The Development of PBL Teaching Method for Teaching English Conversation

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ABSTRACT

This study integrates Problem-Based Learning (PBL) and Instructional System Design principles into English language teaching. The three main purposes of this quasi-experimental study were 1) to develop effective lesson plans based on Problem-Based Learning for teaching English Conversation for a Daily Life Course, 2) to compare the students’ pre and post-test scores of the English Conversation Test and learning achievement of the English Conversation for Daily Life Course, and 3) to investigate the students’ attitudes towards learning through PBL Instruction. The subjects were 72 Computer Information System undergraduate students at Rajamangala University of Technology Isan, Kalasin Campus. They were separated into two groups, namely experimental and control. The results revealed that the PBL teaching method developed from the PBL Model was effective for teaching English Conversation for the Daily Life course according to the 80/80 standard. The students’ post-test score of the English Conversation Test was significantly higher than that of
the pre-test at the 0.05 level, and the students’ learning achievement score of the experimental group in learning English Conversation for Daily Life Course was higher than that of the control group who learned through the traditional teaching method. Finally, students revealed a very positive attitude towards learning through use of the PBL method. Thus, it can be said that the PBL method in this study is effective and can be used in English language teaching.

**Keywords**: Problem-based Learning; English Language Teaching; English Conversation

**Introduction**

English is, nowadays, an international language which plays an important role in our lives such as communication in daily life, business, trade, commerce, science and technology, and education. The high level of English competency, therefore, not only benefits many people during their studies, but helps with professional promotion, career development, and further studies. However, it is generally recognized that the approach to the teaching of English in Thailand, especially in the regional and new universities, tends to be based on the Grammar Translation Method, in which the teacher’s role is to act as an instructor and corrector of errors. The student’s role is to do what the teacher says which, therefore, makes students tend to be over-dependent on their teachers and to always think of their teachers as providers of knowledge. This conflicts with the purpose of the Education Reform Act B.E 1999 which was intended to promote autonomous and lifelong learning (National Education Act, 1999). This is confirmed by the study of Torok and Waugh (2006) who state that teachers in Thailand start English teaching by introducing vocabulary items and grammatical structures, and then they let the students read aloud or repeat the sentences after the teacher. Students read and translate sentence-by-sentence for the whole class, or individually. Moreover, the Johns’ study (1997) confirmed the negative effects of the traditional teaching method by stating that this method of teaching is boring which can lead to negative attitudes towards learning English and reduces incentives for active learning, because students cannot reconstruct the message encoded by the writer for the particular purpose intended.

To deal with the situation mentioned above, the PBL approach is considered as a more suitable tool to enable students to acquire better English communication than learning through traditional teaching methods. PBL is an approach which emphasizes the use of problems to engage students in active and multidisciplinary learning. Students learn how to solve problems through problem-based learning that are ill-structured, open-ended or ambiguous. According to Barrows, 2000; Torp and Sage, 2002, PBL is focused, experiential learning organized around the investigation, explanation, and resolution of meaningful problems and students work in small collaborative groups and learn what they need to know in order to solve a problem. Moreover, problem-based learning engages students in intriguing, real and relevant intellectual inquiry and allows them to learn from real life situations (Barell, 2007).
Even though PBL was originally developed in medical schools and has been used in a variety of settings from middle school to professional education (Barrows. 2000; Barrows and Kelson. 1995; Barrows and Tamblyn. 1980; Gallagher et al., 1992; Hmelo. et al., 2000; Hmelo-Silver. 2000; and Torp and Sage. 2002), PBL methods, nowadays, has been used in various areas of science and teaching, for example, architecture, economics, engineering, mathematics and law (Poikela and Poikels. 2005). However, in the humanities, it is still slowly being experimented with, but in language learning it is going at a snail-pace, probably due to the fact that English language is a non-content subject and teachers tend to spend time on the prescriptive aspects of the language. This is evident in the dearth of PBL research published in the field of language teaching (Abdullah. 2005). Moreover, this approach is still unfamiliar and rarely found in language teaching pedagogy (Sojosirikul. 2009).

To develop the new teaching method, the research needs the principles for developing instruction effectively and for teaching English conversation systematically. In doing so, the researcher, therefore, decided to integrate the theory of Instructional System Design (ISD). Instructional system design is a system of procedures for developing educational and training materials or programs in a consistent and reliable pattern. Instructional system design is a creative, active, and iterative complex process. Although the exact origins of the instructional system design (ISD) process can be debated, the writings of Silvern. (1965) represent an early attempt to apply general systems theory (Bertalanffy. 1968) and systems analysis as an approach to solving problems. Silvern was specifically interested in how general systems theory (GST) could be used to create effective and efficient aerospace and military training and published what might be considered the first ISD model. Consequently, the ISD was integrated to PBL in this study to develop the effective teaching method for teaching English conversation courses.

