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A Survey on the Relationship between PBL Teaching Mode and University English Teaching

Ke Gong

School of Foreign Languages; Shandong Jiaotong University; Jinan, Shandong, 250300

Email: karen999568@hotmail.com

Abstract

Only innovating the teaching methods and applying both advanced and practical teaching mode in class teaching, can we change the present traditional English teaching circumstance and improve the teaching quality. This article puts forward by analyzing the drawbacks of traditional teaching mode that PBL is the very innovatory teaching mode, which can realize the aim of students' autonomous learning, embody teachers' guidance and students' leading role, and make up for the defects of traditional English teaching mode. It is sure to make a significant contribution to university English teaching reform.

Keywords: PBL, Teaching Mode, Enlightenments

INTRODUCTION

Nowadays the education in the world is being innovated constantly, and the society puts forward higher requests on the English talents educated by the universities with the wide spreading and diversificating of the international communication day by day. However, some problems generally lie in the university English teaching: the students' autonomous learning is not very well; the teacher is still the center of class teaching; the shortage of initiative and innovation, etc. Most teachers and students regard passing CET4 and CET6 examinations or TEM4 and TEM8 examinations as the teaching aim and learning aim, but having ignored the real meaning of English learning. Apparently the students educated in this educational mode cannot meet the demand of the modern society once more, which must be reformed. So only innovating the teaching methods and applying both advanced and practical teaching mode in class teaching, can we change the present traditional English teaching circumstance and improve the teaching quality. PBL is just the reformed teaching mode which aims at shaping the independence and autonomy of learning to equip them with the skill of continuing learning in the following days of life and occupation. Based on organizing the defects of traditional English teaching mode, this article will put forward and analyse the apply of the PBL teaching mode in university English teaching to provide with the referential methods for university English teaching.

Connotation of PBL Teaching Mode

PBL (Project-based Learning) is a brand new teaching mode, which contains Constructive Learning Theory, Dewey's Pragmatic Teaching Theory and Bruner's Discovering Learning Theory. At home, there're several interpretations, such as PBL, Problem-based Learning, Issue-based Learning and Specialized-teaching-plan-based learning, etc. While I personally prefer to PBL. PBL (Project-based learning) is based on Constructive Learning Theory and this teaching mode can break through three centers—"the teacher-centered, the course-centered, and the class-centered". It is a kind of learning mode which lays stress on the student-centered, courses cross, team learning, autonomous exploration and the connection between real world and life practice.

One important characteristic of it is to concentrate on solving real problems and show it in the form of final work. Then promote the work to other people and thus make others know and share their learning results.

Maybe the two examples as follow can be helpful for us to have a general, unclear and apparent
understanding about this kind of learning mode.

E.g. 1: a student-run company

In a middle school industrial art class, the students is going to set up a company and they produce some wine show stages, cabinets or some folding chairs used to sell. The students select company workers and divide them into groups to finish different work of the company. Many group activities are all with the help of technology. For example, the finance group inquires the goods of which the price is the lowest by using Excel and creates some finance reports. The research group draws the design draft by using the picture software. The market group makes the advertisements by using the word-processing software. The camera will be used in the trading process and the goods will be broadcasted in the school broadcast. Many products need to use the lathe or the squeezing machine operated by computer. The final products are operated in the assembly line mode and they are sold in the campus. Students buy and sell the stocks in the company and then they begin to receive dividends after the goods sold out.

E.g. 2: write a book about community knowledge

In a project, parents and children work together and their aim is to write a dynamic book with color pictures about community knowledge. The clients of this book are their neighbors (live in Arlington, Virginia). All the parents and children involved in the project participate in group discussion. They confirm the content of every page (words and diagrams), then hand these contents over to the editors of the book. The parents with higher degree of education are responsible for managing the book and selecting the research matter (e.g. immunity, school etc.). The parents with secondary degree of education find the address and phone numbers of the local salesroom and the salesroom provides the demanded equipment for them and explain the shopping handbooks of the local shops they like in the form of diagram. In the book, they have designed a page recording urgent numbers while the children have designed a page recording urgent numbers while playing for the children. When the writing of the book have finished, they will present them to the headmasters of the local primary schools. Some families attend “the meeting with the author in the local library”. The parents and children will also apply the portfolios into recording the performance and finishing the evaluation of the questionnaire. They communicate together and evaluate the work of each other, and give a proper explanation for their work. The last item of this project is to sell the book to the community people.

