

DEVELOPING DAR APPLICATION BASED ON ANDROID IN READING ENGLISH TEXT

Choirun Nisa¹, Yuyun Bahtiar²

^{1,2}Universitas KH. A. Wahab Hasbullah
(yuyunbahtiar@unwaha.ac.id)²

Abstrak

Tujuan dari penelitian ini adalah untuk mengembangkan Aplikasi DAR (Descriptive, Announcement, and Recount Text) Berbasis Android dalam Membaca Teks Bahasa Inggris untuk Siswa SMA kelas X. Peneliti menggunakan metode Research and Development (R&D) dan mengadaptasi ADDIE (Analyze, Design, Pengembangan, Implementasi, dan Evaluasi) model. Berdasarkan hasil pengembangan peneliti mendapatkan hasil validasi media dengan skor 95,8% yaitu kategori "sangat baik". Pada validasi materi peneliti mendapatkan skor 92,1% yang merupakan kategori "sangat baik", dan pada hasil implementasi produk, peneliti mendapatkan skor peneliti sebesar 92,1% yang merupakan kategori "sangat baik". Dari data tersebut dapat disimpulkan bahwa aplikasi DAR layak sebagai media pembelajaran dalam belajar-mengajar bahasa Inggris.

Kata Kunci: *Androi; aplikasi DAR; keterampilan membaca*

Abstract

The purpose of this research was to develop DAR (Descriptive, Announcement, and Recount Text) Application Based Android in Reading English Text for Senior High Students in grade X. The researcher used Research and Development (R&D) method and adapted ADDIE (Analyze, Design, Development, Implementation, and Evaluation) models. Based on the resulting development the researcher got a result of media validation 95,8% scores, which was the "very good" category. In the material validation, the researcher got 92,1% scores, which was a "very good category", and in the result of product implementation, the researcher got 92,1% scores, which was a "very good" category. From those data, it can be concluded that DAR Application was feasible as a learning media in teaching-learning English.

Keywords: *Android; DAR application; reading skill*

A. Introduction

English is an international language, which is widely spoken in the world. English has a crucial role in many aspects of life (Rao, 2019). English is used in technology, education, sciences, and also in

communication (Ratheeswari, 2018). English in Indonesia is an important subject because English is a foreign language that is taught in education in Indonesia from kindergarten until university. In Indonesia,

English is a foreign language that students should learn.

In learning English, students can master all aspects of English. They are listening, speaking, reading, and writing (Ma'arif & Afidah, 2018). In learning English, there are four skills that we must learn: listening, speaking, reading, and writing. These four skills certainly have equally important portions, interconnected and complementary.

Reading is one of four skills in learning English. According to some experts, reading is a process between a reader and a text to understand the text. To get more information about the text, you have some strategies and skills, there are guessing, predicting, checking, and asking yourself questions (Heryatun, 2020).

From data analysis in Islamic Senior High School, students have learned descriptive text material, announcements, and recount text using teaching materials in the form of books. However, for some students, learning English is still a difficulty. For students, learning English is to be based on likes and interests and also methods or media of learning as well as varied delivery methods by teachers when learning English. Although teachers have methods that are often used, students sometimes feel bored with the delivery or media. That is all, students need a new atmosphere and innovation in learning English, and they also have an interest in using android-based learning media.

Having done the need analysis, the researcher develops interactive learning media, because, in the learning and teaching process, interactive learning media can be used to create a good atmosphere and make the learning and teaching process

more interesting for students (Subro, 2021). Interactive learning media develop based on android applications can be a new way for students to learn English because interactive learning media-based android can make the students more attractive and more eager to learn English (Damayanti, 2022), (Nurfadhillah, 2021).

B. Research Method

1. Research Design

In this research, the researcher used to research and development as a research method. According to experts, research and development methods are research methods that have steps or processes to create or develop a new educational product or perfect an existing product to provide innovation and improvement and test it to be better and effective, and useful for educators (Akbar, 2013), (Santuri, 2022)

There are many models from research and development, including Borg and Gall model, 4D model, Kempis model, Smith, and Ragan model, R-D-R model, ASSURE model, ADDIE model, and others models. Among these research and development models, the researcher uses the ADDIE model as a model in this research because the ADDIE model has simpler steps for the product developed by the researcher. The product developed by the researcher is "DAR Based on Android in Reading English Text for Senior High Students grade X". Research and development were the simple methods to use in this research.

