DEVELOPING SUPPLEMENTARY ENGLISH-SPEAKING MATERIAL FOR THE SEVENTH GRADER OF ISLAMIC HIGH SCHOOL

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Abstract. In this present globalization Era, teaching English with the goal as a tool for communication is necessary. In line with it, MTs Al Karimi 1, however, has commitment to create students to be able to use English as a tool for communication in everyday life. Due to the reason, this research has been conducted. This study aimed to develop English speaking materials and solve the problem during teaching and learning English for the seventh grader of Islamic High School. The study conducted in MTs Al Karimi 1 Gresik. The design of this study was Research and Development (R&D). The detail procedure of each step is elaborated in the procedure of the development. The researcher conduct this study with the following procedure: 1) identifying the problem; 2) reviewing the problem into the theory; 3) conducting need assessment and needs analysis; 4) gathering materials; 5) writing manuscript; 6) verifying to the expert; 7) revising; 8) validating to the experts. The result in this development was the supplementary English-speaking text book for the seventh grader of Islamic high school. The supplementary book contained the attractive cover, preface, table of contents, book mapping, colorful pictures and photos, good coherent and illustration. It has nine chapters with the topics which were chosen under the consideration of the students' need. The strength of this product is on the basic common useful expressions, these basic common useful expressions are also translated to Indonesia equivalent since the students' level of English proficiency is in intermediate level. By that way, the students are motivated and are easy to use the developed materials both inside and outside the classroom.

Keywords: Speaking, CLT, materials development

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INTRODUCTION

Our understanding about the process of second/foreign language has changed in the last 30 years and Communicative Language Teaching (CLT) got involved in it. Earlier view on language learning prefers to consider on mastering grammatical competence. Language learning was viewed as mechanical habit process where the students have to make correct sentences and avoid the errors. Both on written and spoken, to reduce the error the students should memorize the dialogue and performing drill, which learning is under the control of the teachers (Richards, 2005)

In this present globalization Era, teaching English with the goal as a tool for communication is necessary. New technology and the beneficial of internet plays important role in business, education, science, and technological proses, all of which demand high proficiency in English (Bahrani, 2011). MTs Al Karimi 1, however, has the quality assurance to create students to be able to use English as a tool for communication in everyday life. The students are expected to do lifelong learning by gaining some information on other subject and using English in their work.

In daily life, most of the people speak a lot than write. Speaking is fundamental to human communication (Hiep, 2007). However, many English teachers still spend the majority class time to teach reading and writing to complete the material based on the national curriculum. If the goal of the language course of MTs Al Karimi 1 Gresik is to enable the students to communicate orally in English so producing a tool to help students in learning English speaking, such as supplementary English speaking textbook and Communicative Language Teaching (CLT) method, was necessary.

Richards (2005) stated that CLT is a broad approach to teach, which focus on communication as the organizing principle for teaching rather than a focus on mastery of the grammatical system of the language. CLT derived from the point of view communicative competence. It means that language can be analyzed, described and taught as a system for

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expressing meanings. Therefore, the aim of language teaching is to help learners on developing skills for expressing different communicative meanings.

During learning-teaching activity, the researcher also an English teacher in the school where carried out the research. He found out that most of the seventh-grade students did not speak English in the class because they were afraid of making mistakes about the grammar. Some teachers kept on teaching English grammar to them and it caused the students doubted to speak English freely. They also did not know the meaning of some words or vocabulary in their handbook. Additionally, the lack of book properness for speaking material especially for speaking was the basis problem of the students in learning English.

By making some considerations, the researcher decided to facilitate students of MTs Al Karimi 1 Gresik on learning English speaking by designing an instructional supplementary handbook because the students have already had the textbook; the students' handbook was in the form of integrated English skills in which it included speaking, reading, and structure materials. This recent product, however, as a supplementary handbook that focus on speaking materials. Local environment around the school such as the location, situation, view, and all things that were inside Al Karimi 1 would be included. The students would also get some casual English conversation so they would be able to use or speak English based on the reality.