Project-based learning (PBL), which has a long history in the west, was widely paid close attention to in 1980s. Based on Constructive Learning Theory, and influenced by Congnosis, Cooperative Learning Theory and Multi-intelligent Theory, this learning mode revolution can be traced back to early 1900s. John Dewey advocates that learning should be “learning together with doing”. In his opinion, education should reflect society. In 1918, Kilpatrick put forward “Concentrated and Purposive Activity”; meanwhile, put children in the center of the selective learning. He defined this purposive activity as “part of typical and real life”. He emphasized that children should be centered in selecting learning contents, other than the importance of collective efforts and cooperation to the project. In 1960s, it was first used in Canada McMaster University, helping the students in Medicine College understand abstract substances. Later, it was successively applied in medicine and engineering course teaching. However, as a teaching mode, it was taken seriously only in 1990s.

Different from general class teaching in teaching aims, teaching contents, teaching mode, teacher’s role, students’ roles and evaluation ways, PBL independent study makes up the shortcomings of traditional teaching mode. As it pays attention to students’ performance in studying process and reflects the guiding role of the teachers and the major role of the students, the project runs through the studying process and effectively inspires inner motivation of students studying. PBL provides the students with decision-making opportunities of selecting contents and showing forms according to their interests, making the students study and explore autonomously, thereby effectively promotes the development of independent study ability and innovation ability of the students.

The main contents of PBL study are all kinds of complicated, unpredicted and interdisciplinary problems expressed in the real life and true situation. PBL is of higher value to the present teaching reform because it can help teachers and students to focus on the deep study of the core conception and remarkable viewpoints of course knowledge.

E.g.

In Vermont, America, a Grade4 “science”(one course open in America) teacher expects students to know of how rock creates and also want them know the building resources, minerals in Vermont and the elements of rock so he designed a PBL to study rock. In this PBL, for the developing of the city, students actively play the geologist role and then the city building planners take advantages of the local materials studied by the students to build city center structures and square.

Students concentrate their attention on studying what local materials are suitable for building streets, houses, roads, sports grounds and other structures. While city building planners make out the standard of materials selecting (e.g. price of material, endurance of material). Students have to know not only what structure materials Vermont has locally, but also the contrast condition between intension, safety, cost and effectiveness of all kinds of materials meeting different demands.

To some extent, the content which the project pays attention to is the elements of special rock and some basic ideas in common geology, in the meanwhile, it also
pays attention to how the basic theory of the material and the engineering is applied in the real life and the practical case of all kinds of materials nowadays.

**Defects of Traditional Teaching Mode in University English Teaching**

Neglecting the initiative performance of students’ study, traditional English teaching mode mainly takes into account the regularity in teaching process and giving lessons from teachers’ point of view.

**Homogeneity of Teaching Method**

At present, some universities still adopt the teacher-centered teaching mode in the process; students just blindly accept knowledge, lacking creativeness and independence. Only aiming to letting students grasp basic knowledge, devoid of teamwork consciousness, this mode restrains their human spirits and imagination. As well as rigid class teaching, single activities, and students who lack of consciousness of team working. Thus most students rather input knowledge in a negative to their head while learning English than positively put their knowledge into practice, if such English-teaching method is used.

**Obsolescence of teaching content.**

Large quantities of teachers learn strictly on the basis of uniform textbooks, without considering whether the material is practical or not. And some teachers seldom replenish fresh currently affairs-related and closely students-related English materials. Teaching content comes apart from students' professional knowledge and everyday life, resulting in inharmoniousness between language-learning content in class and language environment of background knowledge in practical life. In this way, students' enthusiasm and initiative in learning will get a discount.

**Shortcomings of Students’ Autonomous Learning**

Students mostly classify the language key points or memorize them in a compulsory and inflexible way, which thus has separated the relationship between context contents and means of expression to record vocabularies and means of expression by corresponding them to Chinese and then neglects its grammar category knowledge and context significance. Besides, students lack initiative in English learning; for example, they cannot put the words learned in class into practice skillfully, especially in translation practice, and the "Chinglish" phenomenon is serious; students are short on necessary understanding about English culture and short of knowledge store; students have few opportunities to apply language in class, etc.

From above-mentioned points, we can find out that this kind of teaching mode which takes theory seriously and takes practice for granted, and takes knowledge seriously and takes ability for granted, is unable to enhance students’ ability to participate in the communication in English indeed and is very hard to develop the skills needed in the future work posts and cannot be adapted to the society’s demand for English talents. Therefore, it is imperative to seek a kind of new teaching mode and improve English teaching constantly to adapt to the demands of society.

**Basic Features of PBL**

Features of PBL are mainly as follow:

1) There is an enlightening question that is used to organize and arouse study activities which are the significant and main part of PBL.

2) There is a (or a series of) final work(s) and students should communicate and have a discussion with each other about the works making and thus come to a conclusion and produce some new questions from the communication and discussion.