2. Research Procedure

The research procedure used for this research was ADDIE (Analyze, Design, Development, Implementation, Evaluation). ADDIE models have 5 stages.

Figure 1.
Stages of the ADDIE Model



The details of the ADDIE model in this research are as follows:

3. Analyze

At this stage, the activities of researcher analyzed the problems found in the field, precisely on February 19, 2022, at the Islamic Senior High School At-Taufik Bogem, Diwek. To find out the problems that occur, the researcher conducted observations and distributed questionnaires to the 13 students of grade X. Based on the results of observations and the distribution of questionnaires, the problem encountered was that many students were less interested in English subjects because the learning media used was less attractive to students. The media used is still not able to increase students' interest and understanding of learning, so students are less active in learning.

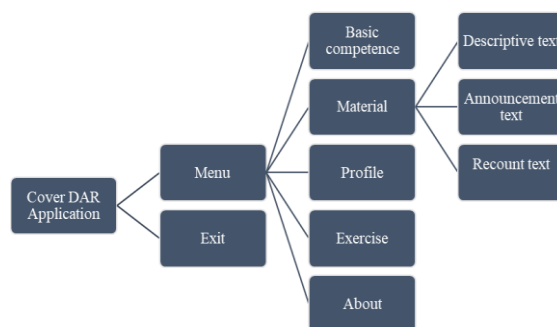
Based on the results of observations and the results of student questionnaires which were analyzed by the researcher and other data in the field, the researcher developed an android-based learning media application for English with the topic Descriptive, Announcement, and Recount text.

4. Design

After that, the researcher designed the learning media by collecting material about Descriptive text, Announcement text,

Recount text, pictures, and other supporting materials which were of course following the basic competencies of the topic and presented. Then, the researcher makes product designs that are developed in the form of PowerPoint media with hyperlinks to make an interactive PowerPoint, uses other applications such as Benime to make moving text videos, Text to Speech as voice-over, and iSpring Suite 10 as an application for making interactive practice questions and change PowerPoint into HTML and Website 2 APK Builder to make learning media it becomes an application.

Figure 2.
Storyboard of DAR Application



5. Development

At this stage, the researcher validated the learning media product and validated the material to 2 people. There are 2 lecturers in English at KH. A. Wahab Hasbullah University. This validation was carried out after the learning media product has been approved and was considered feasible by the supervisor for validation. Validation of learning media products and material validation used a validation sheet as an assessment of learning media products and materials used. The validation has been done on April 18, 2022, and the researcher made a revision that is

listed on the validation sheet following the suggestions from the validator.

6. Implementation

After that, the learning media product was tested on 14 students at grade X Islamic Senior High School At -Taufik Bogem, Diwek. After conducting the trial, the researcher gave a questionnaire by link on Google form to the students to assess the performance of the learning media product developed by the researcher, and make revisions when necessary.

7. Evaluation

At this stage, the researcher evaluated whether the developed learning media product was feasible or not to be disseminated after seeing the results of the validation sheet, questionnaire sheet, and revisions made by the researcher.

8. Data Analysis Techniques

Data analysis was an activity carried out after all data sources were collected. In this research, the researchers used descriptive analysis as a data analysis technique. The data that has been collected can be grouped into two, namely, qualitative data and quantitative data.

1. Qualitative data was used to process the data from the review in the form of responses, criticisms, and suggestions for improvement by media experts, material experts, and students. The data was then processed in the form of sentences or words. The results of this analysis will be used to revise the product developed by the researcher.
2. Quantitative data was used to analyze quantitative data from validation results and response questionnaires with

percentage calculation techniques. Calculation function to find out the final value of the validation and response questionnaire.

