



DEVELOPING ISLAMIC-BASED MANDARIN CONSTRUCTIVIST TEACHING MATERIALS

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ABSTRACT

This research is motivated by the absence of Mandarin language teaching materials that are integrated with Islamic values in their learning and the use of Mandarin language teaching materials, especially textbooks from the country of origin of China (People's Republic of China) which is still thick with eastern culture and less relevant to Islamic values. The research stages are identification analysis, formulation of teaching materials, readability test, trial, validation, and revision as well as making a final prototype. This research concludes that (1) Islamic-based Mandarin constructivist teaching materials are needed, especially in Islamic educational units that include Mandarin in their curriculum. (2) The design of teaching materials with the main topics of discussion on prayer, fasting and Eid has gone through the trial, validation and revision stage to produce the product is in the form of an Islamic-based constructivist Mandarin textbooks for beginners consisting of a teacher's handbook and a student's book. (3) Based on the results of the readability test and validation of material experts, Islamic-based Mandarin teaching materials have been feasible 4) Islamic-based Mandarin Language Teaching Materials have received positive acceptability from teachers and students as users.

Keywords: Teaching Materials, Constructivist, Islamic Based

INTRODUCTION

The era of globalization has made people increasingly aware of the importance of learning foreign languages, including Mandarin. Foreign language skills are used as a preparation to increase competence when entering the world of employment. This awareness made many Indonesians interested to study in China. Moreover, in 2002 the Indonesian government declared its support for Mandarin education and for Sinology departments to be established at Indonesian universities, triggering the development of learning Mandarin after school and after work (Koh, Hoon and Haji-Othman, 2021).

Mandarin language education must keep up with the times, incorporate Mandarin into the national education system without being hindered by students' economic status,

religious beliefs and ethnicity; In addition to science, schools also need to instill the essence of traditional culture, moral student education and personality (Sutanto & Soedirman, 2022). There are various purposes for students to study it, whether it is studied because native-speaking countries have a role in the progress of the global economy or studied for diplomatic purposes. Whatever the purpose of learning, learning a foreign language is very important for linguistic, social, personal development and interpersonal development. In today's world of education, not a few schools have policies to establish Mandarin as one of the main subjects or local study, not to mention schools based on Islamic education or Madrasahs, but in reality, learning Mandarin is still very difficult to find language teaching materials. Mandarin is suitable for implementation in Madrasah or school environments where students convert to Islam because the content is too adaptable to the eastern culture where this language originates, it is very problematic to find Mandarin teaching materials that require Islamic values that are close to the daily lives of Muslim Students. This is certainly a consideration for madrasah or schools that want to choose Mandarin to be applied as one of the subjects in their madrasah, especially in madrasah or schools that hold a foreign language program in their curriculum.

Based on the pre observations, the Mandarin teaching materials used in several schools in Indonesia currently have never been developed based on an Islamic approach that integrates the teachings of Mandarin with Islamic teachings such as the teachings of the five daily prayers, fasting, zakat, and so on. The developments that have been carried out so far are still limited to being regional and adapting to the lives of Indonesian people in general such as weather conditions, daily activities, time differences, and others, and are general to be learned from various groups based on certain levels of education. In developing this Islamic-based constructivist teaching material, researcher seek to realize faith and piety education through Mandarin which not only explores student's foreign language skills but indirectly through content that integrated with Islamic teachings sourced from the Qur'an and Hadith to emphasize teaching positive behavior and avoid negative behavior (Suparjo et al., 2021a).

Increased enthusiasm and awareness of the Indonesian Islamic sparked the emergence of new avenues for inculcating socializing Islamic values in teenage generations of Muslims over the last two decades. This is done through Islamic schools and madrasahs. However, public school is now also an important channel for teachers, with the participation, support, enthuseas, consistency of parents in instilling the values of faith-taqwa and goodness morals in students (Suyatno, Hayati and Wantini, 2020).

According to (Suparjo et al., 2021b) about character building, the development of textbooks that integrate religion and other sciences is an important element in the formation of a religious and scientific Muslim personality. This attitude will keep students from splitting their personalities from becoming the extreme right that supports radicalism or the extreme left that supports secularism. Therefore, the teaching materials developed do not only focus on linguistics but also integrate it into religious knowledge which is closely related to everyday life. By adapting Muslim students guided by the Al-Quran, the teaching materials developed contain several verses of the Qur'an containing concepts and moral values that are very relevant to serve as a reference in character building (Subarkah et al., 2018) .

This is a consideration for using constructivist learning, as stated by (DeLay, 1996) Constructivism is the opposite of behavioristic learning which is carried out in one direction from teacher to student, constructivist learning is an active process in which students personally build their knowledge based on the ideas they have and

interactions with the surrounding environment. Based on Johnson & Johnson in (Bećirović et al., 2022) one of the constructivist learning models is cooperative learning. The whole concept of cooperative learning is based on learning through group activities and achieving instructional goals collaborative, where the success of a group of students is conditioned by the success of their collaborative peers. From several descriptions regarding the development of teaching materials above, it can be concluded that making teaching materials, must be based on the structure of each form of teaching materials. With these instructions and guidelines, it will be easier to develop teaching materials. In order to make this research more focused, researcher formulates the research questions such as: 1) How is the need for Islamic-based Mandarin constructivist teaching materials? 2) How is the design of Islamic-based Mandarin constructivist teaching? 3) How is the feasibility of Islamic-based Mandarin constructivist teaching materials developed? 4) How is the acceptance of Islamic-based Mandarin constructivist teaching materials developed?