In developing the material, the researcher concerned to the essential concept of CLT that engages the learner to a real-world communication through a series of communication task the students complete by making equal between fluency and accuracy (Bahrani, 2011, 2011). The first relevant study on Research and Development (R&D), Efrizal (2012) developed teaching speaking materials based on communicative language teaching for second year students of senior high school. The result showed that the draft of materials development was focused on speaking activity. He developed the material based on Communicative Language Teaching (CLT) approach and arranged well based on the standard competence and basic competence of the syllabus in senior high school. These materials included seven chapters and the objective of the topic was stated at the beginning. The topic were chosen under the consideration that related to the students' need and interest and aimed to enrich students' experiences in order to support their daily activities.

The second relevant study, Febriatun (2016) developed English speaking materials for tenth-grade of hotel accommodation department in SMK pi Ambarukmo 1 Sleman. The objectives of this study were: (1) to find the target and learning needs of X th grade students of hotel accommodation department at SMKPI 1 Ambarukmo Sleman, Yogyakarta, and (2) to develop appropriate English speaking materials for Xth grade students of hotel accommodation department at SMK PI Ambarukmo 1 Sleman, Yogyakarta. Considering the needs, this study developed three units which consist of introduction, main lesson, and reinforcement in each unit. Based on the experts' judgment result, the mean score of all aspects from those three units was 3.56, categorized as"Very Good". This suggests that the developed materials are appropriate to be used for Xth grade of Hotel Accommodation Program at SMK PI Ambarukmo 1 Sleman.

The third relevant study, Palupi (2017) also developed English learning material for speaking skill based on ADDIE. She got the result that the vocabulary material is in the form of multimedia power point presentation. She passed some steps in developing the English vocabulary material by doing; need analysis, design, development, expert validation, try out, revision, and final product. She concluded that learning material for speaking skill based on ADDIE could be applied to the seventh grade students.

The recent study, the researcher developed supplementary English-speaking material for the seventh grader of Islamic high school based on Communicative Language Teaching (CLT) Method. The expected result in this development was the supplementary English-

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speaking material for the seventh grader of Islamic high school would be proper tool for seventh grader in learning English speaking. The result of the development also expected based on the need of the students.

LITERATURE REVIEW

The Definition of CLT

Spoken language is the best material for communication, so an effective approach to teach language is the one who helped the learners to be able to use language for actual communication. It is generally accepted that communicative approach or communicative language teaching is the most suitable approach for teaching for the aim of communication because its main aim is for developing learner's communicative competence.

Spada (2007) defines CLT from the point of view that language can be analyzed, described and taught as a system for expressing meanings, therefore the aim of language teaching is to help learners develop skills for expressing different communicative meanings. Hiep (2007) further state that CLT was developed into two ways: 1). A notional-functional approach, which extends the teaching grammar regarding the teaching of interactional notions. 2). Learner-centered approach which emphasized the important of learners learning the language.

Similarly, Richards (2005)states that CLT is a broad approach to teaching that resulted from a focus on communication as the organizing principle for teaching rather than a focus on mastery of the grammatical system of the language. Meanwhile, Littlewood (2007) also presented that Communicative Language Teaching (CLT) is a method of teaching with the goal to develop student's communicative competence such as grammatical, discourse, functional, sociolinguistic, and strategic of language.

Principles of Teaching Speaking

There are some principles that need to be understood before teaching speaking. Goh (2016) explained the principles of CLT are: (a) provide appropriate input, (b) use language in authentic ways, (c) provide context, (d) design activities with a purpose, (e) use task-based activities, (f) encourage collaboration, (g) use an integrated approach, (h) address grammar consciously, (i) adjust feedback/error correction to the situation, and (j) include awareness of cultural aspects of language use.

Material Development

In the teaching process, a teacher needs material that can be used to make his classes more effective and efficient. One of the materials function is to support the objective of the class. Materials for language learning will be taken to be anything that can be used to facilitate the learning of a language, including course books, videos, graded readers, flash cards, games, websites and mobile phone interactions, though, inevitably, much of the literature focuses on printed materials. Materials can be informative (informing the learner about the target language), instructional (guiding the learner in practicing the language), experiential (providing the learner with experience of the language in use), eliciting (encouraging the learner to use the language), and exploratory (helping the learner to make discoveries about the language).