Table 1.
Likert's Scale

Meaning Score	Category
Very Good	4
Good	3
Low	2
Very Low	1

According to (Riduwan, 2014), in Dasar-Dasar Statistika book, the calculation of the questionnaire result used the following formula:

$$\text{Percentage} = \frac{\sum \text{total score}}{\text{max score}} \times 100\%$$

C. Research Finding and Discussion

Findings And Discussion

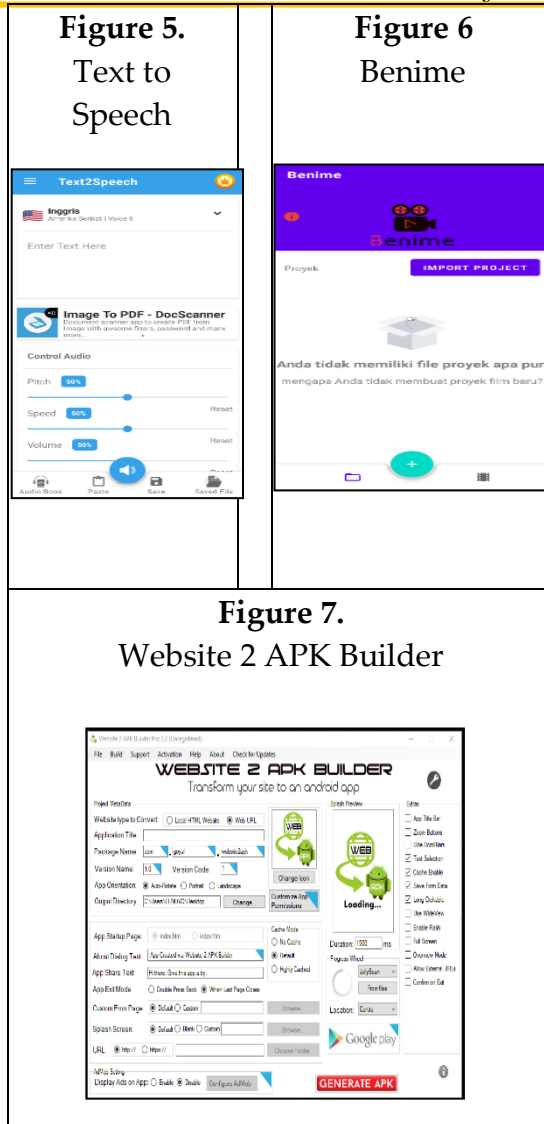
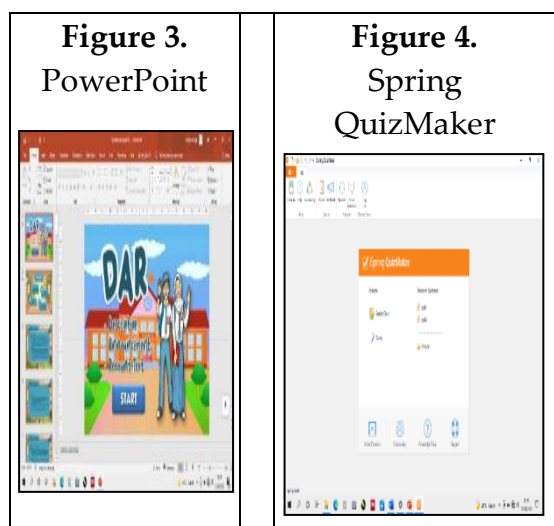
1. Result of Analysis

In this part, the researcher did research in Islamic Senior High School At-Taufiq Bogem, Diwek, Jombang on February 19, 2022, to get some data about what the students needed to help with English learning activities. The researcher used a questionnaire and observations as the instrument of this research, and from the data in need of analysis, the researcher found some problems during English learning activities in the class. The problem encountered was that many students were less interested in English subjects because the learning media used was less attractive to students. The media used was still not able to increase students' interest and understanding of learning, so students were less active in learning.

Based on the result analysis the researcher concluded that students need a new learning media which could students more interested and active during English learning. Therefore, the researcher developed DAR Applications to help students more interested and active in English learning.

2. Result of Design

Design activities were done by making a storyboard and application needed. While the application used to make DAR Application was PowerPoint, Benime, Text to Speech, iSpring Suite 10, and Website 2 APK Builder. PowerPoint media with hyperlinks was to make an interactive PowerPoint, Benime was to make moving text videos, Text to Speech as voice-over, and iSpring Suite 10 as an application for making interactive practice questions (iSpring Quiz Maker) and changing PowerPoint into HTML and Website 2 APK Builder to make learning media it becomes an application.



3. Result of Development

The researcher finished the validation DAR to media and material experts on April 18, 2022. The result of validation sheets of media and material.

The questionnaire result obtained from students, media experts, and material experts were analyzed using the Likert scale. The percentages into criteria of feasibility. This was important to know whether the media be able to revise or not. The criteria were as follows:

Table 2.

