USING SOLFEGGIO LEARNING MODEL IN TEACHING UNIVERSITY STUDENTS IN WEST SUMATERA, INDONESIA

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Abstract

The problem of this study was rooting down from the students music learning circumstances, of which they had low skill and knowledge of solfeggio, low ability of transforming solfeggio into a new context, made the lecturer rather difficult to teach them thereof, it is a compulsory to select proper methods and proper model of learning that can enable him tailoring the knowledge towards the learners. To overcome the problem, the researcher design a model of learning solfeggio which enables the lecturer to empower them to transfer the knowledge to the learners. The basis model of development is using ADDIE model. This research belongs to R & D research. The subject of the research is the students of art and music department, FBS Padang State University. The instrumentation of data gathering was using interview, questionnaire, tryout, written-test. To analyze the raw data to see the level of reliability and practicality the researcher used the formula of Rho Spearman Brown, and the result is that r-obtain 1.2 exceeds r-table within significance level of 95% (0.05) it is 0.349 or by (0,01) it is 0.449. To prove the effectiveness of the product of this research (the model of learning solfeggio), the writer distinguish the data of pre-test to post-test by calculating the scores the students obtained by using match t-test, and the result is that t-obtain 9.311 exceeds t-table 1.697.it means that, the model of learning solfeggio as the product of this research is much more effective significantly since the result of the match t-test is so high exceeding the number of the t-tab. It can be concluded that this model is very useful for the lecturers and the students as well in learning solfeggio at the music department of FBS Padang State University in academic year of 2016/2017.

Keywords: Learning model, learning solfeggio, direct instruction

Introduction

Teaching solfeggio towards the beginners are the most problematic case for the music lecturers in Padang State University West Sumatera Indonesia. The writer was rooting down the problem of this study from the students music learning circumstances, of which they had low skill and knowledge of solfeggio, low ability of transforming solfeggio into a new context, made the lecturer rather difficult to teach them, thereof, it is a compulsory to select proper methods and proper model of learning that can enable the lecturers tailoring the knowledge towards the learners. To overcome such a problem, the lecturers certainly do not stuck on methodology selection, but they tend to fulfill the learners needs of learning, based on the instructional taxonomy namely the 3 domains : affective, cognitive, and psychomotor, see Santrock (2014:126). In this study, the writer conducted a research in a kind of research and development (R&D) which was aiming to get a product of the research in the form of a developed model of teaching based on ADDIE model. The developed model was dedicated to all musical instruments lecturers and teachers to take it in account as a media of teaching in implicating the method and the procedures in teaching musical instrument to the learners. The writer can claim it boldly to the readers that the developed model as the result of the research is helpfully for the lecturers of music at Padang State University West Sumatera Indonesia, to motivate, elicit, and improve the learners ability to learn solfeggio, it was proved from their low ability (in the first semester) could be improved to high ability (in the following semesters). Hopefully, this result can also be a resource for the other lecturers and teachers of musical instrumentation to implicate upon their learners, besides a resource of comparison to conduct a continual research to develop a more complete and practical new model for teaching solfeggio.
Discussion

A. The Procedure of Development

Developing the learning model of solfeggio was on the basis of ADDIE Model: (1) analysis, (2) design, (3) development, (4) implementation, dan (5) evaluation

1. Analysis Phase

Analysis is one of the important steps to do in the research, aiming to get the data of the students problematic learning namely the problems dealing with why the learners ability was too low in learning solfeggio. The problems that were analyzed: (a) learners background such as: amount of learners per classroom, gender, age, their learning experience when they were at senior high school, (b) the media used by the lecturers when they were learning solfeggio, (c) task analysis which referred to the learning activity, (d) learning condition which referred to environment and learning resources, (e) learners’ intake, and (f) learners need in learning solfeggio.

a) Learners’ background

It was found that the amount of the learners in academic year of 2015/2016 who were learning solfeggio was 58 with the amount of girl was 27 and men was 31, all was in the age of 18 up to 20. They came from various school such as: senior high school, vocation school, and madrasah senior high school, around west Sumatera province, Jambi, Bengkulu, south Sumatera, Riau daratan, Riau kepulauan, and north Sumatera.

Five learners (2.9 %) of the musical department in academic 2015/2016 came from dance, music, and theatre school. Their abilities were: basic of music theory, singing, playing traditional and western music without musical score or pattern.