Materials development is now not only undertaken by practitioners but is also a field of academic study. As a practical activity it involves the production, evaluation and adaptation of materials. As a field it investigates the principles and procedures of the design, writing, implementation, evaluation and analysis of materials. Ideally, these investigations both inform and are informed by the development and use of materials. This is the case in a

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number of recent publications (Muhammad Adnan Latief, 2009; Tomlinson, 2011, 2012) whose authors are both practicing writers of language-learning materials and academics theorizing about materials development.

The material development is focused on both accuracy and fluency. In accuracy the activity can be such exercises, discrete, form, predictable, close-ended, contrived, correctness, full class work, and open-pair work. In fluency the activities are tasks, integrative, meaning, unpredictable, open-ended, realistic/life-like, message, closed-pair work, and group work.

It concludes that the developing English conversation teaching material which consider as most important to accuracy and fluency. This is necessary as a research into Communicative approach or CLT method because of the need to master oral language communication.

The Process of instructional design

Instructional process is a systematic process in which every component (i.e. teacher, learners, materials, and learning environment) is crucial to successful learning (Shofi, 2018; Tracey, 2009). This study is to develop a set of teaching-learning materials; therefore it should be developed neatly and carefully by following systematic procedures in order to make it successful; i.e. it reach its objectives. Below are models of instructional design that provide stages in developing an instructional program/material.

Latief (2009) gives a clear explanation about the process how to conduct R&D. The steps of developing the material, the researcher present as below:

- a) Identifying classroom problem related to instructional supporting documents (like syllabus, the textbook, and the media as well as assessment instruments). Instructional supporting documents are suspected as the problems because of those do not exist, or those exist but do not precisely fulfill the needs, or those exist but it needs to be fixed. The problem as the researcher mentions will be the reason to conduct R&D.
- b) Reviewing literature: theories, principles, or criteria of effective instructional supporting documents and assessment instruments.
- c) Developing instructional documents or assessment instruments considered to the cause of the problem.
- d) Reviewing the product by the researcher to make sure that all the appropriate principles are applied in the development of the product.
- e) The product is validated to the experts and revised to get quality assurance.

The instructional product is tried out in small scale and revised the product based on the results of the try-out.

RESERACH METHODS

This study was aimed at developing English speaking materials for the students of MTs Al Karimi 1. The design that was proper for this purpose was Research and Development (R&D). According to Latief (2009) Research and Development was a research design aimed at developing educational products, like curriculum, syllabus, textbooks, instructional media, modules, assessment, etc. The participants of this study was 24 students of class A in the grade seventh of MTs Al Karimi 1. The instruments used in this study were interview guide, questionnaire, observation, and the expert judgment.

The instruments for collecting the information of the need analyst were interview guide and questionnaire. The interview guide was to interview the teachers of English and the students of MTs Al Karimi 1. The information from the questionnaire are related to the students' speaking habit in English, existence of speaking materials in the school, and the content of speaking materials they need. The instruments for collecting the information about the properness of the product were questionnaire and expert judgment.

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In this study, the researcher used the research and development model addapted by Latief (2012), due to this kind of model was suitable with the condition of the students' and the classroom problem to be solved. The steps were: (1) identifying classroom problem related to instructional supporting documents (like syllabus, the textbook, and the media as well as assessment instruments), (2) reviewing literature: theories, principles, or criteria of effective instructional supporting documents and assessment instruments, (3) developing instructional documents or assessment instruments considered to be the cause of the problem, (4) reviewing the product by the researcher to make sure that all the appropriate principles have been applied in the development of the product, (5) the product was validated by related experts and revised accordingly to get quality assurance, (6) the instructional product was tried out in small scale and revised based on the results of try-out. Targeted criteria of success are needed to determine the acceptability of the product. Try-out to a larger group of students may be needed to get more feedbacks for the product revision, (7) the final product was published.

Practically, the researcher modified it into several steps that became his own model of development. The reasons were that it was more practical and that the scope of the study was not so large; therefore, it was better if the researcher used it.

FINDINGS AND DISCUSSION

Result on Need Assessment

Before collecting the data from the questionnaire, the researcher conducted pretest to know the student's weakness. In English subject, the students must achieve the targeted score 75. After doing pretest in Class A that consist of 24 students, the searcher found that 5 students scored below 50 scores, it was far from the standard score and 10 got below 75 scores. The result was 50% of the students scored 75. For this reasons, there must be an interesting teaching material which could make them be more active to act. The students also did not use their body language, and some of them were shy to show their facial expressions. During teaching and learning process, students also had some problems such as lack of vocabulary, did not know how to speak, and less confidence.