Index Category of Skala Likert

Percentage Score	Category
------------------	----------

76% - 100%	Very Good
51% - 75%	Good
26% - 50%	Low
≤25%	Very Low

According to (Riduwan, 2014), in Buku Dasar-Dasar Statistika, the calculation of the questionnaire result used the following formula:

$$\text{Percentage} = \frac{\sum \text{total score}}{\text{max score}} \times 100\%$$

A. The Result of Expert Validation and Revision

1. Validation from Media Expert

This validation focused on the media aspect of the DAR (Descriptive, Announcement, and Recount Text) Application. The expert on media validation of this research was Mrs. Ulfa Wulan Agustina, M.Pd., as the lecturer of ICT (Information and Communication Technology) in Language Teaching of Universitas KH. A. Wahab Hasbullah Tambakberas. The researcher used the validation sheet. The result of media validation was as followed:

Table 3.

The Result of Media Validation

No.	Aspect	Total Score
1.	Layout Design	8
2.	Text/Typography	12
3.	Pictures	8
4.	Videos	12
5.	Audio	6
6.	Packing	7
7.	Use	8
8.	Navigation and Interactive Link	8
Sum		69

Average	95,8
---------	------

The maximum score was the maximum score on the Likert scale multiplied by the number of items, so that $4 \times 18 = 72$, the total score of observation = $(15 \times 4) + (3 \times 3) + (0 \times 2) + (0 \times 1) = 69$. The calculation of the percentage of the feasibility of media validation was followed:

$$P = \frac{\sum \text{total score}}{\text{max score}} \times 100\%$$

$$P = \frac{69}{72} \times 100\% = 0,958 \times 100\% = 95,8\%$$

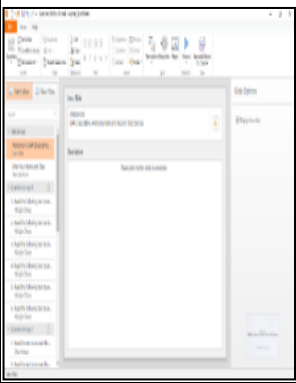
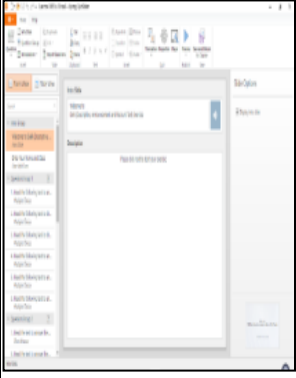
Based on that, the researcher got a 95,8 % score, which was in the "Very good" category. It meant, that the resulting media validation sheet or the result of the DAR Application was "Deserve to be tested". Based on the result of media validation, this application needed revision. That was should add music to exercises, so students were not bored when doing the exercise.

2. Revision from Media and Material Validation

Based on media and material validation, the expert gave the same revision to add music or back sound in the exercise. So, students were not bored when doing the exercise. The following table showed the layout before and after revision.

Table 4.

The result of Expert Revision

Before		Expert validation suggests giving music in exercise.
After		After revision, the researcher gave music for exercise.

Application.

3. After the student's study used the DAR Application, students have to do the exercise of the DAR Application and sent the result of the exercise to the researcher.
4. The researcher sent a link for the questionnaire of students' responses by Google form in the WhatsApp group and asked students to fill out the questionnaire.

Based on the implementation stages, the researcher got the data as follows:

Table 5.

The result of the Questionnaire for Students' Responses

No	Statement	Questionnaire Score
1.	The design of the DAR Application learning media used is interesting.	49
2.	The use of DAR Application learning media is very easy.	54
3.	Videos on DAR Application learning media help you to better understand descriptive,	51

D. Result of Implementation

The DAR Application was tested on 14 students in grade X of Islamic High School at – Taufiq Bogem, Diwek on July 2, 2022. The research was carried out online in the WhatsApp group “Try Out Final Product” by the following steps: first, the researcher gave the students a link to the WhatsApp group “Try Out Final Product”. After the students join in the group, the researcher gave instructed what they must do. The following are:

