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DIGITALIZATION: IMPROVING THE LITERACY OF FOREIGN LANGUAGE LEARNERS THROUGH MULTIMODAL TEXTS

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ABSTRACT
The development of teaching materials is one of the most important elements that can support the quality of the learning process, including foreign language learning. In contrast to technological developments, teaching materials for Arbeit am Text courses studied by students at Universitas Negeri Malang (UM) are still conventional and have not received sufficient attention for a long time. On the other hand, the course that focuses on German reading skills has an important goal, namely, to improve student literacy. Therefore, this study aims to develop multimodal-based teaching materials for Arbeit am Text courses. In this research and development, researchers used the ADDIE model (Analyze, Design, Development, Implementation, and Evaluation). Questionnaire sheets were delivered to the material expert as well as to the media expert to earn product validity. Besides, e-questionnaires were also filled out by students as users of the teaching materials arranged. Based on the data validation results, it can be concluded that the multimodal-based digital teaching materials for the Arbeit am Text course were declared to meet the eligibility requirements for media and material with respective percentages of 94% and 95.28% so they are included in the "very good" category. Likewise, the results of trials on users, namely students who took part in the lectures, had given very positive responses to the multimodal-based digital teaching materials designed by researchers. Researchers hope that multimodal-based digital teaching materials can be used widely, especially in learning the Arbeit am Text course, and can be used as a source of independent learning outside the lecture process.

1. INTRODUCTION

Arbeit am Text is a course that is part of the skills and scientific subject group presented at the German Language Education Study Program (GLESP) Universitas Negeri Malang (UM). After taking this course, students are expected to be able to read and understand texts globally, selectively, and in detail, as well as be skilled in summarizing, retelling, and concluding the contents of texts both in the form of fiction and non-fiction, covering the fields of science and technology, economics,

social and culture, as well as literature texts at B1 level based on the Common European Framework of Reference for language learning (Tim Penyusun JSJ UM, 2020). The Arbeit am Text course has been presented in the curriculum presentation of the GLESP since the first batch of this study program at UM, namely, in 1999, and along the way it experienced several changes in the credit load along with the change in the curriculum. When this research was conducted, the latest changes occurred in the 2018 and 2020 curricula for the class of 2018 students. The Arbeit am Text course has a content of 3 credits and the courses are presented in semester 4 (Tim Penyusun JSJ UM, 2018). As for the class of 2020 students, the course content is changed to only 2 credits and will be presented when students take semester 3 (Tim Penyusun JSJ UM, 2020). This change has a significant impact because it requires adjustments to the material provided, not only from the aspect of the theme but also from the aspect of the level of language competence possessed by students.

Based on the experience of researchers when teaching these courses for the first time in the odd semester of 2020–2021, researchers encountered difficulties in preparing learning materials, one of which was the result of the above curriculum changes. At GLESP UM itself, teaching materials for Arbeit am Text courses had previously been developed by Wijayati & Usman (1991) and lastly by Indriwardhani (2008). Of course, in such a long-time span, many developments in science and technology should be adapted to be implemented in the learning process. Research related to Arbeit am Text courses that already exist at UM is also more likely to discuss the application of certain learning strategies, as done by Anantia (2015) by applying reading-in-detail strategies to students and by Febrianasari (2015), which applies the Directed Reading Thinking Activity strategy. The research by Asiah (2017) tries to reveal the reading strategies chosen by students specifically in taking the Arbeit am Text course. So far, this research is the only research that discusses the teaching materials used in the course. Masruroh's research (2009), on the other hand, is not about making teaching materials. Instead, it is about making sure that the text being taught is easy to read.

