thus suggests that the Levene's test of variance has a significant value (sig.) of $0.268 > 0.05$. Therefore, it can be concluded that the data variance for the experimental and control classes is equal or homogeneous. (2-tailed) value is 0.001 and 0.001, respectively, where the value is less than 0.05. Consequently, it can

be deduced that the utilization of animated video media in the learning process exerts a substantial influence on students' mastery of German vocabulary.

Table 4. Results of hypothesis test using the independent sample t-test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean diff.	Std. Error Diff	95% Confidence Interval of the Difference	
									Lower	Upper
Vocabulary Learning Outcomes	Equal var. assumed	1.253	.268	3.574	58	.001	1.700	.476	.748	2.652
	Equal var not assumed			3.574	56.310	.001	1.700	.476	.747	2.653

Furthermore, the Cohen's d test was carried out to determine the effect size, or how big the difference is between the control group and the experimental group. The calculation results, utilizing the SPSS application, demonstrate that the effect size value is 0.922929. According to the established criteria for effect size (Cohen's d), this value falls within the range of 0.7 to 0.9. This finding indicates that animated media exerts a significant influence on enhancing the mastery of German vocabulary among class XI.1 students at SMA Negeri 1 Seram Barat.

CONCLUSION

Based on the data analysis and discussion, we can say that the students in Class XI.5 of SMA Negeri 1 Seram Barat, who learnt with animation media, have a better vocabulary than the students in Class XI.1, who learnt with static picture media. Furthermore, observations during the learning process revealed that students in the experimental class who used animation media exhibited heightened levels of activity in responding to questions, providing responses, retelling situations depicted in animated videos, and engaging in pantomimes. This observation was further substantiated through interviews with several students, who expressed a high level of motivation derived from the animated videos they watched. The videos were found to be particularly engaging and offered a more authentic depiction of the animal world, characterized by the incorporation of moving images accompanied by sound, thereby facilitating the retention of the presented material. Conversely, in the control class, it was observed that students exhibited diminished interest in static image media, often due to their familiarity with such media, its lack of interactivity, and its perceived boredom. The conclusion drawn from these findings is that the utilization of animated media in the learning process is indeed highly efficacious, as demonstrated by the substantial enhancement in the vocabulary proficiency of SMA Negeri 1 Seram Barat students when engaging with German vocabulary through this medium.

ETHICAL STATEMENTS

This study was conducted in accordance with established ethical principles, including informed consent, protection of informants' confidentiality, and respect for local cultural values. Special consideration was given to participants from vulnerable groups to ensure their safety, comfort, and equal rights to participate. No external funding was received, and the authors declared no

conflict of interest. All data and information presented were collected through valid research methods and have been verified to ensure their accuracy and reliability. The use of artificial intelligence (AI) was limited to technical assistance for writing and language editing, without influencing the scientific substance of the work. The authors express their gratitude to the informants for their valuable insights, and to the anonymous reviewers for their constructive feedback on an earlier version of this manuscript. The authors take full responsibility for the content and conclusions of this article.

