Reading Model Development of Context Based Chinese Cultural Texts for Indonesian Students

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Abstract—This study aims to develop a product that can be used in Indonesian educational institutions considering the context-based Chinese linguistics, cultural aspects. Borg and Gall’s theory was employed as the method of this study consisting of eight steps: needs analysis, planning, design, piloting test, revision, field test, final revision, feasibility test, final model. The research was conducted at Chinese Literature Department of Darma Persada University, Jakarta. The participants were 18 students of Reading 5 subject in the academic year 2016/2017. Hypothesis testing was done by using paired sample T-test to compare the data before and after the implementation of reading learning by using context-based Chinese literary and cultural works resulting in Tcount (4,060) which is more than Ttable (2,101). Thus, it can be concluded that the difference on both average scores indicates H0 is rejected and H1 is accepted. The model of teaching materials on context-based Chinese language-cultural works is considered more effective to develop the students’ reading skill. In conclusions, the model of teaching materials can be used for Reading 5 subject at Chinese Literature Department.

Keywords: model; Chinese culture; students’ competence development; research and development

I. INTRODUCTION

The cultural knowledge, which has been so far studied at the Chinese Literature Department, Darma Persada University, is not yet adequate in accordance with the students’ needs. Therefore, to fulfill such needs, teaching materials development in this study was under the theme of context-based Chinese’s literature and culture.

The chosen texts about Chinese’s culture were folklore because it becomes part of the culture spread and inherited across generations in oral and written forms, non-verbal language, or memory-enhancement media. Folklore is used to get the students more accustomed to the habits of Chinese’s people and motivated in learning Mandarin language.

This teaching material is used for the 5th reading course which is one of the compulsory courses at Chinese Literature Department, Darma Persada University in Jakarta. This course discusses the process of reading as well as understanding the text in Mandarin. It is a tiered and conditional courses consisting of Reading 1 to Reading 6 subject.

In this approach, every student is encouraged to be actively involved in the teaching and learning process. One of the ways is by actively asking questions about the delivered materials. Through guidance, the students are expected to be capable of creating good discoveries in the form of refinement of what has been there, formulating ideas or tools that have never existed before. In this approach, imagination is appreciated as a form of natural curiosity.

Based on the circumstances, the research questions are, “How is the modelling of Mandarin learning materials by using cultural Chinese” and “how to introduce the cultural elements in the form of story within the reading-skill learning”.

The significance of this study can be viewed from two aspects: theoretical and practical ones. Theoretically, the results are expected to be employed as an example of Mandarin reading materials for the students of Chinese Literature Department in Indonesia.

The practical benefit of this study is for the educational institution in every level from the basic to higher level particularly in Jakarta and other areas in Indonesia. It is as a contribution of academic conception in composing teaching materials and effective and efficient learning strategy, curriculum and syllabus development, and as a conducive and constructive reference in Mandarin language learning at Culture Sciences Department.

THEORETICAL FRAMEWORK

1.1. Research and Development

Richey and Klein in Emzir defines research and development as “the systematic study of design, development and evaluation processes with the aim of establishing an empirical basis for the creation of instructional and non-instructional products and tools and new or enhanced models that govern their development”. According to Gall & Borg, research and development is a bridge between educational research and practices because the main purpose of this research is to apply the knowledge generated by educational research and translate it into a product that can be used in schools.

It is supported by Sugiyono defining research and development as "research methods used to produce a particular product and test the effectiveness of the
product”. The purpose of this research is to produce the product as a function of creation to improve the learning quality, to overcome the learning problem, to describe the factors causing the emergence of the gap of the problem revealed, and to indicate the possibility of alternative problem solving by using the learning product.

According to Borg and Gall, the research and development (R&D) approach in education comprises ten steps, as follows.

a. Preliminary studies
b. Research planning
c. Design development
d. Pilot testing
e. Revision of the results from pilot testing
f. Field testing
g. Revision of the results from field testing
h. Feasibility test
i. Final revision of the results from feasibility test
j. Dissemination and implementation of the final product

To conclude, those ten steps above become systematic functioning as the directing steps for the research to conduct education-based materials development.