Amid the limited time at that time, researchers sought material from various sources while still paying attention to the lesson plan. An example is material taken from the YouTube channel or pages that provide learning materials related to the Arbeit am Text course. Quoting material through Internet pages is indeed easy to do, but it lacks content because the material obtained is not always following the needs according the lesson plan for the Arbeit am Text course. As mentioned earlier, in the Arbeit am Text course, various types of texts will be discussed (Tim Penyusun JSJ UM, 2020). When talking about texts, it certainly cannot be separated from the terms "literacy" and "reading skills." In today's digital world, the practice of reading has shifted beyond reading printed texts because texts are displayed multimodally, not only with words but also with pictures, animations, music, and videos (Lim & Tan, 2018). Therefore, teachers must prepare teaching materials effectively so that students can understand the text presented in the multimodal learning process.

Several studies on the use of multimodal literacy have shown that it works well and that students learn from studying different kinds of text. In his research, Bourelle (2018) used comics and graphic novels to teach multimodal literacy. Meanwhile, Austin's research (2018) discussed the use of multimodal texts to train students' critical thinking applied to writing skills. Furthermore, McCarthy (2019) sought to increase the confidence of prospective teacher students when they are faced with designing literacy learning through multimodal projects. All in all, the results of the three studies are not much different, that is, all three reveal the great benefits of multimodal-based literacy learning. Through this approach, learners are not only able to create a broader connection between their professional and academic lives, but they are also able to give meaning to everything they learn.

Based on the problems above, the researcher aims to develop teaching materials in digital form based on multimodal literacy for the Arbeit am Text course. The intended teaching materials are planned to include digital text, images, and videos. The material presented in the teaching materials includes discussions of reading foreign language texts, reading strategies, types of texts, German-German monolingual dictionaries, structure in texts, various rubrics found in newspapers, and various forms of literary texts. In addition to material, the teaching materials will also include training and evaluation.

2. LITERATURE REVIEW

Multimodal literacy is an attempt to understand something through various ways of representing knowledge and making meaning (Kress, Jewitt, Ogborn, & Tsatsarelis, 2001). The word "literacy" itself is an activity that lies between the space of thought and text. Literacy is not only considered as a set of skills to analyze a text that can be seen on paper by reading word for word, retrieving the words, putting the words into meaningful ideas, making sequences, and greater understanding of what the text is (Scanlon, Anderson, & Sweeney, 2010). More than that, literacy is a social activity contained in interactions between humans (Heydon & O'Nell, 2016). Social activities such as communication are said to be able to open other aspects of understanding a text (Leseförderung durch leises Lesen, n.d.). Thus, multimodal literacy is about the choice of all semiotic powers to meet the purpose of the text, audience, and context, and how choices work together to develop information and ideas. One of the approaches used to teach multimodal literacy is systemic functional multimodal discourse analysis or a systemic approach. This theory illustrates that semiotic sources can be interpreted in various social functions, such as organizing messages, relationships, and building experiences, can be fulfilled. Bringing multimodal texts into the classroom provides a space for students to critically evaluate the texts they encounter outside the classroom, such as hoaxes and scams that are scattered on websites, Facebook, Instagram, and the like. Through multimodal literacy learning, students learn to read the news, pictures, and videos critically.

The key to the multimodal literacy approach is to visualize the text. Visualization while reading is an effective strategy to improve text comprehension. Given the importance of visualization in improving reading comprehension, it is unfortunate that it is not used as a strategy in reading learning practice (Lenters, 2018). Multimodal text is described by Bearne and Wolstencroft (2007) as combining four main modes, namely motion, image, sound, and writing. Composing a multimodal text also involves design elements, where those four modes are combined to convey a message. The use of multimodal literacy in learning to read in the Arbeit am Text course allows students to bring their communicative repertoire into the classroom by conveying stories or information they get from outside the classroom. As described earlier, this can happen because the multimodal text is not only focused on written text on paper but also digital text, video, and film. Along with the development of science and technology, the need for the world of education to have access to digital teaching materials is unavoidable. Various investments in technology have been made as an effort to revitalize work in daily life. Sipejar (Sistem Pengelolaan Pembelajaran) is a learning management system (LMS) of technology-based investment carried out by the UM to support the smooth running of learning and training activities. Sipejar uses a single sign-on access mode, which makes it a very flexible system to operate because it can be accessed anywhere and anytime and has been integrated with the UM academic informaation system. Various types of digital teaching materials can be used as learning content at Sipejar, for example, e-books and animated videos (PTIK Universitas Negeri Malang, 2021). The use of this application by the academic community of UM has increased in intensity along with the outbreak of the COVID-19 pandemic since the beginning of 2020 which made the entire lecture process carried out online.