**Purposes of the Study**

1. To develop the effective PBL teaching method for teaching English Conversation in a Daily Life course based on the 80/80 standard.

2. To compare the students’ pre and post-test scores of English Conversation Test and learning achievement of the English Conversation for Daily Life Course.

3. To investigate the students’ attitudes towards learning through PBL teaching method.

**Research Methodology**

1. **Population and Subjects**

   The populations of this study were 235 non-English major students who were studying the English Conversation for Daily Life course. The subjects for this study were 72 students. They were divided into two groups: experimental and control. Each group contained 36 students. All of them were selected through the random sampling method.

2. **Research Design**

   2.1 **The PBL Model**

   The PBL Model was developed by the researcher via the adaptation of the System Approaches Model for Designing Instruction (Dick and Carey. 1985) was employed as a research design. It was illustrated in Figure 1 and explained below:
1. Population and Subjects

The populations of this study were 235 non-English major students who were studying the English Conversation for Daily Life course. The students at Rajamangala University of Technology Isan, Kalasin Campus.

2. Research Design

Each group contained 36 students. All of them were divided into two groups: experimental and control. The experimental group was taught using the PBL method, while the control group was taught using the conventional method.

3. Data Collection

The data obtained from the three steps of the test were used to revise and improve the PBL teaching method in the revision phase.

4. Data Analysis

Phase 4: Revision of instruction. After the formative evaluation step, a revision of the PBL teaching method was carried out. Data from the formative evaluation was summarized and interpreted to identify difficulties experienced by learners in achieving the learning objectives, learning activities, assignments, and assessment before it was implemented in the next phase.

Phase 5: Implementation of instruction. After the PBL teaching method was revised in the revision phase, it was implemented with the 32 fourth-year students at Rajamangala University of Technology Isan, Kalasin Campus.

Phase 6: To conduct a summative evaluation. Dick and Carey. (1985) state that although summative evaluation is not part of the design process, most teachers and program administrators need to conduct one to make decisions about the worth or value of the instruction. This study, therefore, included a summative evaluation to find out the effectiveness of the PBL teaching method and to see whether the students were satisfied with the instruction program that was developed.

Research Instruments

3.1 PBL Lesson Plan

The five steps PBL lesson plan for teaching the English Conversation for Daily Life course was developed by the researcher by adapting MITA (Webber, 2000) and the Harvard Hybrid Model PBL.
Learning through PBL lesson plan needs to divide students into group of five to six. The member in each group should consist of all level of English abilities students considering from their grade of English course in the previous semester. Below is a brief description of the teaching procedures in each PBL lesson plan:

Step 1: Stating the learning objectives for clear goals.

1.1 Teacher states the learning objectives based on the requirements of the English Conversation for Daily Life course description to avoid missing out important contents.

1.2 Teacher also informs the explanation of rubric scoring that was used to give scores to students’ individual and group works. Individual work refers to the written conversation dialogues in various situations according to the learning objectives, while the group work refers to the role plays of the various situations according to the learning objectives as well.

Step 2: Identifying problems for stimulating and guiding students’ learning.

2.1 Teacher informs the well-designed problems related to learning objectives to students. Each question expects the students to create both individual and group works as a solution. These well-developed questions encourage students to discuss the importance of the topics, to brainstorm for answering questions, and to find a possible way to present knowledge individually and cooperatively covering all the learning objectives of each unit.

2.2 Students discussed about the problems and the available learning resources that they can access the necessary information to create their works.

Step 3: Collecting the necessary information from various resources.

3.1 Students start their research by finding out the available learning resources to collect the necessary information.

3.2 Students collect the necessary information from available resources to create their individual and group works.

Step 4: Analyzing and synthesizing the information for creating students’ work.

4.1 Students discuss the information obtained from their research, to list important topics for detailed study, to answer the questions in detail, and to create individual and group works.

4.2 Teacher circulated, observed, and gave help and suggestions as necessary or by request.

4.3 Students discuss about the expected scores of their works comparing with the criteria of scoring in the rubric assessment.

4.4 Students discuss for the way to present their works.

Step 5: Expressing new knowledge from solving problems procedures.

Students present their group work through role play, while their individual work was presented via the written conversation dialogues.

Step 6: Giving feedback and summarizing the lesson.