RESEARCH METHOD

a. Research Design and Participant

The type of research methodology used is a development research methodology, according to (Borg, 2014), "A process used to develop and validate educational products". Researcher chose the location of this research at SMAN 3 Pontianak, with the consideration that SMAN 3 Pontianak is one of the secondary schools that currently has a language program and Mandarin lessons. In addition, some students are Muslim, making it easier the researcher to conduct product trials in this study. The research participants involved as a whole are as follows: At the validation stage, the material consisted of one translator as well as a Mandarin teacher, and one Islamic education expert. The trial stage consists of; 1) The one-on-one trial phase involved three students-selecting low, medium, and high levels of Mandarin skill; 2) The field trial phase involved Muslim students in one class in class X at SMAN 3 Pontianak.

b. Data Collection

To produce the teaching material, quality instruments are also needed and are able to explore what is desired in product development.

Observation

Observation is used for initial identification and monitoring the process of testing teaching materials or the Mandarin learning process that the researchers did after the development of teaching materials was carried out with data collection tools in the form of field notes and video recorders.

Readability Test

The legibility test (cloze test) is used to measure the readability of the text that the researcher will include in the teaching materials before the researcher makes a prototype of the text book as a whole. This readability test is carried out with a question sheet containing text that has been crossed out.

Indirect Communication

Indirect communication is used to find out the views and responses of material experts and students who are designated as trial respondents with data collection tools in the form of questionnaires. The teaching material expert is given an instrument sheet in

the form of an assessment of teaching materials that have been validated. Meanwhile, teachers and students were given a questionnaire instrument sheet for aspects of teaching materials that had been tested through the learning activities carried out.

Focus Group Discussion (FGD)

FGDs were used in this study to find out the responses and inputs of Mandarin teachers and students towards Islamic-based constructivist Mandarin textbooks which were prepared in the small group trial stage. Discussions were carried out with the teacher and students after a trial or learning of Mandarin was carried out with a data collection tool in the form of an audio recorder.

c. Data Analysis

Data analysis was carried out qualitatively and quantitatively as follows:

Qualitative Data Analysis, the data analysis used in this research is an interactive qualitative data analysis type which consists of three stages such as; a) data reduction, b) data display, and c) drawing conclusions or verification (Matthew Miles, 2014). This data analysis is used to analyze the results of the data obtained in the field notes and learning observations.

Quantitative Data Analysis, quantitative data obtained through a questionnaire instrument, to assess the quality of the developed product. Data from Mandarin and Islamic educational experts will be validated with Aiken's V, Aiken's V content validity coefficients to calculate the content-validity coefficient based on the results of an expert panel assessment of people on an item regarding the extent to which the item represents the construct being measured. The assessment is done by giving a number between 1 (that is, very unrepresentative and very irrelevant) to 5 (that is, very representative or very relevant) (Azwar, 2012:113). With a formula like the following:

$$V = s / [n(c-1)]$$

So:

Lo = The lowest validity score (1)

c = The highest validity score (3)

r = Number given by a validator

$$s = r - lo$$

The range of possible numbers is from 0 to 1.00. The results of the Aiken's V validity coefficient are one of the benchmarks for declaring the feasibility of a product. In this case the product is declared feasible if the validation results range from 0.6 to 1.00 then the product is in the proper category range.

In addition to the Aiken validity coefficient, quantitative analysis is also used in a questionnaire with a Likert scale. In the Likert scale in this study, a positive tendency was shown to strongly agree (SS) was given a score of 4, agree (S) was given a score of 3, disagree (TS) was given a score of 2 and strongly disagree (STS) was given a score of 1. for a negative statement (found in statement no. 9), strongly disagree (STS) was given a score of 4, disagree (TS) was given a score of 3, agree (S) was given a score of 2 and strongly agree (SS) was given a score of 1.

The data that has been calculated through the validity coefficient and the scale above, then analyzed using qualitative descriptive techniques.

d. Procedure

This development process will go through several procedural stages which include: a) Identification analysis, b) Preparation of draft material (prototype), c) Trial, Validation, and Revision, and d) Final production.

Identification Analysis

The activities carried out at the identification stage are gathering information regarding the need for Islamic-based Mandarin teaching materials as well as Mandarin-based teaching and learning activities and formulating rational thoughts on the development of teaching materials, identifying and reviewing the theories that underlie the development of Islamic-based Mandarin teaching materials, and aspects Important aspects of the material to be developed based on an Islamic approach include: reading, writing, listening, speaking, and grammar.

At this stage, an analysis of: a) needs analysis b) analysis of the school curriculum, especially Mandarin subjects, includes: material analysis and formulating basic competencies. c) learning media and facilities and d) class conditions.

Cloze Test (Rhizome Test)

The level of readability of textbooks can be determined by using the gap test instrument or the close technique. The gap test is considered to be able to measure the level of readability of discourse and describe students' abilities in reading material. As stated by (Xie et al., 2020) this method was introduced by Wilson Taylor (1953), through the gap test technique, the reader is asked to be able to understand incomplete discourse (because certain parts of the discourse have been intentionally erased) with understanding Perfect. The parts that are omitted, usually the nth word, are replaced with certain marks (horizontal straight lines with dots). The omission or omission of word parts in the gap test technique may also not be based on the nth word consistently and systematically. By using the gap test technique in a relatively short time the teacher can immediately find out the level of readability of the discourse; the students' level of understanding; and the background experience, interests, and language of the student.