In many cases, the pandemic situation prompted language workers to create new language resources and reflect changing needs (McIvor, Chew, & Stacey, 2020). For language teachers, maintaining a high level of learner involvement in every learning process is a challenge. In general, learners are more effective in developing their knowledge, skills, and understanding in the social environment they are familiar with. Therefore, when presenting new and unfamiliar material, teachers need to provide opportunities for students to relate it to their own lives and circumstances (Senior, 2010). In Sipejar, the opportunity to interact with each other between lecturers and students or fellow students themselves is facilitated by the Forum Discussion feature and video conference which is called the Big Blue Button menu (PTIK Universitas Negeri Malang, 2021). The finished teaching materials are then uploaded to the lecturer's Sipejar account to be used in daily learning.

3. METHODOLOGY

Product development of digital teaching materials based on multimodal literacy for the Arbeit am Text course is included in the type of research and development using the ADDIE development model, which was pioneered by Dick & Carey in 1996. Following the research design intended by the researcher, the ADDIE model is believed to be an effective, attractive, and efficient model to be

applied in the development of learning products, both for face-to-face and online modes (Aldoobie, 2015). According to Yang and Kaufmann (in Gustiani, 2019), anyone conducting research and development should choose a model that can be described narratively, has a logical sequence, and establishes measurable success. Five stages must be passed by researchers to produce a product using this ADDIE model. Those stages were: (1) analyze, (2) design, (3) develop, (4) implement, and (5) evaluate. The following describes more clearly the stages in the ADDIE model applied in this study. In the analysis stage, the researcher identified the problems experienced by the target group and what their needs were. The group in question was GLESP UM students who took the Arbeit am Text course in the odd semester of 2020–2021 at the State University of Malang. Based on the analysis of the problems that have been obtained from unstructured interviews, the researchers then formulated the standards and objectives of the teaching materials that would be compiled at the design stage. The determination of these standards and objectives, of course, also considered the existing intended learning outcomes in the curriculum. These objectives assisted researchers in designing assessments and evaluations.

The product design developed at the design stage was then realized at the development stage. The main data in the form of text and images was collected and then selected according to need. In this third stage, the researcher prepared an instrument in the form of a closed questionnaire, which was used for product validation by experts, and an open questionnaire for users as a form of formative evaluation (Kurt, 2018). There were two experts involved in the validation process. The first expert assessed teaching materials from the point of view of learning materials with the criteria of teaching materials proposed by Funk (Allendorf, n.d.). Meanwhile, media experts evaluated teaching materials from the point of view of learning media by referring to the theory of multimedia development. Closed questionnaires were filled out by experts during the product feasibility test using a Likert scale of 1-5. The scale means:

1: very little/very hazy/not precise
2: not good, precise, or clear
3: sufficient/sufficiently precise/sufficiently clear
4: good/right/clear
5: excellent/exact/unambiguous

The next step was to look at the percentages of the data from the questionnaire using the formula below to analyze the data quantitatively.

$$\text{Result} = \frac{\text{gained score}}{\text{maximum score}} \times 100\%$$

From the calculation with the formula above, the researcher interpreted the feasibility of the developed multimodal literacy-based digital teaching material product. The eligibility criteria for the selected product are the criteria proposed by Haryanto (in Mardiningrum, Afifah, & Sakti, 2020) with the following details:

Table 1. Media Eligibility Criteria

No.	Score	Media Eligibility
1	0 – 46%	Very less
2	47 – 60 %	Less
3	61 – 73 %	Enough
4	74 – 85 %	Good
5	86 – 100 %	Very good

