The developments of Thai learning achievements on the royal language unit of Mattayomsuksa 2 students (8 Grades) by using the project-based learning

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Abstract

The purposes of this research were 1) to study the efficiency of lesson plans of Thai Language about Royal Words Unit of Mattayomsuksa 2 Students by Using the Project-Based Learning to meet the criteria of 80/80 2) to study the effectiveness index of lesson plans of Thai Language about Royal Words Unit of Mattayomsuksa 2 Students by Using the Project-Based Learning 3) To compare the learning achievements of Mathayomsuksa 2 students before and after treatment and 4) The satisfaction of the students in learning about Royal Words Unit by using the Project-Based Learning. The sample consisted of 52 Mathayomsuksa 2 students in class 2/8 of Khonkaenwittayayon school, under secondary educational service area 25, Meuang district, Khonkaen province. The sample is obtained by cluster random sampling technique. The instruments employed to collect data were 1) Thai language lesson plans on the Royal Words Unit of Mattayomsuksa 2 Students by using the Project-Based Learning 2) a 30 - item 4 - choice achievement test which has the discriminant index from 0.28 to 0.85 and the total reliability of 0.86 and 3) A satisfaction rating 15 item 5 level which has the discriminant index from 0.32 to 0.80 and the total reliability of 0.84 The collected data were analyzed by percentage, means, standard deviation and t-test (Dependent Sample) The results of the research revealed that : The lesson plans of Thai Language on the Royal Words Unit of Mattayomsuksa 2 Students by using the Project-Based Learning have the efficiency were 87.35/83.64 that higher than the criteria of 80/80. The effectiveness index equal to 0.6196 percent from 61.96. Mattayomsuksa 2 students gained the achievements scores after treatment higher than the scores gained before treatment at the significant level of .05 and The students have contentment at the highest level.

Keywords: Developments; Thai learning achievements; royal words; project-based learning.

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1. Introduction

Royal language is the official terminology used to communicate between people in different levels in Thai society. Royal language learning in secondary schools have yet succeeded as many educators would have wanted because students do not use it correctly. Also the achievement in using of the royal language has been relatively low or does not meet the criteria. It is due to the fact that they are lack of proper techniques. Teachers should adopt different techniques to enable students to improve their learning potentials. In order to manage the learning process to be effective, management should focus on the learning experience especially practical work to allow students to feel the real work. In addition, learning experience provides students with hands-on lessons, to learn how to solve problems, to plan and to be able to do analytical thinking to learn and build their knowledge.

The project-based learning is one of the learning process where learners are emphasized and encouraged to take part in learning systematically, which aims to promote critical thinking. Helping each other build knowledge base or problems solving by studying and doing research. When the project is completed, new knowledge must be obtained and can put that knowledge to good use. The principle of learning is that students can choose issues or problems on their own. Students will learn to share their learning with others and bring the knowledge to use in everyday life. The learning of Thai royal language by Mattayomsuksa 2 students (8 Grade) using the project, therefore, promote the process of learning, critical thinking and self-knowledge building.

2. The Aim of the Research

- To develop lesson plans in royal language using the learning project which is effective 80/80
- To find the index of the effectiveness of management plans for Thailand's royal language learning using project-based learning model
- To compare the achievement of students on royal language learning using learning project between pretest and posttest
- To study the satisfaction of students in Mattayomsuksa 2 (8 Graders) on the subject of royal language using project based-learning

3. Method

3.1. Population and sample

The chosen population in this study were students in Mattayomsuksa 2 (8 Graders) at Khon Kaen Wittayayont school, under secondary educational service office area 25, second semester of academic year 2516, a total of 15 classrooms with total students of 695.

The sample group used in the study were secondary school students, class 2/8, Khon Kaen Wittayayont School, under Secondary Educational Service Office area 25, second semester of academic

year 2516, 52 of which were selected by random cluster (Cluster Random Sampling) using the classroom as a unit in random order.

3.2. **Tools used in the research**

- Lesson plan on royal language by using the project-based learning for a period of 12 hours
- Test papers of the achievement of royal words using the project-based learning. There are 4 types which is multiple-choice of 30 items

3.3.3. **Evaluation form on the satisfaction of the students in learning royal language by using the project-based learning**

- The building and finding quality tools
- Study the documents and related research then created a tool as prescribed
- Display the tool to specialist for quality assessment
- Try and improve on the shortcomings found in order to apply to the samples

3.4. **Research process**

- Pre-test
- Teaching as Plan, test knowledge on different activities
- Post-test

3.5. **Data analysis**

Part 1) Analysis of the performance of the lesson plan of Thai royal language using project-based learning as per Table 1.

<table>
<thead>
<tr>
<th>List</th>
<th>Full Score</th>
<th>Total Score</th>
<th>EBED Equation.3</th>
<th>S.D.</th>
<th>The average percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process efficiency (E₁)</td>
<td>350</td>
<td>15,898</td>
<td>305.73</td>
<td>19.44</td>
<td>87.35</td>
</tr>
<tr>
<td>Performance results (E₂)</td>
<td>30</td>
<td>1,258</td>
<td>24.19</td>
<td>1.99</td>
<td>83.64</td>
</tr>
</tbody>
</table>

Performance Plan (E₁ / E₂) is 87.35 / 83.64.