The interpretation of the gap test results above is seen from the point of view of the classification of the readers. With the same classification, the researcher can classify that:

- a. Discourse is classified as easy if the percentage of gap test scores obtained is $> 60\%$.
- b. The discourse is classified as moderate if the percentage of the gap test scores obtained ranges from 41% -to 60% .
- c. Discourse is classified as difficult if the percentage of gap test scores obtained is $<40\%$.

If the readability of the text is moderate or difficult, then the level of need for teaching materials that the researcher develops is adequate.

Preparation of Draft Teaching Materials (Prototype 1)

Based on the results of the identification analysis, the researcher will compile a storyboard that will help the researcher in developing and compiling teaching materials. At this stage, prototype 1 (initial) is produced as the realization of the results of designing teaching materials. At this stage, prototype 1 is produced as an integrated part of the basic competencies. Namely the realization of the required learning device design results.

The trial, Evaluation, and Revision Phase

At this stage, 2 main activities are carried out, namely 1) validation activities, and; 2) conducting field trials of prototype teaching materials from validation results.

In validation activity, the type of instrument used in this phase is a validation sheet. Before being used, it is first validated by experts to test whether or not the

instrument is used to measure the specified aspects in terms of the clarity of the formulated measurement objectives, the suitability of the questions for each aspect, the use of language, and the clarity of the use of the instrument. The validator for the validation stage of the Mandarin material was entrusted to an experienced Mandarin-Bahasa translator and lecturer. Meanwhile, the validator of Islamic education is entrusted to the head of the postgraduate Islamic Religious Study Program IAIN Pontianak. Suggestions from experts and practitioners are used as a basis for improving or revising teaching materials. The activities carried out when validating teaching materials are as follows:

- a. Asking for expert considerations about the feasibility of teaching materials (on prototype 1) that have been realized. The instrument is a validation sheet.
- b. Perform an analysis of the validation results from the validator, if the analysis results show:
 - Valid without revision, then the next activity is a field trial.
 - Valid with a few revisions, then the next activity is to revise it first, then prototype 2 will be produced and then field trials will be carried out.
 - Invalid, then revisions are made to obtain a prototype of new teaching materials. Then ask for expert and expert considerations again until a valid model is obtained.

Before conducting trials of teaching materials that have been developed, an instrument is first developed, namely an observation sheet that has been validated by experts to test the feasibility of the instrument to measure the specified aspects. The trial was carried out aiming to see the practicality and effectiveness of teaching materials in the implementation of learning. Activities carried out at the trial stage are:

- 1) Conducting field trials
- 2) Individual trial: 3 students
- 3) Small group tryout: 12 students
- 4) Field trial: 30 students (adjusting to the number of Muslim students in class)
- 5) Analyze the data from the trial results, and
- 6) Revise based on the results of the trial data analysis
- 7) Final Production Phase (Final prototype)

The final production activity is that researcher produce final teaching materials that have gone through a process of individual, small group, and field trials, validation, and revision involving experts in Mandarin, Islamic Education, and participating students.

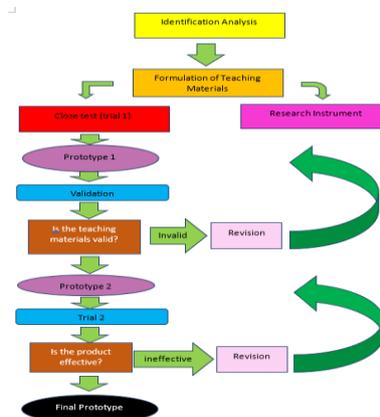


Figure 1: Process of Developing Islamic-Based Constructivist Mandarin Teaching Material

RESULT AND DISCUSSION

RESULT

Through of research questions, data collection and analysis, the result of this research shows the need; design process ; feasibility and acceptability of Islamic-based Mandarin constructivist teaching material which can be seen from explanation bellow.

To find out the need for Islamic-based mandarin teaching materials, the process carried out is observation and readability test of the prototype. The result shows the Mandarin teaching materials used in several schools in Pontianak currently have never been developed based on an Islamic approach. Teaching materials used are currently still in the form of photocopied textbooks from the book "基础汉语40课" which main material contains content that adapts to the lives of East-Asia society. Learning Mandarin methods are still conventional and student centered such lecture method, reading aloud, and taking notes where the learning outcomes are largely determined by the teacher. In the readability test stage, the researcher involved twenty-eight Muslim students. Each student works on questions that contain an Islamic-based Mandarin text that has been superimposed. Based on the summation, the average score obtained from the discourse readability test on Islamic-based Mandarin textbooks for the sample class is 59.1. Where the range of values illustrates that the level of difficulty of discourse is classified as moderate which means that the compiled textbooks are needed.

At the stage of designing teaching materials, the initial product produced is in the form of student textbooks and teacher handbooks which content has been adapted to constructivist learning theory and some Islamic nuanced content, at the design stage, prototype 1 (initial design), prototype 2 prototype 3, and the final prototype are produced.