REFERENCES

- Annisa, P., & Muryanti, E. (2022). Efektivitas Video Animasi terhadap Pengenalan Kosakata Bahasa Inggris Anak Usia Dini. *Jurnal Pelita PAUD*, 6(2), 216–221 doi: <https://doi.org/10.33222/pelitapaud.v6i2.1838>
- Badan Standar, Kurikulum, & A. P.-K. (2022). Capaian pembelajaran mata pelajaran Bahasa Jerman fase F untuk SMA/MA/Paket C [*Learning outcomes for the German language subject in Phase F for senior high school, vocational high school and Package*]. <https://kurikulum.kemdikbud.go.id>
- Farastuti, S. K. (2021). Pengaruh penggunaan media animasi terhadap perubahan pengetahuan dan sikap gizi seimbang pada siswa kelas IV dan V Sekolah Dasar Negeri Puren Depok Sleman Yogyakarta [Undergraduate thesis Poltekkes Kemenkes Yogyakarta]. *The Effect of Using Animated Media on Changes In Knowledge And Attitudes About Balanced Nutrition Among Grade IV And V Students At Puren State Elementary School In Sleman Yogyakarta* doi: <http://eprints.poltekkesjogja.ac.id/6367/>
- Fridani, L. (2014). Hakikat Perkembangan Bahasa. Metode Pengembangan Bahasa. Jakarta: Universitas Terbuka. The Nature of Language Development. Language Development Methods. Jakarta: Open University.
- Lorraine, S. (2008). Vocabulary Developing. Boston. MA: Super Duper Publication.
- Luviana, D., Asri, W. K., & Al Ilmul, S. F. (2022). Media Pembelajaran Kartu Domino dalam Meningkatkan Kosakata Bahasa Jerman. *Phonologie: Journal of Language and Literature*, 2(2). doi: <https://doi.org/10.26858/phonologie.v2i2.35301>
- Melati, E., Fayola, AD., Hita, IPAD, Saputra, AMAS., Zamzami., & Ninasari, A. (2023). Pemanfaatan Animasi sebagai Media Pembelajaran Berbasis Teknologi untuk Meningkatkan Motivasi Belajar. *Using animation as a technology-based learning medium to increase learning motivation. Journal on Education*, 6(1), 732-741. doi: <http://jonedu.org/index.php/joe>
- Mon, M, C., & Rijal, S. (2023). Penguasaan Kosakata Bahasa Jerman dengan Menggunakan Media Cerita Pendek. *Mastering German vocabulary using short stories. Academic Jornal of social and educational Studies*. 1(2), 102-109 doi: <https://doi.org/10.26858/academic.v1i2.47225>
- Musi, M., Rusmayadi, R., R, R., & Dzulfadhilah, F. (2023). Pengaruh Penggunaan Media Audio Visual Menggunakan Video Animasi Untuk Meningkatkan Kosakata di Taman Kanak-Kanak. *The effect of using animated videos to teach vocabulary to kindergarten children. Pusat Padu Lino. Anakta*, 2(1), 1-6. doi: <https://doi.org/10.35905/anakta.v2i1.6480>

- Noermanzah, N., Abid, S., & Septaria, S. (2018). Improving the Ability of Writing a Narrative Charge by Using Animated Images Media Student Class V.B SD Negeri 17 Lubuklinggau. *BAHTERA : Jurnal Pendidikan Bahasa dan Sastra*, 17(2), 116. doi: <https://doi.org/10.21009/BAHTERA.172.9>
- Sheep, M. L. (2016). Effective Communication and Persuasion. In: Farazmand, A. (ed.) *Global Encyclopedia of Public Administration, Public Policy, and Governance*. Springer, Cham. doi: https://doi.org/10.1007/978-3-319-31816-5_2257-1
- Lestari, H., Usman, M., & Hasmawati, H. (2019). Kemampuan Berpikir Logis dan Penguasaan Kosa Kata Bahasa Jerman. Logical thinking skills and mastery of the German vocabulary. *Eralingua Jurnal Pendidikan bahasa Asing Dan Sastra*, 3(2). doi: <https://doi.org/10.26858/eralingua.v3i2.10065>
- Watzlawick, P., Beavin, J., & Jackson, D. (2017). *Menschliche Kommunikation: Formen, Störungen, Paradoxien*. Human communication: forms, disturbances and paradoxes. Verlag Hans Huber, Bern
- Widiyaningrum, N., Wulandari, F., & Masturoh, U. (2024). Penggunaan Media Film Animasi Untuk Meningkatkan Kosa Kata Pada Anak Usia Dini. Using Animated Film Media to Improve Vocabulary in Early Childhood. *Journal of Islamic Education for Early Childhood*, 6(1), 65-73. doi: <https://doi.org/10.30587/jieec.v6i1.7019>
- Wiyantara, I, M, S., & Rasna, I, W. (2020). Penggunaan media youtube sebelum dan saat pandemi covid-19 dalam pembelajaran keterampilan berbahasa peserta didik. The use of youtube media before and during the covid-19 pandemic in students' language learning. *Jurnal pendidikan dan pembelajaran bahasa indonesia*. 9 (2). 113-122. doi: https://ejournal-pasca.undiksha.ac.id/index.php/jurnal_bahasa/article/view/3536
- Zeeland, V, & Schmitt, N. (2013) Lexical Coverage in L1 and L2 Listening Comprehension: The Same or Different from Reading Comprehension? *Applied Linguistics* 34(4). 457–479.