The learners who came from public school in the amount of 53 or similar with 97%, had varied levels of ability such as: some were able to play music but not to sing, or the vice versa, some were able to sing but not to play music, a few of them had ability in both playing music and singing, as well, in the context of playing musical instrument and singing without text, but autodidactically, instead. It was concluded that, generally, most of the musical education department students at Padang State University were able to play musical instrument auto didactically but still had low knowledge of musical instrumentation such as: identifying rhythm, interval, and melody to transcript, and for further sight reading and sight singing.

b) Administration of learning solfeggio

The administration of learning solfeggio at the university consisted of: syllabus, course plan, material, and media all were still lacked, not as available as what the lecturers need in teaching.

c) Activity in learning solfeggio

Throughout the interview upon the learners, they said that learning activities were not well-settled yet, they were taught by the lecturers by using conventional model, methods, technique, and strategy. Practically, learning activities were: practicing how to read songs without preceded by practicing rhythm, interval, and melody as the first step to do.

Practically, the method of learning solfeggio that used was imitation method of which the lecturer firstly demonstrate how to play melody then followed by learners to do the same. Kind of tasks that was given to the learners: re-practicing the songs they had gotten in the classroom, it means that the learners had no improvement of ability to get self creativity in paying musical instrument since they were frequently imitating only, instead of self-creation.

d) Environment and learning resource of solfeggio

Interview upon the learners resulting on the environment of learning was not effective since the amount of learners in the classroom was too big 30 to 40 learners in a group, on the other hand, solfeggio was a new subject matter for the learners and they had low knowledge in rhythm, interval, and melody, besides it was lacked of learning media. The method used by the lecturers was single-direction method of which the lecturer explaining, illustrating, and then the learners listening towards the teaching. Learning resources was not available yet, the lecturer used the conventional one to fulfill.

e) Learners’ prior ability of solfeggio

Below was the material of pretest given to the learners to read rhythm, interval, and melody. As a matter of fact, it was found that they had low ability to read those three topics. The material which was tried-out upon them consisted of:
1. Rhythm in 2 metered with category as follows:
   - Simple:
   - Moderate:
   - Difficult:

2. Rhythm in 3 metered with category as follows:
   - Simple:
   - Moderate:
   - Difficult:

3. Rhythm in 4 metered with category as follows:
   - Simple:
   - Moderate:
   - Difficult:

4. Rhythm in 5 metered with category as follows:
   - Simple:
   - Moderate:
   - Difficult:

5. Interval

6. Melody with Category.
   - Simple:
   - Moderate:
   - Difficult:
The result of tryout above was: (1) the average of rhythm sight-reading: 48.65, (b) the average of interval sight-reading: 44.42, dan (c) the average of melody sight-reading: 42.12. It was concluded that the prior ability of the learners was low.

(f) Learners needs

Based on the data analysis above, it can be inducted that musical learners’ need at Language and Art Department (FBS) at Padang State University was a model of effective learning which covers approach, method, strategy, and technique of learning that integratedly involved in a good design. They also needed learning experience of solfeggio by practicing listening and reading rhythm, interval, and melody which lasting an ability of listening and reading a song text in other new context.

2. Design Phase

Direct instruction (DI) is a model of learning using teacher centered approach. There are three general factors in this model namely: goal of action, task analysis, instructional taxonomy. The essential of goal of action is the improvement the learners’ work quality. The essential of task analysis is focusing on the levels of how much task the learners finished. The essential of instructional taxonomy is developing the three domains of the learners, they are: affective, cognitive, and psychomotor, see Santrock (2014:126).

In this study, the design of the solfeggio learning model based on direct instruction was done by modifying the steps of DI model. At the introduction and review phase was combined to presentation phase which was named as presentation phase. Then, self-drill was combined to coached-drill which was named coached-drill.