According to table 1, the result found is that the efficiency of the process (E₁) is equal to 87.35 and the efficiency of the output (E₂) is 83.64. Therefore, the lesson plan in Thailand's royal word using the learning project efficiency (E₁ / E₂) is 87.35. /83.64 which exceeds a specified threshold.

Part 2 Analysis of the effectiveness index of lesson plans in Thailand's royal language, grade 8 students by using a project-based learning in Table 2.

<table>
<thead>
<tr>
<th>Number of students</th>
<th>Full score</th>
<th>Total score</th>
<th>Effectiveness Index E.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>30</td>
<td>766</td>
<td>1,258</td>
</tr>
</tbody>
</table>
According to table 2, it appears that the index of the effectiveness of management plans, learn about Thailand using royal language learning project is equal to 0.6196, or 61.96 percent.

The third analysis compared the achievement of the royal language of the grade 8 students using the learning based project between pretest and posttest using t-test (Dependent Samples) Table 3.

Table 3. The analysis of the learning achievement of the royal language by grade 8 students using a learning project between the pre-test and post-test using t-test (dependent samples)

<table>
<thead>
<tr>
<th>Testing</th>
<th>N</th>
<th>( \bar{X} )</th>
<th>S.D</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>52</td>
<td>14.73</td>
<td>2.51</td>
<td>1.675</td>
<td>.000*</td>
</tr>
<tr>
<td>Post-test</td>
<td>52</td>
<td>24.19</td>
<td>1.99</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* There is a statistically significant level. 05.

Table 3 shows learning achievement on royal language by 8 grade students using the project-based learning. It is found that after-study, the score was higher than before study and level of statistical significance is 05.

Chapter 4 analyzes the satisfaction of the 8 grade students towards the royal language learning plan using project-based learning in Table 4.

Table 4. Depicts mean, standard deviation from satisfaction survey

<table>
<thead>
<tr>
<th>No</th>
<th>Assessment</th>
<th>( \bar{X} )</th>
<th>S.D</th>
<th>Satisfaction levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I like teacher’s learning management</td>
<td>4.70</td>
<td>0.63</td>
<td>Highest</td>
</tr>
<tr>
<td>2</td>
<td>I like teacher’s roll play activity</td>
<td>4.80</td>
<td>0.41</td>
<td>Highest</td>
</tr>
<tr>
<td>3</td>
<td>I like the way teacher describe and give details</td>
<td>4.50</td>
<td>0.51</td>
<td>High</td>
</tr>
<tr>
<td>4</td>
<td>My friends and I are happy to do brainstorming</td>
<td>4.55</td>
<td>0.52</td>
<td>Highest</td>
</tr>
<tr>
<td>5</td>
<td>I like to study through the instructional media.</td>
<td>4.55</td>
<td>0.51</td>
<td>Highest</td>
</tr>
<tr>
<td>6</td>
<td>I am happy to have a group discussion.</td>
<td>4.55</td>
<td>0.51</td>
<td>Highest</td>
</tr>
<tr>
<td>7</td>
<td>I am happy when we find the right answered</td>
<td>4.55</td>
<td>0.52</td>
<td>Highest</td>
</tr>
<tr>
<td>8</td>
<td>I am excited when we had a chance to explore new knowledge.</td>
<td>4.55</td>
<td>0.52</td>
<td>Highest</td>
</tr>
<tr>
<td>9</td>
<td>Teachers always have new teaching techniques</td>
<td>4.85</td>
<td>0.41</td>
<td>Highest</td>
</tr>
<tr>
<td>10</td>
<td>I like to define problems and find out the answers</td>
<td>4.55</td>
<td>0.52</td>
<td>Highest</td>
</tr>
<tr>
<td>11</td>
<td>I like to find the meaning of the royal language</td>
<td>4.60</td>
<td>0.51</td>
<td>Highest</td>
</tr>
<tr>
<td>12</td>
<td>I want the teacher to lead these activities again</td>
<td>4.85</td>
<td>0.35</td>
<td>Highest</td>
</tr>
<tr>
<td>13</td>
<td>I understood better when teachers give out answers</td>
<td>4.55</td>
<td>0.52</td>
<td>Highest</td>
</tr>
<tr>
<td>14</td>
<td>I like to do work and present it</td>
<td>4.60</td>
<td>0.52</td>
<td>Highest</td>
</tr>
<tr>
<td>15</td>
<td>I think that I can apply my knowledge to my daily life.</td>
<td>4.50</td>
<td>0.49</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4.62</td>
<td>0.08</td>
<td>Most</td>
</tr>
</tbody>
</table>

Table 4 shows that the 8 Grade students were satisfied with the learning management of royal language using the project-based learning with an average of 4.62.