To collect the data related to the students' needs, the researcher distributed the questionnaire to the seventh-grade students of Islamic Junior High School of Al Karimi 1 to dig all information that was related to students needs in overcoming their problem on speaking English and the model supplementary speaking material they wish. The questionnaire was also given to Class A that consists of 24 students. The result was presented below:

Table: 1 Questionnaire result for developing materials:

No.	Category	Yes	No	%
1	Students want to have an English speaking book.	24	0	100
2	Students like the book with many contents	19	5	79,16
3	Students like the book which contains pictures	22	2	91,66
4	Students want the book printed colorfully	22	2	91,66
5	Students want the book contains some expressions	24	0	100
6	Students want a thick book	16	8	66,66
7	Students want some interesting topic based on their age	18	6	75
8	Students want a reading passage on the book	10	14	41,66
9	Students want the book consists of comprehension test	7	21	29,16

The result showed that the students needed a speaking book. The development would be focused on the students' need on how the supplementary speaking materials would be. There must be more than 70 % agree on each category. Based on the data that had been collected form 24 students. It was found that all students or 100% they stated that want to

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have an English speaking book. It indicated that students agreed with the development of English speaking material.

The second point concerned with the content of the book. 19 students or 79,16% said that the like the book with many contents. The rest of it, 5 students or 20,83% stated that they did not like the book with many contents. The third point concerned on the pictures of the book. 22 students or 91,16% of students voted that they like the book with content some pictures. The rest of the students, 2 students or 8,3%, voted that they did not like the book with contents some pictures. The fourth point was about the colorful book. 22 students or 91,16% of students said yes. However, 2 students or 8,3% said that they did not like the book that was printed colorfully. The fifth point was about the useful expressions in daily life. In this point, 100% or 24 students stated that they wanted the book which contained useful expressions. The sixth point concerned the thickness of the book. 16 students or 66,66% of students voted "yes", it intended that they like the thick book. However, 6 students or 33,33% of students did not like the thick book, they liked the thin one. The seventh point was a question about the interesting topic based on students' age. 18 students or 75% of students choose the book that has topics about their age. The rest of the students, 6 students or 26% voted that they did not want the topic based on their age. The eighth point concerned the reading passage of the book. 10 students or 41,66% of students stated that they wanted the book that contained in reading passages. However, 14 students or 58,33% of students voted that they did not want a book with containing with reading the passage. The last question was about the book that contained some comprehensions test. 7 students or 29,16% of students stated that they wanted the book contained with it, but 17 students or 70,83% of students did not want the book that contained some comprehensions test.

The researcher also conducted interview to collect all information regarding to teaching and learning process at Islamic Junior High School of Al Karimi 1. When the researcher asked about students' interest in learning English, the teacher stated that most students like learning English. The teacher further stated that most students realize that English is a fundamental subject that have to be mastered in order to be able to use it as the tool for communication to other people all around the world and as the tool to successfully face this modern era. However, as the teacher at the school that the researcher conducted this research, I admitted that there were lacks of material of teaching and learning that more focus on speaking skill. The material, however, did not cover the students' needs and students' enthusiastic on speaking skill. These limited number of material caused the ineffective in teaching and learning English process.

Result of Developed Material

As the students' needs and the teacher suggestion based on the result of need analyst, the researcher decided to develop supplementary speaking material that focuses on speaking skill. The draft of the supplementary speaking materials were developed based on Communicative Language Teaching (CLT) approach and harmonized with the current syllabus in Islamic Junior High School of Al Karimi 1. The supplementary material included nine chapters. The topics were chosen under the consideration of the students regarding their needs. Those nine chapters were useful expressions in the class, greeting and take leave, asking for and giving information, asking and forbidding someone to do something, apologizing, politeness and gratitude, like or dislike, descriptive, asking for and giving service, and procedure.