Table 1. Direct Instruction Model design Based on ADDIE

<table>
<thead>
<tr>
<th>No</th>
<th>Phase</th>
<th>Goals</th>
</tr>
</thead>
</table>
| 1  | Presentasi  | a. Eliciting and brainstorming the learners’ wills toward learning process.  
|    |             | b. Engaging the learners into the process of learning.                 |
|    |             | c. Elaborating and enriching the learners about the frame of solfeggio learning. |
| 2  | Coached Drill | a. Enhancing the skills                                             |
|    |             | b. Enriching the skills                                             |
|    |             | c. Drilling automatic self-skills                                    |
|    |             | d. Drilling how to transcript the ability into other new context.     |

2. Development Phase

The model of this study was developed by consulting in the forum group discussion of which 5 validators were involved. The validators task was to control and giving valuable ideas how to sharpen and bold the developed model, from the first prototype of model up to the post-model, for about 10 months. During this consultation process, the researcher also got tryout result for twice (trial-1 and trial-2) while she was consulting the result of tryout to validators. The components that were validated consisted of: (1) Language, (2) Syllabus, (3) Course Plan, (4) Materialr, (5) Learning process, (6) Learning media.

a. Developing the Syllabus

Syllabus is a vehicle of learning process (Zais, 1976). It transporting all learning components from the beginning up to the end of goals, they are: core competence and basic competence, indicators of goals, material of learning, activities or learning experience, methods, media, assessment criteria.

b. Developing Learning Material

Learning material was dealing with the curriculum content that should be tailoring upon the learners until they were tailored and able to actualize in daily life, in accordance with core competence and basic competence as the main goals of learning in the curriculum, (Sanjaya, 2008: 141). Solfeggio learning material consisted of: rhythm, interval, and melody.

c. Developing Learning Activity

The learners were oriented against the material, then coaching them in drilling, giving feedback so that they know their weaknesses and they know how to improve the way of drilling. First of all, they
presented how to transform and transfigure the rhythm, that aimed to visualize time difference of each note or pitch, as the following:

- **Quadruple pitch**: the way of transforming the duration of those 4 pitch was by orally.

  - one tu tri fo:

  or

  - ta ti ti ti

- **Examples of triple pitch**: the way of transforming the duration of those 3 pitch was by orally.

  - one tu tri

  or

  - ta ti ti

- **other triple pitch**: the way of transforming the duration of those 4 pitch was by orally.

  - One tu tri

  or

  - Ta ti ti

- **other triple pitch**: the way of transforming the duration of those 4 pitch was by orally.

  - one tu tri

  or

  - ta ti ti

- **Example of double pitch**: the way of transforming the duration of those 4 pitch was by orally.

  - one tu

  or

  - ta ti
Example of single pitch: ♬

the way of transforming the duration of those 4 pitch was by orally

one

or

ta

The next drill was combining the 7 notes in 1 rhythm pattern as the following:

1 2 3 4 1 - 3 4 1 2 - 4 1 2 3 - 1 - - 4 1 - 3 - 1 - - - > > > > >

one-tu-tri-fo: one-tri-fo: one-tu-tri one-fo: one-tri one-

atau:

Ta- ti- ti- ti Ta- ti- ti Taa- ti- ti- ti Ta- ti- ti- ti Taa----ti Taa--- ti Ta- ti- ti- ti Ta- ti- ti- ti

Using colorful blocks showing the difference of duration and limit of each note to pronounce. Moreover, the use of syllables: wan, tu tri fo: aimed to familiarize the learners instinct to deeply comprehend each of the notes or pitch. The same bolding also took on the use of: ta-ti-ti-ti; aimed to familiarize the learners instinct to distinguish between high pitch (ta) and low pitch (ti), since it is known that vocal voice of “a” is higher than vocal voice of “i”, besides only those two vocals from five that can clearly distinguish in tone.

4. Implementation (Trial – 1 & 2)

a. Trial-1 at a small volume

After pre-test, then the developed model was tried out in the small volume, means that the member of the subject in the classroom consisted only 16 learners. The activity was:

(1)presentation, (2) coached drill

There were 14 meetings of trial-1, in which the content of the meeting was coring on the 3 themes namely: rhythm, interval, and melody. Kinds of activity can be seen in the matrix below:

<table>
<thead>
<tr>
<th>No</th>
<th>Lecturer activity</th>
<th>Learners activity</th>
<th>Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sounding the objectives of learning to the learners</td>
<td>Absorbing the taught knowledge</td>
<td>Engaging the learners into learning process</td>
</tr>
<tr>
<td>2</td>
<td>Coaching the drills of: audio rhythm, interval, 6 metered melody</td>
<td>audio drills</td>
<td>Coaching the drills of rhythm, interval, melody</td>
</tr>
<tr>
<td>3</td>
<td>Coaching the drills of rhythm transcript, interval, 6 metered melody</td>
<td>Transcript drills</td>
<td>Coaching the learners’ instinct upon rhythm, interval, melody</td>
</tr>
</tbody>
</table>
Coaching the drills of \textit{sight-reading} or \textit{sight-singing} on rhythm, interval, 6 metered melody

