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Development of Teaching Materials on The Topic of Food and Drink" for German Listening Comprehension in Grade 11 SMA Negeri 1 Binjai

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Abstract

This study aims to describe the process and outcome of developing a German listening comprehension (Hörverstehen) instructional material on the topic „Essen und Trinken" (Food and Drink) based on video and a Canva template for eleventh-grade students at SMA Negeri 2 Binjai. The study was motivated by students' difficulty in understanding spoken German, particularly native-speaker utterances, and their limited vocabulary due to insufficient listening practice. This research employed the Research and Development (R&D) method using the ADDIE model (Analysis, Design, Development, Implementation, Evaluation). The resulting product consists of three videos of daily eating activities (breakfast, lunch, dinner) entitled „Guten Appetit", integrated into a Canva-based PPT template. The research participants were 30 eleventh-grade students who completed a 30-item listening test and a 24-item questionnaire covering four aspects. The results show a mean listening test score of 75.70 (SD = 9.31); a one-sample t-test indicated that this score was significantly higher than the reference value of 70 (t = 3.352, df = 29, p = .002). The questionnaire results indicated a very positive response across all aspects, with an overall mean score of 86.1% (categorized as very good). It is concluded that the developed product is valid, practical, and able to enhance students' learning motivation, although the improvement in listening comprehension remains moderate, indicating a continued need for additional vocabulary practice for some students.

Keywords: *instructional material development; Hörverstehen; Essen und Trinken; Canva; ADDIE model*

Introduction

German is one of the foreign languages taught in senior high schools (SMA) in Indonesia, including at SMA Negeri 2 Binjai. Of the four language skills students must master, listening comprehension (Hörverstehen) is often regarded as the most difficult skill for beginner-level (A1) learners to acquire, since students are required to understand spoken information within a limited time without being able to have the speaker repeat the utterance directly. Vandergrift and Goh (2020) assert that foreign-language listening ability does not develop automatically but requires metacognitive strategies and targeted practice. Nation (2020) likewise emphasizes that vocabulary mastery is an essential prerequisite for successful listening comprehension in a foreign language.

Several recent studies have developed instructional media to improve German Hörverstehen. Azizah, Asri, and Mannahali (2020) developed a web-based (DaF) listening learning medium for high school students in Makassar on the topic of daily conversation. Rodríguez and Marín (2022) developed audiovisual listening materials for A1-level German learners on the topic of daily activities, including eating and shopping, using Canva and the ADDIE model, and found that visual media helped students focus on

context, thereby facilitating comprehension. Nainggolan, Sitinjak, Rajagukguk, and Sari (2025) showed that YouTube videos can improve listening ability, enrich vocabulary, and enhance students' learning motivation. Meanwhile, Prameswari and Pujosusanto (2025) analyzed Easy German TikTok videos on the topic "Essen und Trinken"and found that short authentic videos can serve as an effective and engaging instructional medium for this topic.

Although these studies have developed audiovisual and web-based listening media, research that specifically develops authentic eating-activity videos (breakfast, lunch, dinner) directly integrated into a Canva PPT template complete with an expert-validated listening test instrument and response questionnaire for eleventh-grade high school students in Indonesia remains limited. Preliminary observation at SMA Negeri 2 Binjai also revealed that the listening materials on the topic "Essen und Trinken " in the textbooks Netzwerk A1 and Super Deutsch (pp. 44–53) still consist of audio recordings and reading texts without visual context, indicating a gap between the need for contextual learning and the availability of existing instructional materials.

Based on this gap, the present study was formulated to address two questions: (1) how is the process of developing interactive instructional materials on the topic "Essen und Trinken" for German Hörverstehen among eleventh-grade students at SMA Negeri 2 Binjai, and (2) what are the outcomes of developing these instructional materials. This study aims to describe the development process and present its outcomes, both in terms of product feasibility and students' listening achievement and responses. The novelty of this study lies in the integration of self-produced authentic eating-activity videos with an interactive Canva template, accompanied by quantitative outcome testing through a statistically analyzed listening test and questionnaire, specifically within the context of eleventh-grade high school students in Binjai, Indonesia.