1.2. Needs Analysis

Needs analysis is a learning foundation centered on the students. This activity should be done carefully, so that no party feels aggrieved because of incorrect planning leading to unexpected results. Needs analysis eases the developers to prepare the teaching materials. By providing the students based on the result of such analysis, they only design based to what is demanded according to the aim to be achieved by the students and lecturers.

In learning a foreign language, recognizing the transparencies of the students’ needs will help the program organizers run the program properly. General and specific needs which have been translated into the lesson plans can make the program run smoothly, so that the targeted goals will be achieved. Munby in Communicative Syllabus Design said that designing a program model that suits the needs of the learner is important in learning a foreign language. Needs analysis is the first step for the preparation of syllabi, courses, teaching materials, or other things related to this stuff. Its process always starts from noting down the needs and background of the students. With various instruments, the record is processed into a needs profile. Of course, each individual has unique needs, but with this analysis the lecturers and program organizers can obtain the average ability and needs of the students.

Jordan defines needs analysis as a process of determining the needs of a group of language learners and prioritizing learning materials based on those needs from both subjective and objective sources.

Hutchinson and Waters (1987) in Nation and Macalister divide needs analysis into two types of needs, namely the target needs and the learning needs. Hutchinson and Waters also assert that the target needs analysis can be seen in the following three types.

a. Necessities questions: “What is needed in learning a language?”
b. Lacks questions: “What do the learners’ lack of?”
c. Wants questions: “What do the learners want to study?”

To conclude, by knowing the needs, shortcomings, and the desire of the students toward learning, the lecturers can accommodate these needs within the syllabus design which can then be implemented in the classroom.

1.3. Reading Concept

Reading is not merely pronouncing written symbols without questioning whether the sequence of words or sentences pronounced is understood or not. Reading is a process done by the readers to obtain messages conveyed by the author through words or written language. A process which requires that a unity of a group of words will be seen at glance, so that the meaning of individual word will be recognized. Reading is an act done based on the combination of several skills, i.e. observing, understanding, and thinking.

Reading can be regarded as process and result. Such process involves all activities and techniques taken by the readers toward the goal through certain stages. According to Goodman, Burke, and Sherman, reading is a process of reconstructing the message contained in the text. It is further stated that the reconstruction process is layered and interactive, and there is the formation process and hypothesis testing. It means that the message is gained through the layers of meaning contained in the text. Then, the readers will test the hypothesis. From the results of the testing, they can draw a conclusion.

The underlying factors of reading is the process of appreciation and understanding. It can be concluded that the essence of reading is an activity to understand the content and ideas either expressed or implied even highlighted in the reading. Thus, understanding is that can be measured; not physical behavior sitting for hours in a room while holding the book. The essence of reading is understanding itself.

From the brief description, the process of reading can be concluded that reading activities involves: 1. letters recognition; 2. pronunciation of sounds of letters; 3. meaning or intention; and 4. understanding of meaning or purpose based on the contextual discourse.
1.4. The Concept of Teaching Materials Based on Cultural Study

Culture is the extended version of the compound words “mind-power”, which means that the power of mind, and then there is a difference between culture and cultures. Culture is the power of mind in the forms of creativity, intention, and taste, while cultures is the result of those three forms.

Cultures according to Koentjaraningrat is the whole idea, action, and the work of human beings in the framework of social life that are owned through learning. According to C.A Van Peurseun, cultures includes all manifestations of a virtuous and spiritual human life, such as: religion, arts, philosophy, science, state administration, and so on. Cultures is seen as something more dynamic not something rigid or static, so it is not a noun, but as a verb. Its dynamic nature contains the signs of development. It is like a story that has not yet been finished and must be connected.