Reading drills

Coaching the drills of rhythm, interval, melody

5. Evaluation Phase

Evaluation was done to measure the quality of learning product. The product of learning means the achievement of learners in learning solfeggio as the output of the developed model. It was postulated that if the components of ADDIE supported integrally, so the learners’ learning achievement of solfeggio was significantly improved. Henceforth, the last product of learning solfeggio was accepted as the basis of learning solfeggio since it was valid, reliable, and practical to use. Throughout the result of evaluation it was also concluded that the developed model of this research is qualified due to the good result of evaluation.

B. Development Result and The Advantages of Developed Model

Development Result

Based on the data analysis showing that learner’s initial ability on \textit{rhythm sight-reading} was 48.65; \textit{interval sight-reading} was 44.42; \textit{melody sight-reading} was 42.12. and the average for those 3 themes was 45.06 or similar with D after concerting to qualitative scoring. By this data, it was concluded that the initial ability of the learners in solfeggio was low before they were taught by the lecturer using the developed model for teaching solfeggio.

On the theme of \textit{rhythm sight-reading}, students’ learning achievement was low, it was 48.65 or similar with D. Nevertheless, though it was low score, but it was still the highest among those 3 themes. It means that all the 3 themes got low score comparing to standardized score. It was happening since the intake of the learners when they entered the university, was also low, especially on solfeggio ability.

On the theme of \textit{interval sight-reading}, it was found that the score was lower than rhythm namely 44.42 or it was similar with D. Furthermore, viewing from the individual score, on rhythm the range of the score was 40 up to 55 whereas on interval the range of score was 35 up to 55. Henceforth, learner’s score on rhythm theme was still higher than interval.

On the theme of \textit{melody Sight-reading}, it was found that on this theme the learners got the lowest score among those 3 themes, namely 42.12 or similar to D. The range of individual score was 35 up to 50. Thereof, it was concluded that melody was the most difficult theme to learn in learning solfeggio.

Based on the result of match t-test that used to prove the effectiveness and the practicality of the developed model, it was found that t-obtained was much bigger than t-tab (9.311 > 1.697). It indicated that quantitatively H_a was accepted and automatically H_0 was rejected since t-obt exceeded t-tab, on the degrees of freedom (df) 31 (32-1, one tailed-test) with the significant level of 95% ( \alpha 0.05 ). Finally, it was boldly stated that the developed model for learning solfeggio based on Direct Instruction was significantly effective. Automatically, if it had been stated significantly effective means that it was also practical to use based on the respondents responses.
The Advantages of Developed Model

Theoretically and empirically, the most valuable advantages of the developed model for teaching solfeggio were:

- The learners were elicited to learn solfeggio more eagerly.
- The learners got more reproductive ideas in learning solfeggio.
- The learners were more enthusiastic to transcribe the solfeggio.
- Sight-reading and sight-singing, both were running well to drill either in coached-drills or in self-drills.

Moreover, empirically developing the model of solfeggio learning was proved as the more effective, efficient, and delighted to use to teach the university students.

Conclusion

Learning solfeggio was taught only in the first semester at Language and Art department of Padang State University. Learning activity was run referred to the syllabus and course-plan made by the lecturers. Learning material and media were unavailable, thereof, they focused only on reading the notes or pitch. As a matter of fact, the biases were arisen for the learners themselves such as: (a) the students tent to memorize and cognition recalling, (b) they had low skill in reading and drilling rhythm, interval, and melody. (c) they were not able yet to transfer into the new context.

Process of developing the model of solfeggio learning on the basis of direct instruction was conducted based on ADDIE model (Analysis, Design, Development, Implementation, Evaluation). There were found that: (a) the students of musical concentration 2.9% came from senior high school with musical background, 79.1% came from non-musical senior high school, (b) learning administration (learning kits) using by the lecturers in teaching solfeggio was syllabus that was not in accordance with KKNI as the standardized national curriculum for universities all around Indonesia. (c) solfeggio learning activity was focusing on reading some songs as the drills for students (d) the environment for learning solfeggio was rather un-conducive.

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