Advances in Social Science, Education and Humanities Research, volume 306
International Symposium on Social Sciences, Education, and Humanities (ISSEH 2018)

Expert Perception on Quantum Approach Teaching Material Model for Speaking Mandarin

Tri Budianingsih
Chinese Department
Al Azhar of Indonesia University
Jakarta, Indonesia
trixiaodi@gmail.com

***Abstract*—The development of quantum approach teaching material model for speaking Mandarin is a part of Research and Development program in a private university in Jakarta. Prior to being tested to students, it is required the model was examined by experts in teaching Mandarin. The examination entails perception from experts, which would be considered as basis for developing the model, so that it can be used as a teaching material proper. This study explores the perception of experts towards the quantum approach teaching material model for speaking Mandarin. The idea is to obtain information from experts which can be referred in stepping onto the further steps of its development. There are two subjects considered as experts; linguistic professor in Mandarin, and a PhD in Chinese-Literature Philology. This study uses qualitative descriptive method, in which descriptive percentage is obtained by using statistic calculation based on obtained data from questionnaire. This study found 4.2% teaching material falls in the category most appropriate. The analysis on the development of teaching material model includes six dimensions. Theme or topic dimension received the highest percentage (4.3%), whereas the others are 4.2% in average. This finding makes it seems likely that the experts perceive the development of quantum approach teaching material model as befitting to be tested to students.**

Keywords—experts' perception; development of teaching material model for speaking; Mandarin; quantum approach

I. INTRODUCTION

Problems in learning speaking Mandarin are presumably from the aspects of books or teaching materials that have been used. In the book, there are many dialogues, texts, grammar, and new vocabularies, but lack of practice in speaking and not having an approach. Too much dialogue and text make students often feel bored and wasted their time to translate it first. This is often done by the lecturers before lectures begin, that the lecturers always tell students to prepare in advance the material to be discussed, for instances are, preparing *pinyin* and the meaning of the dialogue and text, preparing the meaning of the new vocabulary, preparing the grammar in the chapter, and preparing the exercises in the book, then in the lectures the students only ask which part of the lecturers they think they do not understand, so the students feel not really need to go to campus if they understand enough lectures that will be discussed later. Actually, this is indeed good to do, but we need to reflect together, they can get it by learning by using a dictionary and other book reviews.

Researchers developed a model of teaching materials for speaking Mandarin to improve students' speaking skills because currently, after using the existing teaching materials, the students are still not optimal. Most students do not have confidence in communication, which they always express when communicating with one of the local lecturers, native lecturer, or their friends are "afraid of mistake, *laoshi*", "feel shy, *laoshi*", "I am not brave, *laoshi*" and many others. Not only that, when the lecturer speaks using Mandarin, the students' answers using Bahasa Indonesia. As explained earlier, this is because the existing teaching material is still not effective.

The development of teaching materials in speaking Mandarin with a quantum approach is a Research and Development (R&D) research which requires a multilevel assessment or testing process from colleagues, professors, students, and experts in Mandarin. Experts' perceptions are very much needed in the development of this teaching material because these experts have had a lot of experience as well as product development is needed an assessment from many sides so that the development of the teaching material can truly be said to be feasible to use.

A. Quantum Approach

Quantum learning is learning that is able to create interaction and activeness of students, so that students' abilities, talents, and potential can be developed, which in turn can improve their learning outcomes by eliminating learning barriers through the use of appropriate methods and tools, so that students can learn easily. There are several advantages and disadvantages of quantum learning, namely [1]:

1) Advantages: It emphasizes the ability of academic development and student skills to get better grades. In addition, students can participate more or be active in the classroom so students can feel more proud of themselves. Educators or teachers must be able to interact, integrate and blend in with the world of the learners. This is the main capital to be able to create effective and more enjoyable methods [2].

Students can EXPERIENCE themselves in learning something so that it is more fun. Learning can also be accompanied by music so that the materials received are easier

to understand because music can make brain performance improve better. It gets the materials presentation more natural.