To find out the feasibility of Islamic-based Mandarin constructivist teaching materials, activities carried out at the individual test stage were the validation of teaching materials by experts on Mandarin Language and Islamic Religious Education materials and the revision of prototype one. This individual trial is carried out to obtain initial input on a particular product or design in the form of an assessment or validation of material experts.

In terms of content validity, the Mandarin Language Teaching Materials has a scale consisting of nineteen (19) items which are assessed by two (2) experts consisting of an expert on Mandarin language material (evaluator 1) and Islamic material (evaluator 2). The range of values given is 1 (lowest) and 5 (highest), so $n=2$, $l_0 = 1$ and $c= 5$.Based on the results of the Aiken's validity test, the following data were obtained:

| | Appraisal Item | $\sum s$ | V | Validity | |
|---------------------------------|---|----------|------|----------|---------|
| | | | | Valid | invalid |
| Feasibility of content/material | Compliance with SK, KD | 3 | 0,75 | √ | |
| | Suitability to student needs | 4 | 1 | √ | |
| | Conformity to the needs of teaching materials | 3 | 0,75 | √ | |
| | Truth of material substance | 3 | 0,87 | √ | |
| | Benefits to increasing insight and knowledge | 4 | 1 | √ | |
| | Conformity with the values of social morality | 3 | 0,75 | √ | |

| | | | | |
|---------------------|--|---|------|---|
| linguistic | Clarity of information | 2 | 0,5 | √ |
| | Conformity with the grammar of Bahasa/Mandarin | 2 | 0,5 | √ |
| | Appropriate use of Bahasa/Mandarin effectively and efficiently | 2 | 0,5 | √ |
| Presentation | Clarity of purpose | 4 | 1 | √ |
| | Order of serving | 4 | 1 | √ |
| | Giving motivation | 3 | 0,75 | √ |
| | interactivity (stimulus and response) | 4 | 1 | √ |
| | Completeness of Information | 2 | 0,5 | √ |
| Graphic | Fonts (type and size) | 3 | 0,75 | √ |
| | Layout | 3 | 0,75 | √ |
| | Illustrations, graphics, pictures, and photos | 3 | 0,75 | √ |
| | Display design | 3 | 0,75 | √ |

Table 3 : Content Validity of Islamic-Based Constructivist Mandarin Textbook Teaching Materials Based on Expert Assessments of Chinese Language Materials and Islamic Religious Education, calculated with Aiken's formula.

Based on the results of the calculation of the validity of the content of Islamic-based Mandarin textbooks, most of the assessment items are valid, while most of the invalid assessments are in the linguistic assessment category and information completeness assessment items, which are under the value range of 0.600. The invalid part is used as a reference for the next prototype revision. In addition to content validity with a scoring system based on the category of assessment of teaching materials, comments and suggestions from material experts on Mandarin Language and Islamic Education are also used as considerations in improving prototype 1 which is comments and input from mandarin experts in terms of feasibility and material content are the selection of themes in teaching materials is very close to students' daily lives so it is hoped that the material can be easily understood and can attract students' interest to be more active in learning Mandarin (Trihardini & Wikarti, 2022) . from the aspect of language, grammar and the use of command sentences about practice questions are required in both Indonesian and Mandarin. from the aspect of presenting information in the command sentence needs to be emphasized. From the graphic aspect, things that need to be improved are the use of punctuation marks and the use of capital letters. and the illustrations in chapter 3 seem stiff and should use communicative pictures. Comments and input from Islamic religious education experts from the aspect of the feasibility of the content or material are, the verses of the Quran displayed should be

selected that are relevant to the theme of each chapter. then on the subject of prayer times, the verses of the Quran used are not appropriate yet. while in terms of language, presentation and graphics are appropriate.

The acceptability of Islamic-based constructivist Mandarin teaching materials is the effectiveness of learning Mandarin when using Islamic-based Mandarin teaching materials and the response of Mandarin teachers and students of class XI to Islamic-based teaching materials developed and measured through small group trials. and field trials which are described as follows:

1. Effectiveness of Learning Mandarin with Islamic-Based Mandarin Textbooks

The effectiveness of learning Mandarin is the extent to which the objectives of learning Mandarin can be achieved according to the lesson plan and instructional objectives through teaching materials in the form of Islamic-based Mandarin textbooks that have been developed, which have several differences from previous Mandarin textbooks. The effectiveness of learning Mandarin is known through observation, pre-test, and post-test.

a. Small Group Trial

This small group trial involved six subjects consisting of one Mandarin teacher and five Muslim students. The results of this group trial were used to revise prototype 2 before field trials were conducted.