Overall, student’s satisfaction level is mostly at the highest level when considering each of the questions. Rank from the highest to the lowest 1) I want the teacher to lead these activities again and the teachers always have new and interesting ways to teach 2) I prefer teachers who lead activities and focused on practice. 3) I like the way the teachers managed learning.
4. Conclusions

1. Lesson plan on a royal language using the project-based learning has efficiency of 87.35 / 83.64 which was higher than the set criteria.
2. Lesson plan on a royal language using the project-based learning has an effectiveness index of 0.6196, or 61.96 percent.
3. The achievement of 8 graders who studied royal language using the project-based learning is higher prior learning. The level of statistical significance is 0.05.
4. The two students were satisfied with the royal language learning using project-based learning with an average of 4.62. Overall, student’s satisfaction is in the highest level.

5. Discussion

1. Lesson plans on Thai royal language by using project-based language learning gave efficiency of 87.35 / 83.64 which means that the evaluation and testing of students in each plan. It yielded a score of 87.35 and an evaluation after learning achieved 83.64 percent of that Plan. This means that lesson plan which has been developed is more efficient than 80/80 set criteria. This is to say that the lesson plan on royal language has been developed systematically by studying concepts, theories, principle, related researches, learning activities, appropriate measurement and evaluation. Also Lesson plan has been assessed by experts. It can be used to manage learning effectively and consistently. The research done by Rawiwan Pungsombut (2010) who studied the development of lesson plan on the ability to compose Gap Yani 11 (Thai traditional poem) in Grade 7 students. By using an activity project, it is found that lesson plan has effectiveness of 81.30 / 81.61, and it is consistent with Boonrom (2012) who studied the development of event-based learning project on Thai royal language of 6 graders. The result of the activities of learning projects in Thai royal language has an effectiveness of 83.24 / 82.46. It met the expectation of 80/80 that we set.

2. Thai language learning on royal language has an effectiveness index of 0.6196, meaning that students who are learning made a progress of 61.96 percent of the curriculum. Therefore, it is consistent with the purpose of learning. It has content and learning activities that focus on practical problems and solutions in a real situation. As a result, learners can develop their potentials at all times. This consists with the research by Boonrom (2012) who studied the development of project-based learning on Thai royal language by grade 6 students. The result shows that students have made learning progress and the effectiveness index is 0.7015 which is 70.15 per cent. This is in line with the research by Somsai (2012) who developed activity learning projects in Thailand proverbs teaching women for 6 Graders. Students showed learning progress with effectiveness Index of 73.83 0.7383 percent.

3. The achievement of students using the royal language using project-based learning is higher after learning. The level of statistical significance is 0.05, which matched the hypothesis. This is because the project-based learning has lesson plans that meet individual differences. By allowing students to learn together, share ideas, find answers and solutions. This also consists with the research by Nak-klieng (2010) who studied the effect of learning a language, “Piece of cake” project by 6 graders. We found that an achievement and the ability to think critically higher than prior study. Boonrom (2012) who studied the development of event-based Learning Projects in Thai royal language by Grade 6 students found that student achievement is higher than prior study with level of statistical significance of 0.05 and it corresponds to Somsai (2512) who studied the development of learning project “Thai proverbs in teaching women” of Grade 6 students. She found students have made learning progress. The level of statistical significance is 0.05.

4. The 8 grade students were satisfied with the lesson plan on royal language subject using project-based learning with an average of 4.62. Overall student satisfaction is in the highest level. Perhaps the management of learning projects heavily focused on students and the training focuses on practical experience. They learn how to obtain knowledge and learn of a variety of learning resources as well as bringing learning to use in everyday life with teacher only act as a mentor and an adviser. This gives opportunities to students to showcase their talents to the fullest, it also shows integration of knowledge and application to combine knowledge into practice. This is consistent with research by Sirakarn

Suriyasakoolwong (2510: 76-86) who did the research on the effects of activity learning projects on subject “Making Klon Su Phap” (Thai traditional poem) by grade 12 students. They are very satisfied with the learning of Thai royal language. Moreover, Boonrom (2010) who studied the development of event-based Learning Project on royal language found that grade 12 students were highly satisfied with the learning.

The results show that lesson plans on royal language for Grade 8 students which were developed by the author are effective. It allows students to have systematically learning and achieved the set target. Therefore, it is suitable to be used in learning management and learning content development on others or to other subjects.

6. Recommendations

6.1. Recommended for adoption

- Teachers should allow students to study, research outside study hours. Teacher should also simulate and check the progress and provide ongoing support.
- Indiscriminate student Grouping, they should mix students with different abilities e.g..good, moderate and weak students.
- The teachers should focus on activities that students understand their roles and responsibilities as much as possible.

6.2. Recommendations for future research

- They should learn more about other projects or appropriate classes and should study in conjunction with other variables, such as the ability to think critically, persistence in learning attitudes toward the project, and so on.
- They should study the learning, projects that can integrated with other subjects. Since learning project enable us to assess various abilities of the students.

References


Rawiwan, P. (2010). Developing the ability to compose epic Yani 11 group learning Thailand. Grade 1 by the project activities. Independent study courses and graduate studies (Unpublished master thesis). Thailand: Mahasarakham University.


Suparb, B. (2010). Development activities learning project group learning about Thailand the royal ninth grade six. Independent study (Unpublished master thesis). Thailand: Mahasarakham University,