6.1 Students and the teacher discuss their new knowledge from research in the form of a mind map.

6.2 Teacher gives score to students according to the quality of work indicated in the rubric assessment.

English Conversation Test

An English Conversation Test was a multiple choices test developed by the researcher to evaluate
and compare the students’ scores of pre and post-tests in both experimental and control groups. It was tried out before the implementation phase to find out the level of difficulty, the level of discrimination, and the reliability. The results of the trial revealed that the level of difficulty was \( p = 0.63 \), the level of discrimination \( r = 0.55 \), and the reliability (KR 20) = 0.82, respectively. Thus, it can be said that the English Conversation Test is effective to evaluate and compare the students’ scores of pre and post-tests in both experimental and control groups in this study.

**Questionnaire**

The questionnaire was used to elicit students’ attitudes about learning English Conversation for Daily Life course via the PBL teaching method. The questionnaire consists of two main parts. The first part aims to elicit students’ attitudes about learning English Conversation for Daily Life course through the PBL teaching method through the use of four-point Likert’s rating scale. The reason for using four points is to avoid the result from being neutralized from choosing the neutral in neutral in category three of the five-point Likert’s rating scale. It was tried out to find the reliability before the implementation which was 0.79. This showed that the questionnaire was suitable for using to gather information for this study.

**Rubrics Assessment**

A rubrics assessment used as criteria in evaluating the students’ expected scores in the PBL lesson plan was constructed by the researcher by the adaptation of Nitko. (2001) to assess students’ learning behavior during the learning in the English Conversation for Daily Life course. It is a scale states the criteria of scores based on the quality of works.

**Data Collection**

The data collection employed in two phases which were the trial phase and the implementation phase. For the implementation phase, the PBL lesson was tried out with the students who were not the subjects of this study in the first semester. There were three steps of trial which are one-to-one test including 4 students, 1 low English ability students, 2 medium English ability students, and 1 high English ability students, and 3 high English ability students, and field test including 5 low English ability students, 10 medium English ability students, and 5 high English ability students. The criterion for classifying the students’ English ability is based on their grade of English subject in the previous semester. For the implementation phase, the data collection was administered with the 72 Computer Information System undergraduate students at Rajamangala University of Technology Isan, Kalasin Campus who were studying the English Conversation for Daily Life course. They were divided into two groups containing experimental and control groups. Each group contained 36 students. The subjects in the experimental group were asked to finish the English Conversation Test before learning the English Conversation for Daily Life course as a pretest. After learning through the PBL teaching method, they were asked to complete the English Conversation Test again as a post-test. The results of both pre and post-tests were compared to find out the differences of knowledge before and after learning through the PBL teaching method. Moreover, the learning achievement of the students in both group were used to compare to find out the effectiveness of each type of teaching methods.
Data analysis

The data obtained from the tests and learning activities in the trial phase, the English Conversation Test, the students’ English learning achievement scores, and questionnaire were analyzed quantitatively through the statistical software to find out the effectiveness of the PBL teaching method, difference of the pre and post-tests score of learning through the PBL teaching method, effectiveness between learning in the English Conversation for Daily Life course through the PBL teaching method and traditional method, and the students' attitudes in learning English Conversation for Daily Life course through the PBL teaching method respectively. For the score of students' attitudes towards learning through the PBL teaching method, they were calculated based on the following criteria:

<table>
<thead>
<tr>
<th>Means</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00-1.75</td>
<td>Students state very negative attitudes towards learning PBL teaching method</td>
</tr>
<tr>
<td>1.76-2.50</td>
<td>Students state negative attitudes towards learning PBL teaching method</td>
</tr>
<tr>
<td>2.51-3.25</td>
<td>Students state positive attitudes towards learning PBL teaching method</td>
</tr>
<tr>
<td>3.26-4.00</td>
<td>Students state very positive attitudes towards learning PBL teaching method</td>
</tr>
</tbody>
</table>

The criteria for evaluating of questionnaire were adapted from Suppasetseeree. (2005) for the appropriateness in this study. The data from a four-point rating scale was calculated for the arithmetic means and standard deviation. These means showed the students’ attitudes toward learning via the PBL teaching method. The criterion of means was from a range divided by number of levels created. This was \((4-1)/3 = 1\) for each level and the means were added up with 1. The following criteria were used for interpretation.