In every chapter, there was the additional basic common useful expression. This expression was to help students easily practice and learn to speak. Further, this basic common useful expression was also translated to Indonesia equivalent since the students' level of English proficiency was on the intermediate level and based on students' wish so the

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researcher decided to give the translated version as well as it was still harmonized with Communicative Language Teaching approach. However, the researcher did not translate all the expressions to Indonesia equivalent. In every speaking focus chapter, the researcher did not give Indonesian equivalent because the researcher wanted to encourage the students to speak such as in the real communication of English.

The design of this supplementary speaking material was so simple and easy to use. To make easy in determining the ideas and to communicate them accurately as the students wish, the teaching material will be drawn some interesting pictures and print colorfully and t was not necessary for the students to memorize the grammatical pattern. What the students' need to do was practicing and using the material with their friends or teachers frequently. Each material in this book was provided in practicing section such as act out the dialogue, role-play, retelling the story, etc.

In addition, the developed material was printed by using standard paper A4. The method of binding the book is saddle stitched because of this supplementary book is thin. The researcher used a great deal of variety of colors used. It does not matter to me although the cost was the little bit expensive.

Result of Expert Validation

After finishing the first draft of the developed supplementary English speaking materials, the researcher gave the draft to the first expert. He stated that there were three characteristics that should be validated within 9 units of the developed material. The three characteristics were the evaluation on the content, evaluation on language, and evaluation on the layout and the art of the book.

For the evaluation on the content generally, the experts said that the developed materials were very good and appropriate to be implemented teaching and learning process of English speaking Islamic Junior High School of Al Karimi which accordance with the syllabus used. The additional material such as basic common useful expression will help the students to easily communicate orally because the material was provided in spoken English form, further it provided spoken English form like the native speaker used. He believed that the students will increase their motivation to study English since the materials are easy to comprehend; the materials also were organized attractively in good order.

For the second characteristic of validation, evaluation on language, the expert said that translate English to the first language was possible for CLT because the level of students' English proficiency is still low (Tomlinson, 2003). However, the researcher has to be aware of translating English to Indonesia. There are miss translations from English to Indonesia. The expert also suggested using correct Indonesian grammar when the researcher translated into Indonesia. Further, it was better for the researcher to make sure that this product categorized as CLT. The third characteristic of validation, evaluation on layout and design, the expert generally said that the layout and design were appropriate and good for seventh-grade students of Islamic Junior High School of Al Karimi because it provided some pictures and it was colorful. For the last aspect, the aspect of communicative principle, the expert said that this developed material was very communicative by giving the students a lot of opportunities to practice their speaking ability without being burden with memorizing a lot of formulas of grammar because the researcher gave them authentic language for the guidelines for speaking.

Result of Revision of the Product

After having validation from the expert, the researcher revised the product base on the expert correction and suggestion. The revisions are, as the researcher stated above, changing some less attractive and less communicative instruction to be more attractive and

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communicative one. Further, the researcher changed the pictures that were taken from the internet to pictures that were taken by the researcher himself. The researcher also revised on miss typing and misses spelling words, punctuation, etc.

Result of Try Out

Questionnaire item number 1 indicated students general opinion of the materials used in the supplementary speaking book whether it was attractive or not. The percentage of students who said that the materials were attractive was 67.69%.

Questionnaire item number 2 indicated student's perception of the usefulness of materials taught related to their daily life. The percentage that the materials were very useful was 77.69%.

Questionnaire item number 3 indicated students' opinion about the activities used in developed materials. Most of the students claimed that the activities of the development materials were very good and easy to understand. The activities were joyful because it covered more practical spoken activities same as in real communication.

Questionnaire item number 4 was an open-ended question asking about the students' opinion of the materials that were expected. Most of the students answered that the materials should not only provide classroom activity but also outdoor class activities. Some others were satisfied with the materials they already have.

Questionnaire item number 5 was an open-ended question that asking what kind of materials that they liked the most or they wished to be used. In seventh grade, the students said that the materials they liked the most were the materials which are related to activities in the class such as useful expressions in the class.

Result of Revision from Try-Out

After having try-out and collecting the data from the questionnaires, the researcher revised the weakness of the product. Those weaknesses of the product such as difficult of vocabulary, misspelling, and include lack of pictures. Overall, the students showed positive attitudes toward the use of the developed material, agreed that they enjoyed teaching-learning activities and would like to use the developed material during and outside class time.