Method

This study is a Research and Development (R&D) study using the ADDIE model, namely Analysis, Design, Development, Implementation, and Evaluation (Richey & Klein, 2020; Borg & Gall, 2020). In the Analysis stage, an analysis of students' listening needs and problems was conducted based on the Netzwerk A1 and Super Deutsch (pp. 44–53) textbooks used at the school. In the Design stage, scenarios for three eating-activity videos (Frühstück, Mittagessen, Abendessen), the Canva PPT template, a blueprint of 30 listening test items, and a 24-item questionnaire were designed. In the Development stage, the „Guten Appetit" videos (performed by Justina, Cindy, and Azirah) and the Canva template were produced and subsequently validated by media and material experts. In the Implementation stage, the product was applied in the eleventh-grade class, and in the Evaluation stage, the test and questionnaire results were analyzed to assess the feasibility of the product.

The research participants were 30 eleventh-grade students at SMA Negeri 2 Binjai. Data on the development process were collected through documentation of each ADDIE stage, while outcome data were collected through two instruments: (1) a 30-item A1-level multiple-choice listening test (10 items per video) completed by students after watching the „Guten Appetit" videos, and (2) a 24-item student response questionnaire using a 1–4 Likert scale, covering four aspects: the "Guten Appetit'' dialogue videos, the appearance/use of the Canva template, listening ability, and motivation to learn German.

Process data were analyzed descriptively-qualitatively by describing each ADDIE stage. Outcome data were analyzed descriptively-quantitatively using SPSS, including descriptive statistics (mean, standard deviation, minimum-maximum values), Kolmogorov-Smirnov and Shapiro-Wilk normality tests, and a one-sample t-test to

examine whether the mean listening test score differed significantly from a specified reference value.

Results

Product Description: "Guten Appetit" Dialogue Video

The instructional product developed in this study consists of three short dialogue videos entitled „Guten Appetit", depicting daily eating activities among students, namely Frühstück (breakfast), Mittagessen (lunch), and Abendessen (dinner). Each video is performed by three students, Justina, Cindy, and Azirah, using simple A1-level German utterances and vocabulary related to the topic „Essen und Trinken". Excerpts of the dialogue script for each activity are presented below.

Aktivität: Frühstück (Justina & Cindy)
Justina: "Guten Morgen, Cindy!"
Cindy: "Warum schaust du so konzentriert auf dein Handy?"
Justina: "Was hast du zum Frühstück mitgebracht?"
Cindy: "Ich habe ein Käse-Sandwich und Mineralwasser mitgebracht."
… (dialog berlanjut)
Aktivität: Mittagessen (Azirah & Justina)
Azirah: "Justina, warte mal! Ich habe gehört, dass wir nächste Woche einen Deutschtest haben."
Justina: "Oh nein! Ich muss mehr lernen."
Azirah: "Keine Sorge. Wir können zusammen üben."
… (dialog berlanjut)
Aktivität: Abendessen (Cindy & Azirah)
Cindy: "Ahhh … endlich fertig! Mein Rücken bedankt sich bei mir."
Azirah: "Drei Stunden Lernen sind wirklich anstrengend."
Cindy: "Aber unsere Präsentation ist endlich fertig."
… (dialog berlanjut)

These three videos were subsequently integrated into a Canva-based PPT template as the main instructional medium used to train students' German listening comprehension (Hörverstehen) on the topic „Essen und Trinken", as evaluated through the following listening test and questionnaire results.

Listening Test Results

The listening test was completed by 30 students (R01–R30) and consisted of 30 items scored dichotomously (correct = 1, incorrect = 0), which were then converted to a 0–100 scale.

Table 1. Descriptive Statistics of Listening Test Results (n = 30)

Statistic	Value
Mean	75.70
Minimum Score	60.00
Maximum Score	90.00
Standard Deviation	9.31

Table 2. Distribution of Listening Test Results (n = 30)

Score Range	Number of Students	Percentage
60–69	8	26.7%
70–79	9	30.0%
80–89	11	36.7%
90–100	2	6.7%

The normality test showed that the listening test data were normally distributed (Kolmogorov-Smirnov: statistic = 0.117, p = .200; Shapiro-Wilk: statistic = 0.943, p = .111). A one-sample t-test against the reference value of 70 showed that the students' mean score (75.70) was significantly higher than the reference value (t = 3.352, df = 29, p = .002; mean difference = 5.70; 95% CI [2.22, 9.18]).