The learning process in the small group trial was conducive, the Mandarin language teacher carried out learning according to the provided Learning Implementation Plan (RPP). The learning process begins with a pretest and ends with a posttest with the following results:

| Sample | <i>Pretest Score</i> | <i>Posttest Score</i> |
|----------------------|-----------------------------|------------------------------|
| Student 1 | 40 | 100 |
| Student 2 | 30 | 100 |
| Student 3 | 50 | 100 |
| Student 4 | 30 | 100 |
| Student 5 | 40 | 90 |
| Average Score | 38 | 98 |

Table 4 : List of Pre-Test and Post-Test Results in Small Group Trials

Based on the table of pretest and post-test results above, it can be seen that before learning the average value of students is 38, after learning Mandarin with Islamic-based Mandarin textbook teaching materials by the teacher according to the plan for implementing learning the average value of students participating in small group trials increased by 98.

b. Field Trial

The process of learning Mandarin in the field trial involved 29 participants, consisting of 1 Mandarin teacher and 28 students. The learning activities take place based on the Lesson Plan (RPP) which researcher have compiled based on the Mandarin syllabus used by the current Mandarin teacher. Learning activities begin with the

teacher opening the lesson with questions and answers according to the subject to be studied, followed by an exploration process. In the exploration process, the teacher uses the Student Team Achievement Division (STAD) strategy, where students are divided into seven groups consisting of four students so that students play an active role in learning the vocabulary related to the subject of prayer times cooperatively when students find vocabulary. difficult words and have never been studied the teacher can give a good explanation. In this process the researcher found active students asking the teacher about the vocabulary they had just met about prayer times, there was cooperation between students and students in groups, and interactions between students and teachers regarding the subject of prayer times in the learning process at that time.

After exploration activities, where students explore information and vocabulary about prayer times, the learning activities are continued with elaboration activities, where students are still in groups determining the meaning and main ideas of Islamic conversations which consist of two discourses. In this activity, the researcher found that students were very active in discussing determining the meaning of the right discourse, besides that there was an exchange of information between students about the right vocabulary to determine certain meanings in the discourse with the theme of prayer time so that it was difficult for the sake of difficulty in learning Mandarin. using Islamic-based Mandarin textbooks can be overcome with solutions from friends in the group. Besides that, the teacher also takes part in facilitating students in determining the meaning when there are students or group members who have difficulty or confusion in determining the meaning of discourse about prayer times.

After exploration and elaboration, the next learning activity is confirmation. In this core learning activity, the teacher provides feedback to students regarding the meaning of discourse or conversations contained in Islamic-based Mandarin textbooks. Each group is responsible for reflecting on their experience while using the Islamic-based constructivist mandarin textbook. In this way, the basic competence of Mandarin in the form of listening and speaking can be honed well. Besides that, the teacher also confirmed the meaning of the right prayer time discourse, so that there were no misunderstandings by students in understanding the meaning of discourse and vocabulary about prayer times in the Islamic-based Constructivist Mandarin textbook.

2. Responses of Students and Mandarin Language Teachers

To find out the responses or tendencies of Mandarin teachers and students to the Islamic-based Mandarin textbooks that the researcher developed, in a small group trial the researcher used the Focus Group Discussion (FGD) method. Meanwhile, the field trial used an instrument in the form of a questionnaire on a Likert scale.

a. Small Group Trial

To find out the responses of teachers and students in small group trials, the researcher used the FGD method, where the discussion process involved five students and one Mandarin teacher and the researcher as moderator. Based on the results of the discussion, it can be concluded that the responses from teachers and students participating in small group trials regarding Islamic-based Mandarin teaching materials are:

- a) The teaching materials of Islamic-based Mandarin textbooks are easier to use than previous textbooks, this is because the previous textbooks were oriented toward foreign students who mastered English. Meanwhile, the textbooks that the researcher

compiled use Indonesian as the language of instruction so that users find it easier and easier to understand.

- b) The members agree if this Islamic-based Mandarin textbook replaces the “基础汉语40课 (40 Lessons For Basic Mandarin Course)” textbook.
- c) Teachers and students think that learning Mandarin is easier to do cooperatively according to the instructions in the Islamic-based constructivist Mandarin textbook because individually it takes a long time and is difficult to find solutions and makes learning Mandarin feel very heavy.
- d) Islamic discussion is very interesting and close to everyday life.
- e) The instructions in the book are easy to understand, but in the teacher's handbook, how to use learning strategies is clarified again.
- f) The display is very attractive and the illustrations are used to support the topic of the discourse presented.

In addition to the positive responses previously described, the researcher also received input from the participants from the presentation aspect, namely the characters in the conversations presented in text 1 and text 2 should not only involve male characters but also involve female characters in the conversation to make it more interesting. Meanwhile, the input from the Mandarin teacher was to detail how to use learning strategies and to give examples of the use of difficult vocabulary.

b. Field Trial

In the Likert scale, a positive tendency is shown to strongly agree (SS) is given a score of 4, agree (S) is given a score of 3, disagree (TS) is given a score of 2, and strongly disagree (STS) is given a score of 1. (found in statement no.9), strongly disagree (STS) is given a score of 4, disagree (TS) is given a score of 3, agree (S) is given a score of 2 and strongly agree (SS) is given a score of 1.

The total score given by the Mandarin teacher is $56/17=3.3$. Based on these results, the teacher's response to the teaching materials of Islamic-based Mandarin textbooks for the even semester XI class that the researcher developed was categorized as agree. The total score given by Students, the sum and the average score is 3, which means that the student's response to Islamic-based Mandarin textbooks is in agreement. Besides that, the response to each statement item has also been calculated on an average, where each response result of 28 students on each statement is in the score range of 3, which means agree.