After going through the assessments of the experts, the teaching material product in the form of a prototype was revised based on the input from the two experts above. The revised prototype was then piloted to users in the implementation phase. Users, who also acted as test subjects in this study, were GLESP UM students who were taking Arbeit am Text courses in the odd semester of 2021–2022. At the end of the pilot activity, the researcher distributed a questionnaire to users to find out their responses to digital teaching material products. The questionnaire, which also functioned as a summative evaluation tool, consisted of two answers, namely closed answers "Yes/No" and open answers. After going through the trial phase, the teaching material product was revised according to the input obtained from the test subjects. As mentioned earlier, there were two types of the evaluation carried out in research and development using the ADDIE model, namely formative evaluation, and summative evaluation. Formative evaluation is an evaluation process that is carried out continuously at every stage it goes through, namely from the analysis stage to implementation, while summative evaluation is carried out after the product has been tested on users to find out whether the developed teaching materials are under the objectives set at the beginning (Kurt, 2018).

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4. RESULTS AND DISCUSSION

The product development in this research goes through five stages owned by the ADDIE method, with the following phases:

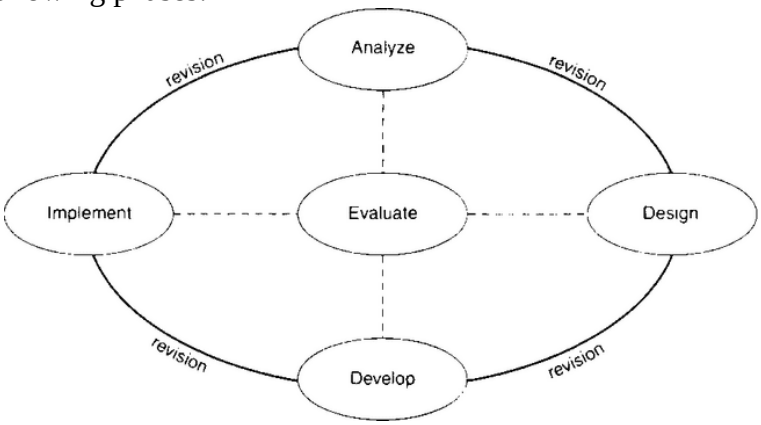

Figure 1. Core Phases of the ADDIE Model (Branch & Merril, 2012)

4.1. Analyze

At this stage, the researcher conducted interviews with students at the end of the 2020– 2021 even semester. Points discussed in the interview include questions about academic abilities, interests, talents, and learning styles. In this interview, the researcher also tried to explore the character of the students. Information about it is very useful for researchers in determining strategies and learning resources. The results of the interview stated that some students still had difficulty understanding the material presented, especially because the vocabulary in certain texts presented in the Arbeit am Text course was more difficult to understand. They think the text uses vocabulary and grammar that is higher than their ability. Some types of text also have difficulties in understanding. Here, students need more time to be able to answer practice questions related to understanding the text. This finding is in line with the results of research conducted by Ihsan (2021), who also investigated the effect of vocabulary mastery on the German language skills of Universitas Negeri Makassar students, where the student's lack of vocabulary and grammar mastery also affected the acquisition of their speaking skills. Another opinion expressed by students was that the attractive appearance of teaching materials made them enthusiastic about learning. The material delivered through media such as video, PowerPoint, and other digital applications is considered by students to have a charm for studying, especially if the media has an attractive, colorful appearance and is supported by an excellent sound background.

4.2. Design

The product design is defined in this design stage. After formulating the detailed specifications of the teaching material products as desired, the researchers prepared the various software and hardware needed. With the help of flowcharts, the researcher tries to show the framework of

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thinking as a series of activities that guide the process of making digital teaching materials based on multimodal literacy, as shown in the next flowchart.