**Results**

The results of the study were presented as follows:

1. **The Result of the Effectiveness of the PBL Teaching Method**

   **Table 2** : The results of the development of the PBL teaching method for teaching the English conversation for daily life course based on problem-based learning

<table>
<thead>
<tr>
<th>Trials</th>
<th>E1 (Effectiveness of Process)</th>
<th>E2 (Effectiveness of Product)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-to-one Tests</td>
<td>73.97</td>
<td>71.58</td>
</tr>
<tr>
<td>Small Group Tests</td>
<td>78.13</td>
<td>77.84</td>
</tr>
<tr>
<td>Field Study Tests</td>
<td>82.61</td>
<td>81.16</td>
</tr>
</tbody>
</table>

   Table 2 presents an analysis showing the effectiveness of the PBL teaching method using the scores of both the process (learning activities) and the product (test). The results for the first test showed that the scores of the individual test were lower than the criteria of 80/80. This might be because the PBL teaching method and its components were not appropriate to the students’ learning abilities and
styles. Moreover, the results from the students’ feedback revealed that students’ needed a clearer explanation of the process of learning through PBL teaching method. The lessons, therefore, were revised according to the comments and suggestions of the students. Finally, the scores of the last phase could pass the 80/80 committed standard.

2. The Result of the Comparison of Students’ Scores and Learning Achievement between Learning through the PBL Teaching Method and Traditional Method

Table 3: The results of a comparison of the pre and post-test scores for the English conversation test for the experimental group

<table>
<thead>
<tr>
<th>Group</th>
<th>Sources of Scores</th>
<th>Total</th>
<th>Mean</th>
<th>S.D.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>EG</td>
<td>LA</td>
<td>80</td>
<td>70.46</td>
<td>5.28</td>
<td>32</td>
</tr>
<tr>
<td>CG</td>
<td>LA</td>
<td>80</td>
<td>62.12</td>
<td>2.27</td>
<td>32</td>
</tr>
</tbody>
</table>

LA- Learning Achievement, EG= Experimental Group, CG= Control Group

Table 4 reveals that the students’ scores on English learning achievement in the experimental group learned via the PBL teaching method were higher than those of the control group which learned through the use of traditional method. This could be said that the PBL teaching method is more effective for using in English conversation teaching than the traditional one.

3. The Result of the Students’ Attitudes towards Learning through the PBL Teaching Method

Table 5: The students’ attitudes towards learning through PBL teaching method

<table>
<thead>
<tr>
<th>Statements</th>
<th>X</th>
<th>S.D.</th>
<th>LOF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Learning through the PBL teaching method helps me understand my real</td>
<td>3.54</td>
<td>.488</td>
<td>Very</td>
</tr>
<tr>
<td>abilities in learning</td>
<td></td>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td>2. Learning through the PBL teaching method helps me succeed in English</td>
<td>3.65</td>
<td>.427</td>
<td>Very</td>
</tr>
<tr>
<td>Conversation for Daily Life</td>
<td></td>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td>3. Learning through the PBL teaching method gives me a variety of academic</td>
<td>3.68</td>
<td>.422</td>
<td>Very</td>
</tr>
<tr>
<td>information</td>
<td></td>
<td></td>
<td>Positive</td>
</tr>
</tbody>
</table>
The students’ attitudes towards learning through PBL teaching method were found to be positive. As shown in Table 4, the mean score of students’ attitudes towards learning through PBL Instruction was 3.62 which was higher than 3.26. According to the interpretation of the mean score of students’ attitudes toward learning through PBL Instruction as indicated in Table 1, it can be concluded that learning through PBL Instruction resulted in the students having a very positive attitude towards the learning English Conversation for Daily Life course.

### Discussion

1. The evidences for the effectiveness of the PBL teaching method was discussed below:

The PBL Model as a research design developed by the researcher according to the principles of Instructional System Design (ISD) and Problem-Based Learning (PBL) worked effectively for developing the PBL teaching method as shown in the results. Moreover, the results of students’ and teacher’s needs analysis, and course description of the English Conversation for Daily Life course in the first phase of the PBL Model suggested the appropriate content, ways of teaching, evaluation, and classroom management in PBL teaching method. Besides, the six steps PBL lesson plans in the PBL teaching method encouraged students use their problem-solving skills and knowledge in their English language learning.
effectively. They also stimulated students to learn and present their knowledge while the teacher facilitated their learning when necessary. Moreover, they promoted cooperative learning by requiring students to work in group to share their abilities. Every student in the group learned actively to share their abilities in researching information, creating, and presenting information to the group (role play was used as the group work to stimulate students practicing conversations in various situations). They could learn how to work as team and they be provided a suitable role as a member of the team based on their ability to work in each step in learning through the PBL teaching method. This made students feel ease when learning in group. The researcher could observe that the leader in group would always help the other members in group. This made all members in group could create good works and get high score. This was correspondent with the study of Boud. (1985) who stated that the PBL approach also emphasizes communication and interpersonal skills. This was also confirmed by the study of Williams. et al. (2003) who state that students appreciate active participation in the PBL learning process.