To determine whether Mandarin teacher as the respondent agrees with the use of Islamic-based Constructivist Mandarin textbooks in learning Mandarin at school, agree or disagree can be seen from the results of the calculation of the data as follows:

| STATEMENTS | RESPONSES | | | |
|--|-----------|---|----|-----|
| | SS | S | TS | STS |
| | 4 | 3 | 2 | 1 |
| I am interested in reading this Islamic-based constructivist Mandarin textbook. <input type="checkbox"/> | | √ | | |
| The illustrations in textbooks are interesting. <input type="checkbox"/> | | √ | | |
| This textbook can be studied under the guidance of a teacher or in groups. <input type="checkbox"/> | √ | | | |
| The textbook structure is easy to understand. <input type="checkbox"/> | | √ | | |
| This textbook provides opportunities for students to | | √ | | |

| | | |
|---|---|---|
| practice Mandarin. <input type="checkbox"/> | | |
| If there are difficulties in understanding the material in textbooks, I can find answers or solutions. <input type="checkbox"/> | √ | |
| This textbook contains a summary or explanation. <input type="checkbox"/> | √ | |
| The writing style is easy to understand. <input type="checkbox"/> | √ | |
| Material is too much * | | √ |
| Instructions are easy to understand. <input type="checkbox"/> | √ | |
| Through this textbook, students can achieve basic competence in reading Mandarin well. <input type="checkbox"/> | | √ |
| Through this textbook, students can achieve basic competence in Mandarin writing well | | √ |
| Through this textbook, students can achieve basic competence in listening to Mandarin well | | √ |
| Through this textbook, students can achieve basic competence in speaking Mandarin well | | √ |
| The cover of textbooks is interesting. <input type="checkbox"/> | √ | |
| Islamic themes in the dialogues presented are interesting. <input type="checkbox"/> | | √ |
| There are Islamic values that can be obtained from Islamic-based Mandarin textbooks. <input type="checkbox"/> | √ | |

Table 5: Mandarin Teacher's responses after using Islamic-Based Constructivist Mandarin Teacher's Handbook

DISCUSSION

The Need for Islamic-Based Constructivist Mandarin Teaching Materials

Mandarin teaching material that integrates the teachings of Mandarin with Islamic teaching such as five daily prayers, fasting, zakat, and so on. The developments that have been carried out so far are still limited to being regional and adapting to the lives of Indonesian people in general such as weather conditions, daily activities, time differences, and others, and are general to be learned from various groups based on certain levels of education.

The Mandarin textbook those imported from China are less relevant if applied to learners in Indonesia (Trihardini, n.d.-b), where the majority of the population is Muslim (Syarif, 2018). other than that the book is only a textbook intended for students and without guidelines for teachers so in carrying out learning, teachers do not have an idea in implementing learning strategies that can generate interest and effectiveness in student learning. This is influenced by the use of Mandarin books translated into English, and students' understanding of these books is largely determined by students' English skills, so teachers need to provide extra explanations so that there are no misunderstandings in the use of certain vocabulary.

Design of Islamic-Based Mandarin Teaching Materials

At the design stage, prototype 1 (initial design), prototype 2 prototype 3, and the final prototype are produced which are described in the following explanation:

Prototype 1 (Initial Design)

Before carrying out the process of designing teaching materials, determine three stages in determining the basic concept of development so that teaching materials made

are more focused and can be used effectively by learning objectives by teachers and participants. The three stages in question are learning theory, learning strategies, and material or discussion points. The first stage is to determine the learning theory used as the basis for the learning objectives. In designing Islamic-based Mandarin teaching materials, the researcher used constructivist learning theory as the basis for writing teaching materials. Where in each subject, the researcher provides information that indirectly stimulates students to find out the meaning of each language that the researcher uses in conversation and simple reading, which is equipped with a list of words as a reference in constructing the meaning of each sentence.

According to constructivist learning theory, one of the most important principles in educational psychology is that teachers do more than just distribute knowledge to students. Students must build their knowledge in their minds. Teachers can facilitate this process, by providing opportunities to discover or apply their ideas and teach students to become aware and aware of using their strategies for learning. The teacher can be a member of the students on a ladder that takes students to a higher level of understanding, provided that the students themselves have to climb the ladder.

The second stage, determine the learning strategy. One of the aspects that marks learner's achievement in language learning is learning language strategies (Purwaningsih & Purwaningsih, 2018) One of the strategies of constructivist learning is cooperative learning, cooperative learning is a learning strategy through small groups of students who work together to maximize learning conditions to achieve learning goals. (Berns, S & Erickson, 2001) suggest cooperative learning is learning to organize learning using small study groups where students work together for learning purposes. According to (Komalasari, 2017), the cooperative learning model includes numbered heads, cooperative scripts, teams of outstanding students, working in pairs and sharing, jigsaw models, snowball throwing, TGT teams, and integrated cooperative reading and writing, and two stay two guests.

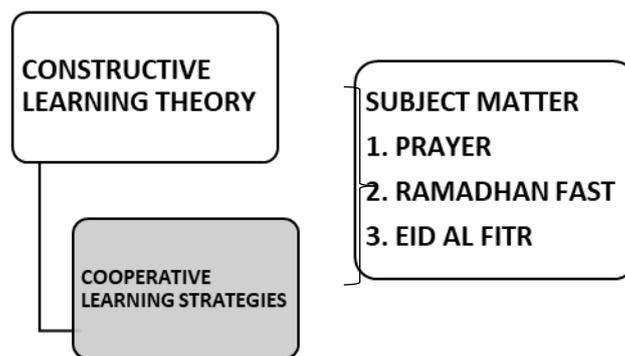


Figure 2 :The Concept of Designing Islamic-Based Mandarin Teaching Materials

After being reviewed from the steps of the learning model or activities in these models, the textbook that will use several learning models that are part of the cooperative learning strategy above that are relevant to the contents of the textbook that the researcher developed.