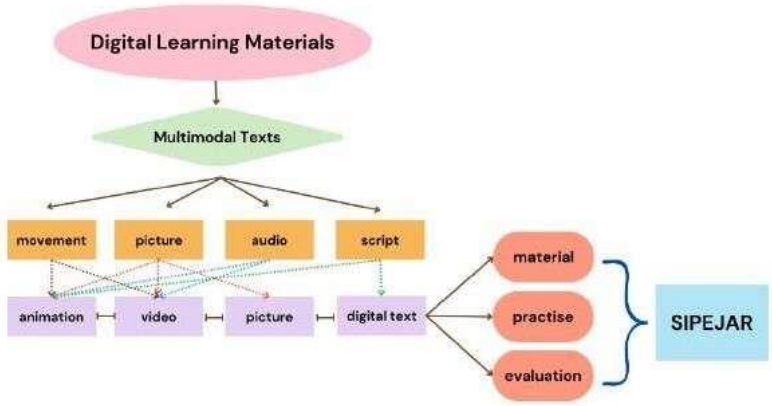

Figure 2. Flowchart of the development of learning materials

Aldoobie (2015) emphasizes the importance of compiling learning materials with effective designs because learners will constantly interact with them. Therefore, the materials developed for teaching materials refer to the Intended Learning Outcomes (ILO) of the Arbeit am Text courses and are arranged as shown in table 2 below. These materials come from a lot of different places, like books and the Internet, as well as being made by the researchers themselves.

Table 2. Design of Learning Materials

Objectives	Material
Reading and understanding texts	Reading strategy: various strategies: global & detailed comprehension, 5-step reading technique, listening to texts, factual texts
Understanding the characteristics of text types	Non-fictional texts: advertisements, letters, brochures, graphics, news from newspapers, letter to the editor Fictional texts: poem, short story, mini novella
Examining and interpreting texts	Creating a keyword index and question-answer cards, an online dictionary

Creating original texts	History writing, making an inner monologue of a figure, storytelling from a different perspective.

4.3. Develop

After the main data is collected, the next step is designing the layout of teaching materials by utilizing various software. The main software used to digitize the compiled materials is Canva. Through this software, researchers present material in the form of presentation slides, videos, digital comics, and posters. As stated earlier, various types of text are needed to implement multimodal literacy (Bearne & Wolstencroft, 2007). Meanwhile, exercises related to the material are created from a variety of perspectives. By utilizing existing features in Sipejar, exercises are presented in the form of online discussion forums, labels, assignments, and so on. Other applications embedded in Sipejar to provide exercises are Padlet, Liveworksheet (Figure 4), and Learningapps.

Figure 3. Comic embedded in Sipejar

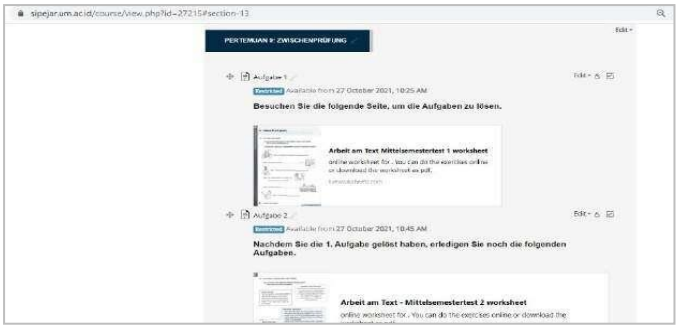

Figure 4. Practice using the Liveworksheet embedded in Sipejar

Also, in Sipejar, materials, and exercises are presented sequentially by considering the level of difficulty of the material (Allendorf, n.d.). One of the applications that are implanted to create a series of learning sequentially starting from the opening, the core, to the end is LessonUp. Through this application, materials and exercises in various forms can be presented in an interactive learning series (LessonUp, n.d.). As shown in Figure 5, LessonUp provides many alternative sources of material and exercises, for example, slides, videos, internet page links, quizzes, mind maps, and even polls. This LessonUp presentation offers more complete facilities than other learning applications, one example of which is the Quizizz application, which was used by Amiroh and Afifah (2021) in training students' German language skills at the State University of Malang. Even though

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the research shows that the app can be a fun way to practice reading, the only features it has been different ways the quiz can look and a leaderboard that shows where each student stands after taking the quiz.

Figure 5. LessonUps' Features (LessonUp, n.d.)