Student Response Questionnaire Results

The response questionnaire was completed by all 30 students and covered four aspects, with six statement items for each aspect.

Table 3. Average Questionnaire Scores per Aspect (n = 30)

Aspect	No. of Items	Mean	Max Score	Percentage	Category
"Guten Appetit" Dialogue Video	6	20.90	24	87.1%	Very Good
Canva Template Appearance/Use	6	20.47	24	85.3%	Very Good
Listening Ability	6	20.73	24	86.4%	Very Good
Learning Motivation	6	20.57	24	85.7%	Very Good
Total Score	24	82.67	96	86.1%	Very Good

Table 4. Distribution of Total Questionnaire Score Categories (n = 30)

Category	Number of Students	Percentage
Very Good	22	73.3%
Good	8	26.7%

Tables 3 and 4 show that all four questionnaire aspects fell into the very good category, with the highest score obtained for the "Guten Appetit''dialogue video aspect (87.1%). Of the 30 students, 22 students (73.3%) fell into the very good category and 8 students (26.7%) into the good category; no students fell into the fair or poor category.

Discussion

The process of developing the listening instructional material on the topic"Essen und Trinken" proceeded systematically through the five stages of the ADDIE model, from analyzing students' needs and problems, designing the video scenarios and instruments, production and expert validation, implementation in the eleventh-grade class, to evaluation based on test and questionnaire data. This process is consistent with the views of Richey and Klein (2020) and Zamsiswaya, Syawaluddin, and Syahrizul (2024) that the

ADDIE model provides a rational framework in which each stage can be continuously evaluated and refined before the final product is used.

The questionnaire results showed a very positive response to the developed medium (overall mean 86.1%, categorized as very good) across all aspects, including the listening ability aspect. This finding reinforces the results of Rodríguez and Marín (2022) and Azizah, Asri, and Mannahali (2020), who found that Canva- and ADDIE-based audiovisual listening materials can improve students' motivation and comprehension, and is consistent with Nainggolan et al. (2025) and Prameswari and Pujosusanto (2025), who showed that contextual audiovisual media can increase students' interest and motivation in learning German.

On the other hand, the listening test results (mean 75.70) indicate a gap between students' positive perception of the medium and their actual listening achievement. Nevertheless, the one-sample t-test demonstrated that the mean score was statistically significantly higher than the reference value of 70, indicating that the use of this medium had a statistically demonstrable positive effect on students' listening ability. This finding is consistent with the theoretical views of Vandergrift and Goh (2020) and Nation (2020) that listening ability does not depend solely on engaging and motivating media but also requires adequate vocabulary mastery and targeted repeated practice. It can therefore be concluded that the developed medium is valid and practical and has been statistically shown to significantly increase students' learning motivation, while its effectiveness in improving listening ability remains moderate, indicating a need for further reinforcement, particularly for students whose scores remain below the minimum mastery criterion.

Conclusion

This study concludes that the German listening instructional material on the topic "Essen und Trinken" based on the "Guten Appetit" videos and Canva template, was successfully developed systematically through the five stages of the ADDIE model and was declared valid and practical by media and material experts. The development results show that the students' mean listening test score (75.70) was statistically significantly higher than the reference value of 70, and students' responses to this medium were very positive across all aspects (mean 86.1%, categorized as very good). This study is limited by its sample size, which was confined to a single school, and it did not compare the effectiveness of the medium with a control group; therefore, generalization of the results should be made with caution.

As a recommendation, teachers are encouraged to provide additional vocabulary exercises and repeated listening practice for students whose scores remain below the minimum mastery criterion. Future research is recommended to test the effectiveness of this medium using an experimental design involving a control group and to expand the research sample to more than one school so that the results can be generalized more broadly.

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