In improving the students' achievement, the good learning process is that the students can get their own information before they learn something. The main object of quantum learning model is the students. Teachers need to make the students learn in their comfort zones first to get a fun learning situation so that they can receive lessons well. After that, the students leave the comfort zone to prove themselves that they can learn the materials with various efforts to interact and get rid of the obstacles in learning [3].

2) Weaknesses: Teachers or educators are guided to have skills. In the case of designing and preparing a quantum model, it requires a more mature and well-planned design and preparation. In the case of learning resources and teaching media, there are limitations which also require more time in determining pleasant learning situations and conditions [4].

Quantum teaching research can improve student learning outcomes, this is evident in the results of Yanuarti and Yosefa research shows that the Quantum Teaching learning model is more suitable in an effort to improve student learning outcomes [5,6].

B. Teaching Materials

Good and effective teaching material is not only seen from its contents but must also be seen from several factors, one of which is expressed by Zhou Xiao Bing [7]:

"教材是教师组织**教学**，学生进**行学**习**的基**础**和依据**。教材不但应该**体**现教学方法和教学原则，而且应该**保**证**教学大**纲**的**实**施**。它不仅规**定了教**学内容，而且在相当程度上影响着教和学的质**量和效益**。" Preparing teaching materials for teachers, students begin basic lessons. Teaching material must not only reflect the teaching method and principles, but also guarantee the implementation of the syllabus. It not only provides teaching content, but also pays attention to the quality and effectiveness of teaching and learning to a certain extent. In short, it can be said that teaching material for teachers is a guide to achieving effective and successful learning, while for students is a basic knowledge that must be mastered before going to the next level.

II. RESEARCH METHODS

The type of research used was descriptive research with a qualitative approach. The data were obtained through questionnaires which proceeded with a simple statistical formula in the forms of descriptive percentages which became the quantitative data. Meanwhile, the qualitative data are the data that explain quantitative data of the same dimension [8].

TABLE I. POINTS OF FEASIBILITY TESTS FOR TEACHING MATERIALS

No	Dimension	Operational Definition	Indicator	Number of Items	Number
1	Platform for Developing Speaking Mandarin Teaching Materials with Quantum Approach	What references are used for developing speaking teaching materials based on a quantum approach	Platform based on needs	1	1
2	Objectives and Approaches	What does the teaching materials want to achieve by in each unit of learning and the learning approach used	General objectives of the teaching materials	2	2-3
			Specific objectives of the teaching materials	1	4
			Lecture's Approach	1	5
			Scope of teaching materials	2	6-7
3	Design and Organization of Teaching Materials	Structure of teaching materials, scope, and other supporting materials	Materials order based on difficulty level	1	8
			Materials order based on concreteness level	1	9
			Materials order from comprehensive to productive	1	10
			Integration between speaking materials, exercises, and type of exercises	1	11
			Compatibility of the materials with diverse interests and learning styles	2	12-13
			Pictures or other visual media	1	14
4	Speaking Skills Content	Scope of speaking skills materials and speaking skills learning	Speaking materials	1	15
			Aspects of speaking teaching material	1	16
			Speaking skills learning (learning strategies and methods)	1	17
5	Theme/Topic	Themes/ topics that bind the materials integration	Relevance of the theme/ topic	1	18
		Themes/ topics that the materials integration	Theme/ topic variations	1	19
6	Methodology	The way the material is presented and understood by the user	Types of exercises/ tasks (theory/ practice/ assignments)	4	20-23
			Workmanship/ training techniques (individual or group)	3	24-26
			Teaching techniques that can be used with existing materials	1	27
			Assistance needed by the students to understand the teaching materials	1	28

III. Results and Discussions

A. Results

Material validation aims to get input from material experts so that it can be used as an improvement material so that the validity of the products produced can reach the standard [9]. Development research definitely requires expert validation, after the expert evaluates the product being developed and provides various records for product improvement before being used in learning [10].