The third stage, determine the material or subject matter. After determining the learning theory used, learning strategies, and learning models, determining several Islamic themes that are close to the daily life of high school students. The main text forms into teaching materials are (1) vocabularies and Islamic conversation texts, (2)

exercises (3) quotations and translations of Quranic verses and (4) articles (Ahmad, 2021) . In each book there are three chapters or subject matter; The first chapter is about prayer, the second chapter is about fasting and the third chapter is about Eid al-Fitr which is presented in the form of simple conversations that are generally discussed in the school environment.

The first chapter discusses prayer, in this chapter consists of two series of conversations, in the first series, contains conversations between two people about the time and place of prayer. While the second series contains a conversation between two people about prayer times in detail. Then it is equipped with exercises that are relevant to the subject, enrichment readings about prayer times in detail as well as verses of the Qur'an that are relevant to prayer, and summary explanations.

The second chapter discusses fasting, this chapter consists of two series of conversations, in the first series, contains conversations between two people regarding activities during fasting such as sahur, buying takjil, and breaking the fast. While in the second series about the activities carried out when reading the holy verses of the Qur'an. Then equipped with exercises that are relevant to the subject, Mandarin readings about traveling in the country as well as verses of the Koran that are relevant to fasting and summary explanations.

The third chapter discusses Eid al-Fitr, this chapter also consists of two series of conversations, in the first series, it contains conversations between two people regarding activities carried out before Eid such as paying zakat. Meanwhile, in the second series, it is about greetings spoken during Eid al-Fitr in Mandarin as well as activities carried out before Eid in general, such as going home and so on. In the preparation of prototype 1, the researcher carried out two stages of preparation, those are preparation of teacher handbook and student book.

a. Teacher's Handbook

In the preparation of the teacher handbook, in addition to including the topics that have been formulated previously, the teacher handbook is equipped with a cooperative learning strategy guide consisting of several learning models such as; Student Team Achievement Divisions (STAD), Numbered Heads Together (NHT), Cooperative Script (Cooperative Script), Jigsaw and Cooperative Integrated Reading and Composition. Each learning model is applied to certain learning processes that are relevant to basic competencies.

In addition to learning strategy guides, the teacher's handbook is also equipped with answer keys for practice questions and tests as well as instructions related to student books for each sub material, making it easier for teachers to carry out learning for students who also use Islamic-based Mandarin books. Which are described in the table below :

Composition of Teacher Handbook

Table of Content

Constructivist Learning (Cooperative Learning Strategy Instructions)

Chapter 1 我们几点做晌礼? (What Time Do We do Zuhur Prayer?)

Vocabulary Table

Text 1

Text 2

Exercise

Practice
 Summary and Explanation
 Answer Key For Practice Questions

Chapter 2 你封斋吗？(Are You Fasting?)

Vocabulary Table
 Text 1
 Text 2
 Exercise
 Enrichment Reading
 Summary and Explanation
 Answer Key for Practice Question

Chapter 3 开斋节快乐！(Eid Al Fitr Mubarak!)

Vocabulary Table
 Text 1
 Text 2
 Excercise
 Enrichment Reading
 Summary and Explanation
 Answer Key to Practice Question
 Test/evaluation
 Answer key
 Bibliography

Table 1 : Composition of Islamic-Based Constructivist Mandarin Teaching Materials (Teacher's Handbook)

b. Student Book

The designed student book is not much different from the teacher's handbook, the only difference lies in the instructional strategy guide, sub-material instructions, and answer keys. Each conversation theme in the subject is adjusted to the competency standards in the syllabus, namely Islamic conversation themes that can be adapted to the school environment. The contents of student textbook are described in the table bellow :

Composition of Student's Book

Table of Content

Chapter 1 我们几点做晌礼？(What Time Do We do Zuhur Prayer?)

Vocabulary Table
 Text 1
 Text 2
 Exercise
 Enrichment Reading
 Summary and Explanation

Chapter 2 你封斋吗？(Are You Fasting?)

Vocabulary Table
 Text 1
 Text 2

| |
|---|
| Exercise |
| Enrichment Reading |
| Summary and Explanation |
| Chapter 3 开斋节快乐 ! (Eid Mubarak!) |
| Vocabulary Table |
| Text 1 |
| Text 2 |
| Exercise |
| Enrichment Reading |
| Summary and Explanation |
| Test/evaluation |
| Bibliography |

Table 2 : Compositions of Islamic-Based Constructivist Students Textbook

Prototype 2 (Revision of Prototype 1)

The preparation of prototype 2 was carried out after the revision stage of prototype 1, where the Islamic-based Mandarin textbook was composed according to the initial design but there were changes in the content according to the validation results and suggestions from the validators.

The revision stage of prototype 1 is carried out based on the results of scoring from experts who do not reach a score of 0.600 or are invalid, where the assessment lies in the linguistic assessment category which involves grammar on instructions and subjects listed in Islamic-based Mandarin textbooks, as well as advice from experts. The material is in Mandarin and Islamic Religious Education.