Formative evaluation in the form of product validation of digital teaching materials for multimodal literacy-based learning has been carried out by material experts and media experts. In this validation activity, material experts assess the product from five aspects, including aspects of self-instruction, self-contained, stand-alone, adaptive, and user-friendly (Arsanti, 2018). The self-instruction points consist of eleven questions regarding the suitability of the material with the learning objectives; the clarity and coherence of the delivery of the material; the suitability of the language level with the student's abilities; and the level of difficulty of the questions, while the other four aspects each consist of only one question. The results of the assessment by the material expert showed that three aspects received a perfect assessment, as shown in Table 3. On the other hand, the material expert paid special attention to the language used in the developed digital teaching materials, among others, by commenting that the level of language used was low. It is too high for 3rd-semester students, so it needs to be simplified again. It is said by Prastowo (in Lestari et al., 2022) that teaching materials should use language that is easy to understand and that is following the level of the learner so that he can learn independently and no longer depend on the presence of a teacher beside him. Therefore, the researchers revised these aspects before the teaching materials were tested on students.

Table 3. The result of product validity from a media expert

No.	Aspect	Average Score

1	*Self-Instruction,*		96,37%
2	*Self-Contained*		100%
3	*Stand Alone*		80%
4	*Adaptive*		100%
5	*User Friendly*		100%
		Result	**95,28%**

From the media expert's point of view, the final score of product validation achieved was 94%. As stated by Bearne and Wolstencroft (2007) that multimodal text combines various elements such as gestures, images, sounds, and writing, so the assessment by media experts includes the following (1) composition and proportion of title and content layout, (2) color selection, (3) font type and size selection, (3) representation of content/teaching materials in illustrations, (4) image presentations, as well as (5) video and audio presentations. Although the final score obtained is relatively high, several aspects still receive criticism from the validator. Suggested corrections include using the typeface in the video display as shown in Figure 6. Expert writing comments that the use of handwriting typefaces should be avoided. As an alternative, the researcher can use the Sans Serif typeface, because, for small screens, the Sans Serif typeface has better legibility. In addition, media experts also recommend that the audio volume be made more consistent and that the researcher choose a background that is not too fast so as not to disturb the user's concentration in understanding the content presented. The purpose of the development itself is to make it easier for students to understand literacy materials. Holsanova (2020) even said that the think-aloud protocol can be used as a new way to improve multimodal competence by combining audio description and reading out loud.

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Figure 6. Corrected handwriting typeface display

Based on the data obtained through questionnaires filled out by the two validators, the mean obtained was 94.64%. This demonstrates that the components presented in this learning medium are very good overall and deserve to be tested in the Arbeit am Text course learning process in terms of appearance, structure, and language.

4.4. Implement

The trial was conducted to see the level of effectiveness of multimodal-based digital teaching materials when implemented in the Arbeit am Text learning process in the classroom. Based on the responses obtained through the questionnaire, students revealed that overall, this multimodal-based digital media is good and feasible to be used in the learning process, supported by the colors and visual appearance of attractive teaching materials. Student response data can be seen in the following table:

Table 4. Students' responses to the use of learning media

No.	Aspect	Percentage of "Yes" Answers
1	*The material presented helps to achieve the learning objectives.*	100%
2	The material is presented in full according to the lesson plan.	100%

3	Learning videos are very helpful before doing practice questions.	100%
4	*The material presented can be easily understood.*	100%
5	*Audio can be listened to well.*	100%
6	*There is no difficulty in using teaching materials.*	85%
	Result	**97, 5%**

From the students' answers in the form of descriptions, the integration of various forms of teaching materials for the Arbeit am Text course in Sipejar can attract their attention to always be involved in the learning process. The existence of interactive applications with attractive displays such as Padlets, LessonUp, and Liveworksheets encourages students not to be afraid to give answers to the exercises given. With the help of visualization in digital teaching materials, students are trained to think more critically and creatively in solving any given problem (Lenters, 2018).