R.Linton states that cultures is the configuration of behaviors as the elements of its formation supported and forwarded by the members of a particular society. There are three forms of cultures; as complex ideas, conceptions, values of regulatory norms, and so on. Second, it is as a complex activity as well as the patterned one of human beings in society. Third, it is as the objects of humans’ works. The first form consists of economics, politics, globalization, and the values and norms of the social products, religion and spiritual cultures.

The second form of cultures as a complexity of activities and the patterned actions of human beings within a community is initiatives as the act of realization. The third form is the objects - objects of humans’ works briefly known as works. The aspects of Chinese cultural heritage can be seen in ancient temples in remote mountains or large cities, landscape paintings, musical instruments such as: flute, harp, and er hu, poetry, cultural dramas, clothings, food, architectures, past stories, marriage and funerals concepts, stationery, cutlery, and so forth.

To conclude, reading materials with the concept of cultural appearance will tell about the concept of Chinese culture including material and non-material cultures.

II. METHODS

The research procedure was from the theory of research and development that Borg and Gall proposed using qualitative analysis and effectiveness test. The effectiveness test was conducted with pre-experimental research, so that it involved only one experimental class for the pre-test and post-test group design. The data analysis was done before and after the experiment was conducted. Effectiveness test on the data from Reading Class 5 at Chinese Literature Department of Darma Persada University consisting of 18 students. The research procedure encompassed several steps, as follows:

1. Analyzing needs: finding out the students’ needs regarding the themes of the Reading Class 5 and learning theory associated with the materials.
2. Planning: reviewing the literature and supporting conceptions related to the needs of teaching materials.
3. Designing: analyzing the theoretical framework and empirical data, determining the instrument that will be tested, determining the materials’ framework effectiveness, and verifying the theory and model for the guideline done by experts and practitioners.
4. Piloting test: organizing sample model test, socializing the model, and revising the teaching materials.
5. Revising: assessing the materials’ lackness, planning next action from the revised model.
6. Field testing: determining sample measurement, measuring the teaching materials.
7. Revising: assessing the materials’ lackness, planning next action from the revised model.
8. Feasibility test: organizing classroom-level research and socializing the teaching materials’ model.

<table>
<thead>
<tr>
<th>Data Analysis</th>
<th>Instrumentation</th>
<th>Data Analysis Technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs analysis</td>
<td>Survey</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Piloting test</td>
<td>Questionnaire</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Field test as validation and feedback from the users after revision</td>
<td>Questionnaire</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Feasibility test to see the product effectiveness</td>
<td>Pre-test and post-test</td>
<td>T-test</td>
</tr>
</tbody>
</table>

III. RESULTS AND DISCUSSION

a. The Analysis Results on the Teaching Materials for Chinese Culture Context-Based Reading Texts
In the preliminary study phase, the activities include the needs analysis regarding the teaching materials and learning conditions that have been undertaken. Needs analysis process was done through handing in questionnaires to the students and lecturers of Mandarin skills at Darma Persada University, Jakarta. This preliminary study was conducted to find out the background of the students, the expected learning methods in teaching the materials for the Mandarin language reading class, and the themes for cultural works.

Based on the results, the students’ reasons of leaning Mandarin language are varied: the demands from their parents, willingness to speak Mandarin as they will continue their studies in China, intention to work in China. In relation to the foundation of the development of teaching materials, all of them asserted that it is a need for reading textbooks equipped with exercises and supporting learning elements in accordance with the needs of students, universities, and linguistic users later considering the outlook of the context-based teaching guideline as well.

To conclude the questionnaire results of needs analysis for the teaching materials for Chinese Culture context-based reading texts, all of the students want to master the Mandarin-based reading skills. Furthermore, they also want to have linguistic competence, while 92.3% of them want to master Mandarin language and cultural materials as well as literary materials.

b. Planning the teaching materials for Chinese Culture context-based reading texts

Before developing the teaching materials’ model, it needs a syllabus as the reference. The syllabus model used in this study was a mixed syllabus because (1) the integration of the whole aspects of the syllabus comprises: lexical aspects, topics, situations, learning activities, and tasks, and (2) learning objectives are derived from the needs analysis used as the basis for the selection of aspects in syllabus preparation. The reading syllabus refers to KKNI, so that the students will have the competences required to be able to understand the content of the reading. Thus, the syllabus for FL learning referring to the contextual approach emphasizes language comprehension and other common language aspects, such as: grammar and vocabulary needed to understand the content of the reading.