Prototype 3 (Revision of Prototype 2)

The Revision of prototype 2 is an improvement made based on the findings obtained at the small group trial stage obtained from the results of observing the learning process by teachers and students, pretest and post-test, and conclusions from the FGD. The revised part is the findings that the researcher got based on the input of teachers and students from the results of the FGD, namely on the aspects of explaining difficult vocabulary in the form of sentences and characterizations in varied dialogues and consisting of female and female characters, where previously the dialogue characterizations only consisted of two boys. And automatic changes are made to the previously designed teacher handbook and student book without changing the composition that has been determined and revised on prototype 2.

Final Prototype (Final Production)

The final prototype is the final result in the form of an Islamic-based Constructivist Mandarin textbook for advanced mandarin learners consisting of student books and teacher handbooks that have passed the trial and revision stages which are part of the development research procedure.

Based on the results of observations of the learning process carried out by teachers and students, pretest and post-test, and student response questionnaires, almost no significant problems were found in the learning process caused by Islamic-based teaching materials that the researcher developed, in addition to the results of the Likert scale questionnaire, the response was obtained from the teacher and students are in

agreement, so there is no need to revise the prototype 3 and immediately carry out the final production.

Feasibility of Islamic-Based Mandarin Teaching Materials

The feasibility of the developed teaching material products has been tested through the assessment and suggestion stages carried out by material experts from aspects of Mandarin and Islamic Religion. The scores and suggestions are used as a reference for revision so as to reach the final prototype. Some of the items that were repaired were the items that got the lowest score, namely in terms of language, especially Mandarin grammar in command sentences, the improvements that have been made are rearranging the command sentences in the Exercise. appropriate for beginners' Mandarin skills, considering the teaching materials developed using constructivist learning strategies have the potential to use words that are less familiar to students and are suitable for intermediate students. So that in the improvement process, researchers must use theoretical but familiar vocabulary that can convey clear information to users, especially in the instructions section (Wang, 2022).

Another suggestion from the validator of Islamic education is the selection of relevant verses of the Quran about prayer times, this must be considered because the verses of the Qoran contain moral values that can build the character of students (Subarkah et al., 2018). in the previous version, the verse displayed was a verse of the Qoran about the command to pray which was still widely distributed, while the text discussed was about prayer times, for that reason the specification of the relationship between the verse and the conversational text must be sharper, if the conversation text discusses prayer times, then the verse displayed must be about prayer times. The verse of the Qoran regarding prayer times that is displayed in textbooks according to Islamic material expert input is Surah An Nisa verse 103.

Acceptability of Islamic-Based Constructivist Mandarin Teaching Materials

From the series of learning activities, can be concluded that learning Mandarin using Islamic-based constructivist Mandarin textbooks is effective because students play an active role in the learning process that impact the language learning acquisition process (Comeaux & McDonald, 2018), understood the cooperative learning instructions from the teacher in group learning and there is positive interaction between teachers and students and between students and teachers so between students with other students (Zhang & Zou, 2020). This assumption is also supported by the results of the pretest and posttest. Based on the results of the pre-test and post-test conducted on 28 students, before the constructivist Mandarin language learning was carried out, the average score of students had not reached the minimum passing criteria, which was 42.85, this was because students were not familiar with the vocabulary contained in the pretest questions. While, after the implementation of Mandarin learning using Islamic-based constructivist Mandarin textbooks, the average score of students even exceeded the minimum passing criteria of 97.14. indicates that the Islamic-based constructivist learning and teaching are effective to increased students vocabulary mastery (Febriyanti, 2018).

Acceptance from the teacher's as the teacher's handbook user also be seen from the results of the questionnaire, 100% statements show a positive responses, where Islamic-based constructivist textbooks developed have proper illustrations, flexibility and structure (Trihardini, n.d.-a). The instructions contained in the teacher's handbook are easy to understand by both the teacher and students. The subject matter presented is

not too much, thus, the textbooks provide opportunities for students to understand vocabulary, sentence structure and information contained in conversations or texts in textbooks (Gribova & Shulekina, 2021). The textbooks can improve students reading, listening, writing and speaking skills significantly (Chen & Durrleman, 2022). Islamic themes in the dialogue are also interesting and Islamic values in the textbooks are representative and based on Akhlak (moral, ethic) specified (Linguistik et al., 2021).

CONCLUSION

Based on the analysis, the identification of Islamic-based constructivist Mandarin textbooks is still very rare because textbooks imported from China are less relevant to the daily life of Muslim students and still require teachers to teach conventionally using behavioristic learning. Besides that, the summation, the average score obtained from the discourse readability test on Islamic-based Constructivist Mandarin textbooks for the sample class is 59.1, which the range of values illustrates that the level of difficulty of discourse is classified as moderate which means that the compiled textbooks are needed.

The design of teaching materials has passed the development stage to produce a final prototype in the form of teacher and student books with Islamic themes such as prayer, fasting in Ramadan, and Eid al-Fitr. The final prototype produced is a feasible product because it has passed the validation by experts in the Mandarin Language and Islamic Education material which is followed by a revision process. Thus, in the process of using it, it gets good acceptability by teachers and students as users. It can also be seen from the effectiveness of learning carried out by teachers and students using Islamic-based constructivist Mandarin books with the pretest result of 42.85 increasing to 97.14.

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