4.5. Evaluate

As described in the method section, input, and correction from experts in the development stage is a form of formative evaluation, which is also a material consideration for researchers when improving the product before testing it on students. Likewise, student responses that mentioned the existence of internet network problems when the trial was carried out were also material for summative evaluations that needed to be solved. Indeed, internet connection problems like that are unavoidable considering that most of the digital teaching materials created are designed for synchronous online learning. Therefore, it is important to reconsider creating a digital media design that allows it to be applied asynchronously.

5. CONCLUSION

From the explanation above, it can be concluded that the development of multimodal-based digital teaching materials is very much needed to improve student literacy to learn foreign languages, especially German. Through multimodal-based digital teaching materials that have been developed and proven feasible to be applied to the Arbeit am Text course, the researchers hope that students will not only get an interesting but also memorable experience in studying various types of texts. Thus, difficulties related to vocabulary and/or grammar, which were originally considered a barrier to understanding a text, will turn into challenges that are ready to be conquered. Also, digital teaching materials that are short and easy to find make it easier for students to study lecture materials whenever and wherever they want.

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REFERENCES

Aldoobie, N. (2015). ADDIE Model. *American International Journal of Contemporary Research*. 5: 68-72.

Allendorf, V. (n.d.). *Kriterienliste: Begutachtung der Eignung eines Lehrwerks für die eigene Unterrichtspraxis* [https://lernplattformmuttersprachdidaktik.files.wordpress.com/2014/03/kriterienliste_lehrwerkanalyse_allendorf.pdf], January 17, 2020.

Amiroh, A. L. (2021) Quizizz sebagai media pembelajaran untuk melatih keterampilan membaca bahasa Jerman. *BRILIANT: Jurnal Riset dan Konseptual* 6*(2)*: 241-249. http://dx.doi.org/10.28926/briliant.v3i4.566

Anantia, JD. (2015). Penerapan detailliertes Lesen pada matakuliah Arbeit am Text mahasiswa program studi bahasa Jerman angkatan 2013 Universitas Negeri Malang. *Thesis*. Universitas Negeri Malang, German Department.

Arsanti, M. (2018). Pengembangan bahan ajar mata kuliah penulisan kreatif bermuatan nilai-nilai pendidikan karakter religius bagi mahasiswa prodi PBSI FKIP Unnisula. *Jurnal Kredo* 1*(2)*: 71-90.

Asiah, SN. (2017). Strategi belajar membaca mahasiswa Jurusan Sastra Jerman pada matakuliah Arbeit am Text. *Thesis*. Universitas Negeri Malang, German Department.

Austin, S. (2018). Teaching graphic novels in the English classroom: Pedagogical possibilities of multimodal literacy engagement. In: Burger, eds.*Understanding rhetoric, understanding genre: A rhetorical genre studies approached writing course*. Palgrave Macmillan. 29–42.

Bearne, E, & Wolstencroft, H. (2007). *Visual Approaches to Teaching Writing*. Paul Chapman Publishing.

Bourelle, A. (2018). Teaching graphic novels in the English classroom. Pedagogical possibilities of multimodal literacy engagement. In: Burger, eds. *Not Just Novels: The pedagogical possibilities of the graphic narrative*. Palgrave Macmillan. 11–28.

Branch, R M, & Merril, M D. (2012). Trends and issues in instructional design and technology third edition. In: Reiser, RA, & Dempsey, JV. *Characteristics of instructional design models*. Pearson.

Febrianasari, RE. (2015). Penerapan strategi DRTA (directed reading thinking activity) pada matakuliah Arbeit am Text Program Studi Pendidikan Bahasa Jerman Universitas Negeri Malang. *Thesis*. Universitas Negeri Malang, German Department.

Gustiani, S. (2019). Research and development (R&D) method as a model design in educational research and its alternatives. *Holistics Journal* 11*(2)*: 11-22.

Heydon, R, & O'Nell, S. (2016). *Why multimodal literacy matters (re)conceptualizing literacy and wellbeing through singing-infused multimodal, intergenerational curricula*. Sense Publisher.