1. The researcher sent the DAR Application to the group and asked students to download and install DAR Application on their phones.
2. After that, the researcher gave the instructions to open and used the DAR Application on their phone, students studied descriptive, announcement, and recount text by using the DAR

	announcement, and recount text materials.				g of Descriptive, Announcement, and Recount Text.	
4.	The DAR Application learning media can motivate to learn material about Descriptive, Announcement, and Recount Text.	51		8.	The presentation of material in the DAR Application learning media helps to answer the questions.	52
5.	The delivery of material in the DAR Application learning media is related to the student handbook you have.	52		9.	The shapes, models, and sizes of letters used are simple and easy to read.	51
6.	The material presented in the DAR Application learning media is easy to understand.	51		10.	This DAR Application learning media uses language that is easy to understand.	53
7.	This DAR Application learning media contains practice questions that can test your understanding	52		Sum		516
				Average		92,1

The maximum score was the maximum score on the Likert scale multiplied by the number of students so that $4 \times 14 = 56$. The calculation of the percentage of the feasibility of media validation was followed:

$$P = \frac{\sum \text{total score}}{\text{max score}} \times 100\%$$

$$P = \frac{516}{56} \times 100\% = 0,921 \times 100\% = 92,1\%$$

Based on that, the researcher got a 92,1 % score, which was in the "Very good" category. It means that the resulting questionnaire for students or the result of the DAR Application was "Feasible" to use

the DAR Application was shown as follows:

Figure 7.
Home Page



Figure 8.
Menu



Figure 9.
Basic Competence Page

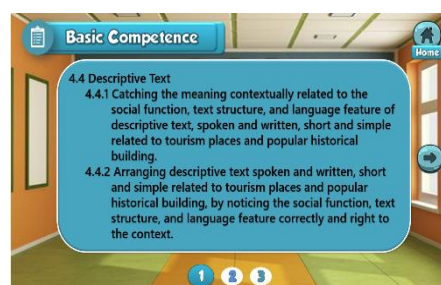


Figure 10.
Material Menu



E. Result of Evaluation

The evaluation stage was the last in developing DAR Application-Based Android in Reading English Text for Senior High Students in Grade X. The purpose of the evaluation was to see feasible or not to be disseminated after seeing the results of the validation sheet, questionnaire sheet, and revisions made by the researcher.

Based on the data obtained from the development and implementation stage, the researcher concluded that DAR Application was feasible to use as a learning media in the English lesson. DAR Application has some strengths and weaknesses. The strengths are DAR Application can be accessed anytime and anywhere in offline mode, music makes students not bored when they did exercise, and the features DAR Application was easy to operate. The weaknesses of the DAR Application were that in the implementation stage, the researcher just sent the application by WhatsApp group. So, some students were confused when operating the DAR Application. The researcher and students did not communicate directly, just by WhatsApp chat. The researcher can not know the result of the exercise to all of the students directly, students should send the result of the exercise to the researcher.