After the syllabus is arranged, the research continued with the development of teaching materials for the literary and cultural works of Mandarin language for level III. The materials developed in this research were in the form of textbook and instruction manual. Each unit of the textbook and students’ workbook consisted of two themes and one language skill. At each end, formative tests and self-assessment are provided. Here is the diagram of planning in the process of making the teaching material.
c. **Designing the teaching materials for Chinese Culture context-based reading texts**

Teaching materials for the reading class are arranged based on the syllabus. It is for the 3rd-level students at Chinese Literature Department who already has Mandarin language competence. The students are indigenous Indonesian. The book is written in Mandarin language without English translation, so it is expected to improve the Mandarin language competence. The book entitled 汉语读文化consists of two series: the textbook and teacher’s manual consisting of 6 chapters with cultural themes. The following is the design of the teaching materials for Chinese Culture context-based reading texts.

**d. Piloting test of the teaching materials for Chinese Culture context-based reading texts**

The piloting test was conducted to a small group in Reading Class 5. The students involved were only 3 students. The teaching materials’ model was tested to the students at Chinese Literature Department in September – November, 2016. Those students were in the 3rd level of the academic year 2016/2017, odd semester. Based on the results (Table 2.), it can be concluded that the book is effective to improve the students’ reading skills. The following is the score of the students’ ability in this piloting test.

<table>
<thead>
<tr>
<th>Language skill</th>
<th>Level</th>
<th>Students’ competence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>III</td>
<td>A</td>
</tr>
<tr>
<td>Reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Able to read the Chinese cultural works</td>
<td>Good (80)</td>
<td>Good (80)</td>
</tr>
<tr>
<td>Able to understand the content of Chinese cultural readings</td>
<td>Very good (85)</td>
<td>Very good (85)</td>
</tr>
<tr>
<td>Understand metaphor, semantic elements, and Chinese proverbs</td>
<td>Good (80)</td>
<td>Good (80)</td>
</tr>
<tr>
<td>Understand the message conveyed by the author in Chinese Culture</td>
<td>Good (80)</td>
<td>Good (80)</td>
</tr>
</tbody>
</table>

Table 2. Review scoring transparencies

Based on the discussion and observation results in the piloting test, it can be noted several points. First, in the pre-teaching stage, the lecturer introduced the book that will be used. The students looked very enthusiastic with the instructional guides that have been prepared. The lecturer then gave the first story in the book to read regarding its title and the meaning of the title.

Furthermore, at this first meeting, they still found a lot of confusion about the literary and cultural literature. However, more productive activities were done by the lecturer.

In the learning of the “culture” theme 1, the students read and interpreted the contents of the story semantically. The lecturer also improved the reading pronunciation and understanding of the less precise text. Regarding the “culture” theme 2, the lecturer began asking the story title and message starting from the first four sentences read by two students and retelling the meaning of the story with Indonesian language.

In the learning of “culture” theme 3, the lecturer provided the same pattern of reading and sentence interpretation. The students were guided to read accurately and understand correctly then conclude the idea of the story by using Indonesian language.

Lessons 4 to 6 are literary themes. The lecturer asked the students to conclude the meaning of the story, read, and interpreted the hidden meaning of the figurative language contained. They concluded that the Chinese writers are familiar with the tragic and backward story.

Based on the above description, it can be concluded that the model developed and implemented in the small group has shown a positive effect on reading learning. This is also indicated by the students’ learning outcomes that exceed the expected target. However, this piloting test has not yet been adequately described the feasibility since the model was only used to three students. Thus, the researcher proceeded the trial to a larger group.