Holsanova, J. (2020). Uncovering scientific and multimodal literacy through audio description. *Journal of Visual Literacy*. https://doi.org/10.1080/1051144X.2020.1826219

Ihsan, Ilmul, SFA. (2021), Problematika mahasiswa pendidikan bahasa Jerman yang belum pernah mendapatkan pelajaran bahasa Jerman di jenjang pendidikan sebelumnya. *INTERFERENCE: Journal of Language, Literature, and Linguistics* 2*(2)*: 137-146.

Indriwardhani, SP. (2008). *Handbuch Arbeit am Text I & II*. Malang: LP3M UM.

Kress, G, Jewitt, C, Ogborn, J, & Tsatsarelis, C. (2001). *Multimodal teaching, and learning - The rhetorics of the science classroom*. London and New York: Continuum.

Kurt, S. (2018). *ADDIE model: Instructional design*. [https://educationaltechnology.net/the- addie-model-instructional-design/], February 26, 2021.

Lenters, K. (2018), Multimodal becoming: Literacy in and beyond the classroom. *The Reading Teacher*, 71*(6)*: 643–649. https://doi.org/10.1002/trtr.1701

Leseförderung durch leises Lesen [https://nzl.lernnetz.de/index.php/leises-lesen.html], (n.d.), January 13, 2020.

LessonUp [https://www.lessonup.com/site/en/about], January 17, 2020.

Lestari, E, Nulhakim, L, Suryani, DI. (2022). Pengembangan e-modul berbasis flip pdf professional tema global warming sebagai sumber belajar mandiri siswa kelas VII. *PENDIPA Journal of Science Education*, 6*(2)*: 338-345. https://doi.org/10.33369/pendipa.6.2.338-345

Lim, VF, & Tan, SKY. (2018). Developing multimodal literacy through teaching the critical viewing of films in Singapore. *Journal of Adolescent & Adult Literacy*, 62*(3)*: 291–300. https://doi.org/10.1002/jaal.882

Mardiningrum, S, Afifah, L, & Sakti, KF. (2020). Media Xueci berbasis android untuk pembelajaran kosakata bahasa Mandarin siswa kelas X SMA Negeri 6 Malang. In *Proceedings of Seminar Nasional Pembelajaran Bahasa dan Sastra*: 2020; Malang. Edited by Afifah. Malang: FS UM. 246-252.

Masruroh, RN. (2009). Keterbacaan teks bahasa Jerman dalam mata kuliah Arbeit am Text I dan Arbeit am Text II tahun akademik 2008/2009. *Thesis.* Universitas Negeri Malang, German Department.

McCarthy, HC. (2019). *Learning by design: Crafting the knowledge processes to enable pre-service secondary teachers to design authentic learning*. 87–111. https://doi.org/10.1007/978-3-030-01255-7_6.

McIvor, O, Chew, KA, & Stacey, KI. (2020). Indigenous language learning impacts, challenges and opportunities in COVID-19 times. *AlterNative: An International Journal of Indigenous Peoples*, 16*(4)*: 409–412. https://doi.org/10.1177/1177180120970930

PTIK Universitas Negeri Malang. SIPEJAR [https://sipejar.um.ac.id/], February 14, 2021.

Scanlon, DM, Anderson, KM, & Sweeney, J M. (2010). *Early intervention for reading difficulties - The interactive strategies approach*. The Guilford Press.

Senior, R. (2010). Connectivity: A framework for understanding effective language teaching in face-to-face and online learning communities. *RELC Journal*, 41*(2)*: 137–147. https://doi.org/10.1177/0033688210375775

Tim Penyusun JSJ UM. (2018). *Katalog Jurusan Sastra Jerman edisi 2018*. Malang: Universitas Negeri Malang.

Tim Penyusun JSJ UM. (2020). *Katalog Jurusan Sastra Jerman edisi 2020*. Malang: Universitas Negeri Malang.

Wijayanti, PH, & Usman, R. (1991). *Arbeit am Text (buku penunjang perkuliahan*). Malang: Proyek Operasi dan Perawatan Fasilitas IKIP Malang.