Finally, the rubric assessment in the PBL lesson plan helped students to attain their expected learning outcomes from their individual work and group presentations. This is the same as Nitko. (2001) found who states that using rubrics is probably more appropriate when performance tasks require students to create some sort of response and where there is no definitive correct answer.

This could explain why the PBL teaching method was effective for teaching English conversation courses.

2. The comparison between students’ pre and post-tests scores showed that the students’ post-test scores in the English Conversation Test were significantly higher than the students’ pre-test score at the level of .05. Moreover, the results also showed that the students’ leaning achievement scores in learning through the PBL teaching method is higher than learning through the traditional one. The results were discussed below:

The results of the study indicated that the PBL teaching method encouraged students to learn effectively. The learning objectives which were stated and introduced clearly in the first teaching period of each unit helped the students understand the purposes of each unit clearly. So, they knew exactly what they have to learn and what they have to do to reach the goals of each unit. The PBL teaching method also helped students keep on correct and appropriate track of learning. As mentioned earlier, all elements of the PBL teaching method helped the students improve their understanding of knowledge in every unit. Consequently, this might result in students getting significantly higher scores in the post-test than in the pre-test. This was supported by the study of Othman and Shah (2013) who stated that one important learning outcome of PBL is language competence. This was also confirmed by the study of Biggs. (2003) who stated that PBL encourages deep learning as students learn for understanding and seek meaning, whereas the traditional teacher-centered approach promotes surface learning with little understanding.

Moreover, the learning procedures in the PBL teaching method especially the cooperative learning helped encourage students to research the information related to the topics provided, to share their collected information with their friends, to discuss the data obtained from each member, to create the individual and group works, and to choose the expected scores of the group work from the rubric.
assessment. As mentioned earlier, the cooperative learning played an important role in the learning procedures of PBL teaching method. This helped the students obtain a clearer and deeper understanding of each unit and to get the high scores in the learning activities in the PBL lesson plans. This was supported by the study of Bauer. et al. (2002) which states that students indicated that the collaborative nature of PBL increased their level of comfort and inclusion in the class. In addition, students believed that their learning was enhanced because PBL increased their ability to consider, evaluate, and respect different points of view. In addition, this was also corroborated by the study of Wilkerson. (1996) who mentioned that as students work on problems in small groups of four or five, their analyses and results in the acquisition of knowledge and problem-solving skills improve considerably. That was why the students’ post-test scores was significantly higher than pre-test score and the learning achievement of the students who learnt through the PBL instruction was higher than those who learnt via the traditional teaching method.

3. The students had a very positive attitude towards learning through PBL teaching method. The reasons of this circumstance were discussed below:

The results of the students’ attitudes toward learning through PBL teaching method revealed that all items in the questionnaire were rated in the very positive range. This indicated that the students had a very positive attitude towards learning the English Conversation for Daily Life course through PBL teaching method. When taking consideration to each item, it was found that the highest mean score was item 9 which was “Learning through the PBL teaching method enhances my critical and logical thinking and improves my problem-solving skills.” This might be related to the activities in PBL teaching method which always encouraged students to use their problem-solving skills to solve many problems in the learning processes. After becoming familiar with the problem-solving process, the students were able to enjoy in learning through PBL teaching method. This is supported by the study of Sahatsathatsana. (2010) who stated that when students were familiar with solving problems, this resulted in a high score for positive attitudes in learning through the provided teaching method. That was why the students have shown the very positive attitude towards learning the English Conversation for Daily Life course through PBL teaching method.

Conclusion

It could be said that learning through PBL teaching method helped students to learn more actively and that they always used their problem-solving skills whilst working under the procedures of PBL teaching method, such as analyzing problems, finding the solutions and organizing a presentation to express the information they have gathered for the assignment. They also designed their own learning through planning, monitoring, problem-solving and finding solutions to the problems they have met for developing their presentations. As they engaged in these activities, students retained information more effectively than studying from the traditional method including reading textbook or only by listening to the teacher as shown by the results of this study. Consequently, it can be concluded that the PBL was suitable for being integrated into English language teaching methods and that PBL teaching method as developed by the researcher is effective and
appropriate for implementation into the teaching of English conversation classes.

**Recommendations**

Below are some recommendations for implementing PBL in the classroom:

1. Explain all the learning procedures carefully for PBL to students if they are not familiar with this kind of learning.
2. Well-designed questions covering all the learning objectives in each unit should be created.
3. Allow students to select the members for working in their group which will make their group work easier.
4. Set aside a session for the groups to discuss the progress of their research and to provide feedback when necessary.

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