**e. Revision of the teaching materials for Chinese Culture context-based reading texts**

The first revision was done including the replacement of classical Chinese language to the simple one; the revision of the number of Han’s script to a fewer number. Specifically, the traditional Han’s script was changed into the simple one.

The book illustration was more cleared out based on the lecturer’s and students’ advice in which each story’s illustration is provided. The font size of Han’s script was also made bigger than before.

**f. Field test of the teaching materials for Chinese Culture context-based reading texts**

The revised teaching materials’ model was then evaluated by two experts. The assessors are senior Chinese language lecturers at Huqiao University holding educational qualification of Professor in Chinese language teaching and Chinese
literate and culture and a lecturer holding doctoral degree. The two experts are experienced in teaching Chinese language. They claimed that the contextual reading materials of Chinese-based works and cultures are considered worthy of use and in accordance with the needs of the 3rd-level students.

Table 3. Scores of properness test by experts

<table>
<thead>
<tr>
<th>No</th>
<th>Assessed aspects</th>
<th>Experts</th>
<th>Average</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Foundation of the teaching materials development</td>
<td>A: 4 B: 3</td>
<td>3.5</td>
<td>Proper</td>
</tr>
<tr>
<td>2.</td>
<td>Objective and approach</td>
<td>A: 4 B: 3</td>
<td>3.5</td>
<td>Proper</td>
</tr>
<tr>
<td>3.</td>
<td>Design and organization of the teaching materials</td>
<td>A: 4 B: 3</td>
<td>3.5</td>
<td>Proper</td>
</tr>
<tr>
<td>4.</td>
<td>Language skill content</td>
<td>A: 3 B: 3</td>
<td>3.5</td>
<td>Proper</td>
</tr>
<tr>
<td>5.</td>
<td>Linguistic content</td>
<td>A: 4 B: 4</td>
<td>4</td>
<td>Highly proper</td>
</tr>
<tr>
<td>6.</td>
<td>Cultural content</td>
<td>A: 4 B: 4</td>
<td>4</td>
<td>Highly proper</td>
</tr>
<tr>
<td>7.</td>
<td>Theme/Topic</td>
<td>A: 4 B: 3</td>
<td>3.5</td>
<td>Proper</td>
</tr>
<tr>
<td>8.</td>
<td>Methodology</td>
<td>A: 4 B: 3</td>
<td>3.5</td>
<td>Proper</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>3</td>
<td>4,060</td>
<td>Proper</td>
</tr>
</tbody>
</table>

Notes:
A: The expert on Chinese culture
B: The expert on Chinese language teaching

Based on the assessment results, it can be seen that the highest score is given by the expert on Chinese literature and culture with the average score of 4. The average score for all dimensions quantitatively has got 3.8, so it can be considered as “highly proper”.

The fourth indicator, language skill content, has got no advice and revision as well. All experts agree with the linguistic components contained in the teaching materials. The fifth indicator, linguistic content, they also provided a positive response. While, the sixth indicator, cultural content, they expected that the discourse is in the modern Chinese rather than classical: simple Han script; and the classical allegory language is removed or changed into modern Chinese language.

The seventh indicator has got advice on the revision on its book title to 文化阅读 as it is considered more appropriate with the Indonesian equivalent. Meanwhile, the eighth indicator has got positive response from the experts.

Thus, since the reviewers’ suggestion did not affect the structure or systematic of the teaching materials, only on the content therein, this revised model’s changes are only about the content as stated in the beginning of this section.

h. Feasibility test of the teaching materials for Chinese Culture context-based reading texts

The experiment was conducted in the regular Reading Class 5 at Chinese Literature Department of Dharma Persada University which consists of 18 students as the experimental class. They already have the ability to speak Chinese language equivalent to the mastery of 4500 Han characters. After 16 meetings, they were given a post-test.