The experts' perceptions were carried out during the feasibility test for developing a model of speaking teaching materials. In addition to the teaching materials being assessed, the experts were also assessing the Semester Learning Plan (will be written as RPS). The following is the feasibility test score of Speaking Mandarin RPS:

TABLE II. Feasibility Test of Speaking Mandarin RPS

No	Dimension	Expert		Averages	Notes
		A	*B*		
1	Preparation Platform for RPS	4	4	4	Very feasible
2	RPS Identity	4	4	4	Very feasible
3	Learning Outcomes	4	4	4	Very feasible
4	Final Outcomes	3	4	3,5	Feasible
5	Indicator of Evaluation/ Criteria and Form of Assessment	4	4	4	Very feasible
6	Materials Study/Theme	3	4	3,5	Feasible
7	Learning Experience	4	4	4	Very feasible
8	Evaluation Materials (Based on needs analysis)	3	4	3,5	Feasible
9	Approach/Materials Design (Based on needs analysis)	3	4	3,5	Feasible
10	Approach/learning method in the teaching and learning process	4	4	4	Very feasible
11	References	4	4	4	Very feasible
12	Types of Evaluation	4	4	4	Very feasible
13	Time of Achievement	4	4	4	Very feasible
	Average			3,8	Very feasible

Based on the results above, it can be concluded quantitatively that the RPS that has been assessed by the two experts can be categorized as very feasible because the average RPS feasibility test reaches 3.8%. In addition, the experts also provide comments/suggestions as qualitative data to maintain the quality of RPS that has been developed.

TABLE III. Experts' Comments/Suggestions for the Speaking RPS Model

No	Dimension	Expert	Follow-up
1	Preparation Platform for RPS	No comment	Maintained
2	RPS Identity	No comment	Maintained
3	Learning Outcomes	It is in accordance with the objectives of the teaching material approach	Maintained
4	Final Outcomes	Final outcomes need to be more specific according to the specific themes	Will be adjusted
5	Indicator of Evaluation/Criteria and Form of Assessment	No comment	Maintained
6	Study material/ Theme	The themes contained in RPS are appropriate for freshman students	Maintained
7	Learning Experience	No comment	Maintained
8	Evaluation Material (Based on needs analysis)	Evaluation materials are very appropriate	Maintained
9	Approach/Materials Design (Based on needs analysis)	No comment	Maintained
10	Approach/learning method in the teaching and learning process	The approach that is highly expected to make students improve in their learning	Maintained
11	References	No comment	Maintained
12	Types of Evaluation	Better if the types of evaluation are vary, individual and group	The type of exercise in class will be vary, individual and group
13	Time of Achievement	No comment	Maintained

Based on the table above it can be concluded that the developed RPS can be maintained/used. There are only 2 (two) dimensions that got the attention, namely the final achievement and type of evaluation. The final achievement was expected to be more specific in accordance with the theme, while the type of evaluation was expected to be more varied by individuals and groups.

After the RPS was tested for its feasibility, the experts began to assess the model of teaching material developed. The feasibility test was also carried out using a questionnaire containing 34 statements that can be assessed with five choices, namely the score 1-5 and one open statement, namely notes/suggestions. This feasibility test data also produced quantitative data and qualitative data. Below are the results of the quantitative feasibility test data.

1) Expert 1's perceptions: The first expert qualification is a professor at one of the Huaqiao universities, China. He is an Indonesian citizen of Chinese descent who has long experience in teaching Mandarin for more than 15 years. He studied S1, S2 and S3 at Shanghai Normal University, China and obtained a Professor from Huaqiao University, China. He previously taught at a private university in Indonesia in 2001.

Now in addition to being active in teaching at Huaqiao University, China, he also opened a course in Indonesia in collaboration with universities in China. The researcher interacted with him through electronic media, e-mail and skype, but researchers also met the experts five times to consult with them when they were in Indonesia.