3) The crossing of various disciplines knowledge

   The enlightening question comes from the real life and to solve this problem should be with the help of interdisciplinary knowledge. So the question coming from the real life is the question produced from the crossing of various disciplines. In the works making process, faced with the problem in the real life, students need to use interdisciplinary knowledge by synthesis to understand and study them; however, the problem you met will never be solved if depending on some discipline knowledge only.

4) Lay stress on the teamwork in the study activities

   Teachers, students and other members involved in the activity cooperate with each other and form a “combined learning system”. In the "combined learning system", there is a close cooperative relationship among members.

5) PBL has a certain society effect

   PBL can help to bring about the relation between teachers-students and the wide communities. All the students’ works------including the documents in the learning process and students’ final works can be shared in the communication among teachers, parents and business groups. They can also be supplied to the business firms to sell in the market and get some certain economic benefits.

6) PBL is to make an inquiry in the real life

   PBL demands students to study the problems coming from the real life and by this study students will receive
the core conception of discipline knowledge and then master some certain skills.

(7) Various cognitive tools and information resource need to be used in the learning process

In the learning process, students are going to apply various cognitive tools and information resource into stating their ideas and supporting their study. These cognitive tools and information resource include computer labs, multimedia, image software and distance communication, etc.

5.0 Enlightenments of PBL Teaching Mode towards University English Teaching

As a kind of quite popular teaching mode in the west, PBL is paid attention to by a lot of scholars, but all the current researches apply it to the network, management teaching, etc. I think PBL teaching mode can also be applied to the English teaching.

Project-based learning is a new-style teaching mode, and an innovative teaching new idea, which emphasizes that the student is the center and they are the main part of project implementing. It stresses the team learning and requires students to study real matters in the real life with relative real situation. The role of teacher is only the initiator of knowledge, the director and organizer of project implementing. PBL autonomous learning has its own learning process, including six stages: selecting a project, drawing up a plan, activity studying, works making, achievements exchanging, activity evaluating. This teaching mode underlines the change from teaching-centered to learning-centered in English teaching and it is sure to make an enlightening contribution to university English teaching nowadays.

PBL is in favour of students to “learn to study” and strengthen study initiative

Under the traditional teaching mode, students just get used to blindly accept the knowledge which teachers pass on, other than understand and absorb initiative. Yet; PBL is capable of solving this problem. Taking my class for example, centering on the clue of the text, I will give the class several subjects, such as environment-protecting, food crisis, etc., which are close to their realistic lives, letting them choose anyone according to their interests, in that way, students can fully understand the subject through collecting and analyzing data. In this process, students are required to get to work and participate in every part themselves. In the meantime, teachers can take full advantage of the time in class and in second-class activity to let one student state in terms of his subject and others discuss, therefore, self-evaluation and mutual evaluation are well combined. In the whole studying process, students participate in every part, and apply their own learning styles, means and ways to the process, achieving indeed independent study and becoming studying main part; while as organizers and instructors, teachers greatly encourage students’ own initiatives. Thus, finally, students have learnt to how to study themselves of which in the wake are the great improvements of their interests, initiatives and positivity of studying.

PBL is in favour of the education of versatile talents

Comprehensiveness of discipline knowledge is a typical feature of PBL. PBL teaching mode lays stress on solving the problem with interdisciplinary knowledge -- in other words, the matters to be studied is required to be interdisciplinary. Consequently, students cannot rely on one discipline knowledge but have to make use of all kinds of tools to look up interdisciplinary in the problem-solving process. To a certain extent, this has realized the mingling of knowledge. Students own interdisciplinary knowledge and mingle them together to produce new knowledge which then becomes the inspired point of new thinking ways and comprehensive abilities. This will not only be helpful to understand the matters of your own course, your own major but also make it easier to create. Whether the discipline knowledge can be mingled and have an effect comprehensively or not is the symbol of versatile talents. Versatile talents can exceed the original knowledge and abilities by mingling different discipline knowledge and abilities, in other words, to think of matters encountered with a fire-new thinking way and then put forward a fresh solving approach. They are just the right talents demanded by the present society.

PBL is in favour of cultivation of students’ cooperation and creative studying abilities

Under traditional teaching mode, learners are competitors, the competition transforms into cooperation after the problem-solving process required by PBL. As PBL emphasizes learning by teamwork, simply relying on individual achieves nothing, it requires learners of reasonable division of work, mutual consultation and discussion of the project before them, fully expressing their own potential, arousing their own creativeness to resolve problems and finally completing the whole process unanimously. It has been proved by class-teaching effect of my class adopting PBL Teaching Mode. In class, we carried out practical activities transited from simple dialogues, grouping discussion and role-playing to speech and debate, etc. Practice proves that with well preparations after class, students had much preference to activities during which their cooperation abilities were stronger and moreover, their teamwork spirit and creative studying abilities were well cultivated and greatly developed.