It was an experimental study, so it only involved one experiment class. The data obtained in the experimental class have shown the lowest scores much 60, the highest score as much 100, and the average value as much 90.

The study was continued to the analysis of the two-average-score difference to test the null hypothesis that there is no average difference between the pre-test and post-test. T-test was used with the following table describing the test results.

Table 4. Data on the difference between two average scores with T-test

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>SR</th>
<th>D</th>
<th>Scombine</th>
<th>Tcoun</th>
<th>Ttabl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>17</td>
<td>74.5</td>
<td>0</td>
<td>3.27</td>
<td>4.060</td>
<td>2.101</td>
</tr>
<tr>
<td>Post-test</td>
<td>18</td>
<td>87.7</td>
<td>8</td>
<td>18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 shows that Tcount (4.060) is greater than Ttable (2.101). So, it can be concluded that Ho is rejected, and H1 is accepted meaning that there is no significant difference between the two average scores. Thus, the teaching materials’ model for Chinese Culture context-based reading texts is effective in improving the 3rd-level students’ reading ability.
From the effectiveness test results, it can be identified that the post-test results in the experimental class have shown the lowest score as much 60, the highest score as much 100, and the average score as much 87.78. Meanwhile, the pre-test results have shown the lowest score as much 60, the highest score as much 100, and the average score as much 74.50. Both samples were drawn from normal distribution. In addition, the homogeneity test also showed the \( F_{\text{count}} (1.04) \) is less than \( F_{\text{table}} (2.27) \). Then, both groups have the same or homogeneous variance.

i. Final model of the teaching materials for Chinese Culture context-based reading texts

Based on the points discussed in the previous section, the final model of the teaching materials for Chinese Literature and Culture context-based reading texts that has been tested for its effectiveness is as follows.

IV. CONCLUSION

From the results of this study, it can be concluded that the teaching materials’ model developed can improve the students’ reading skill at Chinese Literature Department of Darma Persada University, Jakarta. It becomes the model of the teaching materials for Chinese Culture context-based reading texts.

Such a conclusion is based on the process of model development and evaluation results toward the model, as follows.

1. The need to learn reading the works of Chinese culture for the students of Chinese Literature Department at Darma Persada University is based on the following components.
   a) The students concern to the importance of Chinese cultural knowledge to support their process of understanding Chinese nation as a whole and to support their career/work.
   b) The students feel lack of competence in understanding reading texts related to literature and culture.
   c) The students expect a development on reading and comprehension upon the reading texts under various context-based themes.

2. The observation on learning process in Reading Class 5 at Literature Faculty, Chinese Literature Department showed that:
   a) The process of understanding the reading is more dominated by the lecturer than the students.
   b) The textbook does not contain Chinese-language cultural works.
   c) The lecturer employs one-way method through doing more lecturing than inviting the students to participate actively in the classroom.
   d) The students seem interested in the culture topics.

3. The design of the learning model for reading the Chinese-language cultural works in accordance with the demography of the students at Literature Faculty, Chinese Literature Department.

4. The properness statement on the learning model developed is obtained through experts’ review, as follows.
   a) The expert of Chinese language teaching asserts that the teaching materials of context-based Chinese culture are considered good and proper to be used.
   b) The expert of Chinese culture asserts that the teaching materials of context-based Chinese culture are considered good and proper to be used as a reading reference for the students.

The final model of teaching materials on context-based Chinese-language cultural works proves to be effective in improving the reading skill at Literature Faculty, Chinese Literature Department. This model improves the average reading score of the students as much 74.50 before implementation to 87.78 after the implementation of the model. Hypothesis testing was conducted using paired sample T-test to compare the data after and before learning to read context-based Chinese cultural works resulting in the probability value (sig) \( 0.00 < \alpha = 0.05 \). Thus, the null hypothesis (Ho) stating that there is no difference in the average score of reading skill upon the works after and before the learning is implemented is rejected. This means that there is a significant difference both periods’ results. It was concluded that the averagescore of reading skill after the implementation the model indicated better result.

References