TABLE IV. EXPERT 1'S SCORE OF FEASIBILITY TEST FOR THE TEACHING MATERIALS

NO	Dimension	Expert 1
1	Platform for Developing Mandarin Speaking Teaching Materials with Quantum Approach	4
2	Objectives and Approaches	4,3
3	Design and Organization of Teaching Materials	4,4
4	Speaking Skills Content	4,3
5	Theme/Topic	4,5
6	Methodology	4,4
	Total	4,3

In the table above, it can be concluded that the speaking teaching materials with quantum approach is suitable for use with a total score of 4.3% with the highest score of 4.5% on the theme/topic point.

2) Expert 2's perceptions: The second expert qualification of a doctor graduated from China. He is a lecturer in Mandarin from Bunda Mulia University who holds a doctorate from one of the universities in China, experts have been very experienced in teaching Mandarin. He is a foreign citizen (China) who has changed his citizenship to become an Indonesian citizen, he took a bachelor's degree at Beijing Foreign Studies University, China with a Bachelor of Arts (BA) degree, studied at the Indonesian University of Education, Bandung with a Master of Education field curriculum development, and doctoral studies at Zhejiang University, China with a Ph.D. in Literature Chinese Philology.

TABLE V. EXPERT 2'S SCORE OF FEASIBILITY TEST FOR THE TEACHING MATERIALS

NO	Dimension	Expert 2
1	Platform for Developing Mandarin Speaking Teaching Materials with Quantum Approach	4
2	Objectives and Approaches	4,1
3	Design and Organization of Teaching Materials	4
4	Speaking Skills Content	4
5	Theme / Topic	4
6	Methodology	3,9
	Total	4

From the table above, it can be concluded that the speaking teaching material with quantum approach is suitable for use with a total score of 4% with the highest score of 4.1% on the goal points and approach.

B. Discussions

Based on the assessment of the two experts above, after summing up with the average calculation, the results obtained are five on the dimensions of the platform for developing mandarin speaking teaching materials quantum approach and the lowest approach is on the theme/topic dimension. The average for all dimensions quantitatively reaches an average of 4.2 so that it falls into the very feasible category. In addition to the feasibility test with questionnaires, the experts also provide input and suggestions (discussion).

TABLE VI. FEEDBACKS AND ADVICES FROM EXPERT 1 AND 2

No	Dimension	Experts' Comments/Suggestions
1	Platform for Developing Mandarin Speaking Teaching Materials with Quantum Approach	Already in accordance with the platform for developing mandarin speaking teaching materials with quantum approach, it is better to **add the objectives of the learning in each chapter according to the needs analysis.**
2	Objectives and Approaches	**Give time in each section of the TANDUR**, adjust the time at each meeting, if the time is not enough, give it as homework and discuss it at the next meeting.
3	Design and Organization of Teaching Materials	The contents' structure contained in the teaching model is already very good and concretely arranged. In the Experince It section of student learning styles, after they are given the freedom to learn with their own learning styles, immediately **give them a discussion** of what they learned earlier.
4	Speaking Skills Content	For **grammar content must be connected with the text discussed** so it can facilitate the students to understand it.
5	Theme/Topic	The theme listed is better replaced because for the second semester it can be said to be very easy, for the whole and the draft are already very good, just need to **change the right theme for the second semester.**
6	Methodology	The exercises listed have noticed the level of difficulty, **in the demonstration section, select an exercise that can really show their confidence in speaking Mandarin and show their speaking skills**, in the Repeat It section, choose an exercise in which many students made mistakes.

The experts did not change the aspect of the model, only change the structure of the materials contained in the model of teaching material developed. It is starting from the systematic writing that there were several things to be improved. **There are a number of Mandarin translations that need to be corrected because the different things in the meaning of**

IV. CONCLUSION

Bahasa Indonesia. The teaching materials model in each chapter begins with more specific general objectives found in the results of the needs analysis.