Final Product

The last step of this research was the final product of the developed supplementary speaking English materials which were completely revised, designed, and arranged based on the try-out and expert validation result. The materials were completely developed.

The expert-approved the final product and they stated that the product was very important for the students of Islamic Junior High School of Al Karimi 1. The expert believed that the product would help the students to overcome their obstacles in learning English. The final product of this research is a set of supplementary English speaking materials for seventh-grade students of Islamic Junior High School of Al Karimi. The supplementary materials were completed with the attractive cover, preface, table of contents, book mapping, colorful pictures and photos, good coherent and illustration. These supplementary speaking materials had nine chapters. The topics were chosen under the consideration of the students regarding their needs.

CONCLUSION AND SUGGESTION

After doing along the process of research and development; identifying the problem, reviewing the problem into the theory, conducting need assessment and needs analysis, gathering materials, writing the manuscript, verifying to the expert, trying-out, revising, validating to the experts, and finally, the product was ready to use. Further, the developed

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material was harmonized with the principle of Communicative Language Teaching (CLT) so the researcher hopes that the teacher understands well its principles. The objective of this research was to solve the students' problems in teaching and learning English process and to attract the students' to speak English a lot. In addition, the purpose of the developed materials was to provide appropriate speaking materials for the students in Islamic Junior High School of Al Karimi 1 because the previous book was lack of properness.

The strength of this product was on the basic common useful expression. This expression had the purpose to help students easily practice and learn to speak. Further, this basic common useful expression was also translated to Indonesia equivalent since the students' level of English proficiency was on the intermediate level. The students also were not necessary to memorize the grammatical pattern. What the students' need to do was only practicing and using the materials within this supplementary book with their friends or teachers frequently.

REFERENCES

- Bahrani, T. (2011). Speaking fluency: Technology in EFL context or social interaction in ESL context? Studies in Literature and Language, 2(2), 162.
- Efrizal, D. (2012). Improving students' speaking through communicative language teaching method at Mts Ja-alhaq, Sentot Ali Basa Islamic boarding school of Bengkulu, Indonesia. International Journal of Humanities and Social Science, 2(20), 127–134.
- Febriatun, L. (2016). Developing English Speaking Materials for X Grade o Hotel Accommodation Department in SMK PI Ambarukmo 1 Sleman. Unpublished Thesis. Yogyakarta: English Education Department Faculty of Language and Art Yogyakarta State University.
- Goh, C. C. M. (2016). *Teaching Speaking. In W. A. Renandya & H. P. Widodo (Eds.)*, English Language Teaching Today: Linking Theory and Practice (pp. 143–159). https://doi.org/10.1007/978-3-319-38834-2_11
- Hiep, P. H. (2007). *Communicative language teaching*: Unity within diversity. ELT Journal, 61(3), 193–201. https://doi.org/10.1093/elt/ccm026
- Latief, Mohammad Adnan. (2012). Research methods on language learning: An introduction. Malang: Universitas Negeri Malang.
- Latief, Muhammad Adnan. (2009). *Penelitian Pengembangan*. Karya Dosen Fakultas Sastra UM.
- Littlewood, W. (2007). Communicative and task-based language teaching in East Asian classrooms. Language Teaching, 40(3), 243–249.
- Palupi, F. (2017). Developing English Learning Material For Speaking Skill Based On ADDIE. Premise: Journal of English Education, 6(1), 29–41.
- Richards, J. C. (2005). *Communicative language teaching today*. SEAMEO Regional Language Centre Singapore.
- Shofi, A. T. (2018). *Developing English Conversation Material For Islamic High School*. E-Link Journal, 5(1), 1–7.
- Spada, N. (2007). *Communicative language teaching*. In International handbook of English language teaching (pp. 271–288). Springer.
- Tomlinson, B. (2011). *Materials development in language teaching*. Cambridge University Press
- Tomlinson, B. (2012). *Materials development for language learning and teaching*. Language Teaching, 45(2), 143–179. https://doi.org/10.1017/S0261444811000528.
- Tracey, M. W. (2009). *Design and development research: A model validation case*. Educational Technology Research and Development, 57(4), 553–571. https://doi.org/10.1007/s11423-007-9075-0.

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