PBL Process or Operational Program

PBL is a kind of new-style teaching mode and an idea of
reforming traditional teaching. What this kind of learning emphasizes is to center students and the teamwork. Students are required to make an inquiry about the true problem in the real life. Generally, its process or operational program includes six steps: selecting a project, drawing up a plan, activity studying, works making, achievements exchanging, activity evaluating, see chart 2.

Selecting a project

In PBL, it is important to select a project which should be selected according to students’ interests absolutely and at the same time these situations as below should be considered also. First of all, the selected project must be related to the students' daily experience. At least part of students should be quite familiar with this project, if so, it is possible for them to introduce some related problems. Secondly, the project should mix various disciplines together, such as science, society research and language art besides basic reading and writing ability (education accomplishment) and other skills. Moreover, the project should be ample so that the study can last one week at least. Finally, the selected project must be more suitable to check in the school (compared to the home). All in all, in PBL, we have to have a fully consideration of students' knowledge and experience and abilities and whether it is possible for students to reach PBL target and solve various problems produced from the project or not. So it is vital to select a project by students and the role of teachers is only as the instructor in the process, in other words, students cannot impose some project on students. The role teachers play is to evaluate the subjects students selected, that is to say, whether the selected subject is of research value? And whether students are able to study this project? According to the evaluation, if necessary, it is not bad to adjust the subjects students chose accordingly or suggest that students make another decision.

Drawing up a plan

Plan includes: learning time schedule details and activity plan. To arrange time is to make a general plan of the time students need in the PBL and make out a detailed time schedule. Activity designing is to make a preliminary plan of activities related to PBL.

Activity studying

This stage is the core or main part of PBL and students' knowledge and skills are finished in this stage mainly. It consists of investigations made by study groups going into the actual place directly. Normally it includes outdoor travel, the study of necessary places, objects and cases. In the process of investigation, students write down the activity details and their own points or thoughts on the activity necessarily and formulate a hypothesis of solving the problem. Then collect information with the help of research methods and technical tools (in this process, students’ research methods and technical tools are of great importance). Next to deal with the collected information and to confirm or overturn the preliminary hypothesis. Finally the problem-solving plan or the result comes into being.

works making

Works making is the special feature of PBL different to ordinary active teaching. Actually works making sometimes can mingle with activity study together but here to make the discussion easier, we divide them. When making works, students complete the works-making process by putting the knowledge and skills got from the study into use. The works can be in varied forms, such as research report, object model, picture, recording, video, ppt, webpage and drama, etc. Study groups describe their researched projects and show their research findings. Their knowledge and skills grasped from PBL are reflected by their works.

Achievements exchanging

When students' works are made out, every study group will communicate with each other and exchange their experience and thoughts produced in the learning and share the success and happiness from the works-making. The way of achievements exchanging is also varied, such as holding exhibition, report, debate, and small game, etc. In exchanging achievements (e.g. exhibition), there may be other visitors outside school besides the leaders, teachers and students in the school, such as parents, teachers and students from other schools, and leaders and experts from higher authorities of education (e.g. Bureau of Education).

Activity evaluating

The crucial difference between PBL and traditional teaching lies in the study evaluating. It has been really done that quantity-evaluating and quality-evaluating, formation-evaluating and finality-evaluating, personal evaluating and group evaluating, self-evaluating and others-evaluating combined together well. The evaluation includes: the selected issue, the performance of students in the team study (the cooperation between activity group members), plan, time schedule, expression of findings and show of
Table 1. Comparison of testing marks

<table>
<thead>
<tr>
<th></th>
<th>Excellent(90-100)</th>
<th>Good(80-89)</th>
<th>Fair(70-79)</th>
<th>Passing(60-69)</th>
<th>Poor(&lt;60)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBL teaching group</td>
<td>1 (3%)</td>
<td>6 (21%)</td>
<td>17 (59%)</td>
<td>4 (14%)</td>
<td>1 (3%)</td>
</tr>
<tr>
<td>Traditional teaching group</td>
<td>0%</td>
<td>2 (7.0%)</td>
<td>13 (44.8%)</td>
<td>11 (37.9%)</td>
<td>3 (10.3%)</td>
</tr>
</tbody>
</table>