In each part of the quantum contained in **the teaching materials model was given time at each step and adjust the time to the achievement that will be done**, such as Grow It (5 minutes). The experts were more focused on the content of teaching materials, namely: 1) **The themes** contained in the

teaching materials that will be developed were not very appropriate with the second semester. Although the theme has been based on student needs analysis also must be considered with the students' abilities because the listed themes were very easy for second semester. If the theme is not replaced, it will not challenge the students in learning because it was too easy. Thus, the researchers revised the theme based on experts' advice. When the researchers viewed from the lecturer needs analysis, there are also listed other themes that had been chosen by the lecturer, so researchers followed the theme suggestions from the lecturer needs analysis, namely food (the title "Have you had breakfast?"), telephone (the title "Wrong call"), health (title "I am not feeling well"), weather (the title "the air in my hometown is better than here"), sightseeing (the title "He has gone to Shanghai"), buying and selling (the title "what do you buy?").

The experts also suggested paying attention to the content of the text or dialogue so it would not make the students difficult. 2) **The grammar** contained in the developed teaching materials was revised because it was not in accordance with the text/dialogue contained in the teaching materials. The grammar must be integrated with the text/dialogue to make it easier for students to understand the grammar. So, that it was more directed, structured and clear. The grammar used is better not grammar that emphasizes subjects, predicates and others, but rather emphasizes the use of vocabulary in sentences so that the students can use it more easily when they speak. Grammar that emphasizes subjects, predicates and others will be explained and discussed in more depth in specific grammar courses. 3) **In the Experience** It section, the students determine their own learning styles differently. The experts suggested that in this section, the lecturers need to pay more attention to the students in their learning, so they will not get out of the context of the chapter being studied. It can be done by after the students finish this section, they can immediately discuss in their group and express what they heard, what they saw, and what they read. Thus, the students will be more directed and learned well.

REFERENCES

[1] D.P. Bobbi, M. Reardor and S. Singer-Nourie, Quantum Teaching: Orchestrating Student Succes, Boston: Allyn and Bacon, 1999.

[2] Sukirno,buku ajar bahasa indonesia berbasis pendekatan kuantum sebagai upaya peningkatan mutu pembelajaran bahasa indonesia, 2010, [Online]. Retrived from http://www.umpwr.ac.id/artikel/505-model-buku-ajar-bahasa-indonesia-berbasis-pendekatan-kuantum-sebagai-upaya-peningkatan-mutu-pembelajaran-bahasa-indonesia.html. Accessed on 24 Septermber 2018

[3] D.P. Bobbi, M. Reardon and S. Singer-Nourie, Quantum Teaching: Mempraktikkan Quantum Learning di Ruang-Ruang Kelas. Bandung: Kaifa, 1999.

[4] D.P. Bobbi and Hernacki, Quantum Learning: Membiasakan Belajar Nyaman dan Menyenangkan. Bandung: Kaifa, 1999.

[5] Y. Ary dan A. Sobandi, "Upaya Meningkatkan Hasil Belajar Siswa Melalui Penerapan Model Pembelajaran Quantum Teaching," Jurnal Pendidikan Manajemen Perkantoran , Vol. 1, pp 11-18, 2016.

[6] Y. Beny and E. Nurjanah, "Pengaruh Metode Pembelajaran Quantum Teaching Dengan Menggunakan Mind Mapping Terhadap Kemampuan Penalaran Matematis Pada Siswa SMP Kelas VIII," Jurnal JPMIPA, Vol. 18, No 2 , pp 146-151, 2013.

[7] Z.X. Bing 对外汉语教学入门 The Guidance of Teaching Chinese to Speakers of Other Language, Guangzho: Zhong Daxue Chubanshe, 2009.

[8] Sugiono, Metode Penelitian Kuantitatif Kualitatif dan R&D, Bandung: Alfabeta, 2008.

[9] P.P Hadi, N. Hidayah and A. Martiana, "Pengembangan Modul Mata Kuliah Penilaian Pembelajaran Sosiologi Berorientasi HOTS," Jurnal Cakrawala Pendidikan, pp 201-209, 2017.

[10] Parmin and E. Peniati, "Pengembangan Modul Mata Kuliah Strategi Belajar Mengajar IPA Berbasis Hasil Penelitian Pembelajaran," Jurnal Pendidikan IPA Indonesia, Vol. 1, No 1, pp 8-15, 2012.