F. Final Product

The final product showed the figure layout after revision. The layout figure of

Figure 11.
Descriptive Text Material



Figure 12.
Announcement Text Material

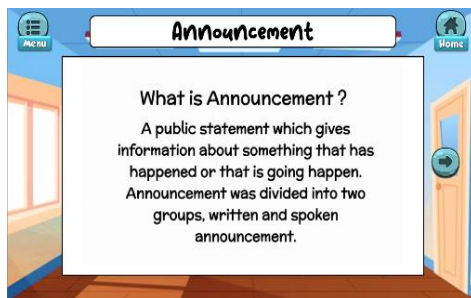


Figure 13.
Recount Text Material



Figure 14.
Profile Developer



Figure 15.
Welcome Page DAR Exercise

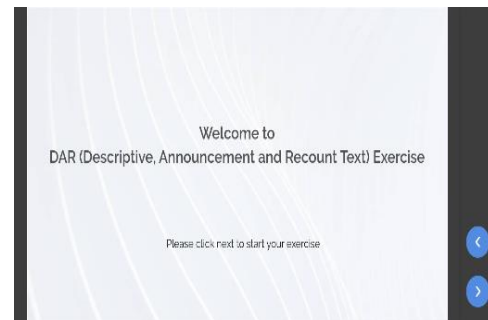


Figure 16.
Multiple Choice Exercise

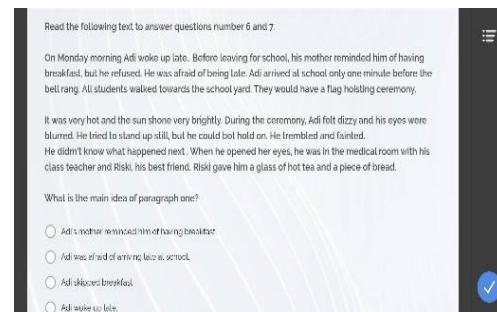


Figure 17.
Short Answer Exercise

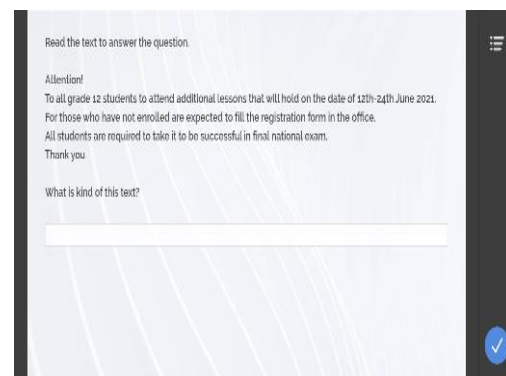


Figure 18.
True False Exercise

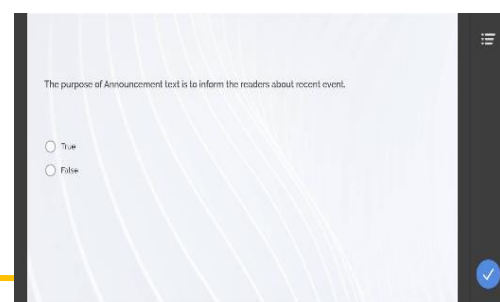


Figure 19.
About DAR Application



D. Closing

1. Conclusion

The objective of this research was to develop DAR Application-Based Android in Reading English Text for Senior High Students in grade X. Based on the result of the result data and discussion that has been described, the researcher got a result of media validation 95,8% scores, was “very good” category. In the material validation, the researcher got 92,1% scores, which was a “very good category., and in the result of product implementation, the researcher got 92,1% scores, which was a “very good” category. The researcher concluded that DAR Application was feasible as a learning media in teaching-learning English.

2. Suggestion

Based on the discussion and the conclusion, the researcher gave some suggestions for the teacher, the other researcher, and the next research: 1). For the teacher, it can be alternative learning media in learning teaching English, 2). For other researchers, this research can be a reference to do the research in other skills and materials.

For the next research, this product can be developed to better product for learning and teaching English.

E. References

- Akbar,, S. (2013). *Instrumen Perangkat Pembelajaran*.
- Damayanti, D. K. K. R. M. G. (2022). *Multimedia Interaktif Berbasis Aplikasi Android dalam Pengenalan Bahasa Inggris Dasar Siswa Kelas VI*. Jurnal Mimbar Ilmu.
- Heryatun, Y. (2020). *Strategi Membaca Text Bahasa Kedua* (1st ed., Vol. 1).
- Ma'arif, I. B., & Afidah, N. (2018). Improving Students ' Reading Comprehension by Activating Their Schema (An Action Research on VIII Grade of SMP Madinatul Ulum Tembelang Jombang). *Journal of Research in Foreign Language Teaching*, 1(1), 14–26.
- Nurfadhillah, S. R. A. S. C. Y. O. D. S. D. O. N. S. (2021). *Pengembangan Media Pembelajaran Interaktif Berbasis Android Melalui Aplikasi Quiziz Pada Pelajaran Matematika Vi Sdn Karang Tengah 06*. Jurnal Pendidikan Dan Ilmu Sosial.
- RAO, S. P. (2019). *The Role Of English As A Global Language*. Research Journal Of English (RJOE).
- Ratheeswari, K. (2018). Information Communication Technology in Education. *Journal of Applied and Advanced Research*, S45–S47. <https://doi.org/10.21839/JAAR.2018.V3I S1.169>
- Riduwan. (2014). *Dasar-dasar Statistika* (P. D. Iswarta, Ed.; Vol. 2). Alfabeta.
- Santuri, B. W. M. A. I. S. A. (2022). *Development of Animated Dubbing Video as Learning Media in English Speaking at*

*Senior High School. Journal Of
Development Research.*

Subro, A. (2021). *Developing interactive
learning media for 8th-grade students of
junior high school. 07(01), 15–23.*