Table 2. Comparison between the two teaching modes

<table>
<thead>
<tr>
<th>No.</th>
<th>Questions</th>
<th>PBL teaching mode</th>
<th>Traditional teaching mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Which one are you interested in?</td>
<td>88%</td>
<td>12%</td>
</tr>
<tr>
<td>2</td>
<td>Which mode is with extensive content and flexible learning method that can help to understand the course?</td>
<td>85%</td>
<td>15%</td>
</tr>
<tr>
<td>3</td>
<td>Which one can help you enhance your comprehensive ability better?</td>
<td>90%</td>
<td>10%</td>
</tr>
<tr>
<td>4</td>
<td>Which one can train your self-learning ability better?</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>5</td>
<td>Which one can improve your ability of induction, summary and language expression better?</td>
<td>92%</td>
<td>8%</td>
</tr>
<tr>
<td>6</td>
<td>Which one can practice your team-work and coordination ability?</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>7</td>
<td>Which one help you improve your collecting ability of relevant information?</td>
<td>84%</td>
<td>16%</td>
</tr>
<tr>
<td>8</td>
<td>Which one can make theory and practice more inseparable?</td>
<td>87%</td>
<td>13%</td>
</tr>
<tr>
<td>9</td>
<td>Which one can improve your problem solving ability better?</td>
<td>86%</td>
<td>14%</td>
</tr>
<tr>
<td>10</td>
<td>Which one can improve your exploration ability of new knowledge better?</td>
<td>82%</td>
<td>18%</td>
</tr>
</tbody>
</table>

achievements, etc. What the evaluation of findings stresses is that students has achieved knowledge and the level of skills they master (e.g. the technique and art of works). What the evaluation of process stress is the evaluation of experiment notes, various original data, activity schedule, questionnaire, interview, learning thoughts, etc.

The evaluation can be done by experts, scholars and teachers, and of course, the partner or the learner himself/herself is also ok. Teachers can observe the knowledge and skills of students used in the PBL and the way of using language. Students can report their and their partners' performance and work procedure, how well the group works? How they think of their performance and work procedure? What knowledge and skills they have got? Reporting performance, examining the procedure and making the key point and weak area of knowledge clear are all included in the learning.

The Evaluation of Students’ Scores and Teaching Effect under PBL Teaching Mode

In the PBL teaching mode, students' performance can come from such factors as below. Firstly, give a mark according to each students' performance in PBL course learning, for example, the frequency of asking or answering questions, the fitness and accuracy of asking questions, the vertical extension and foresight of knowledge and information related to the questions, the discipline crossing and knowledge coverage related to the questions, the logic and accuracy of answering questions, the ability of foreign language applying and expression in answering questions and clarifying viewpoints, the accuracy and organizing ability of knowledge and information applied in answering questions in the scene, the quantity and quality of information used in the scene, the consciousness and ability of innovative thinking, the ability to use foreign language, etc. Secondly, give a mark according to the whole PBL learning group's performance in PBL and then calculate the average of summarized marks of individuals in the group. Note it as the individual mark depending on the performance of group. Thirdly, the written testing mark of the raised questions on some idea or teaching key points given when the course learning finish. Allot the proportion of the above marks of several factors appropriately and calculate the total marks of students in 100.

You may find the sharp comparison between the PBL teaching mode and the traditional one from the following table 1 and 2.

In addition, in the aspect of teaching effect evaluation, we can have a subjective and objective evaluation of PBL teaching mode effect in two ways. The first one refers to applying traditional teaching mode and PBL teaching
mode into teaching work to the same group of students successively and taking the same testing way or the standard of evaluation to have a subjective and objective evaluation of the effect at last. The second one refers to dividing the same group of students into two groups in a random order and applying traditional teaching mode and PBL teaching mode into teaching work to these two groups respectively and taking the same testing way or the standard of evaluation to have a subjective and objective evaluation of the effect at last.

In the aspect of objective effect evaluation, when finish the course study, students can have an examination of written tests about some problem provided by the advisor group and then be given a mark. In the aspect of subjective effect evaluation, the mark can be given according to the test of students' subjective impression and thoughts in the form of questionnaire after they participate in these two teaching mode respectively.

CONCLUSION

Comparing to traditional teaching mode, PBL is a revolutionary, effective mode that breaks through classes. It requires students of using all kinds of resources by their sides, investigating questions in and out of classes, collecting and analyzing data through expressing potential and creativeness to be present as “works” in front of the teachers and students, under which students’ independence are greatly expressed and knowledge are effectively developed at the same time as they learn to study, communications and cooperation between learners strengthened. Of course, we should realize that how to carry out teaching by adopting PBL Teaching Mode is still limited by some certain factors, such as the designing of the project, the role of the teachers and the choosing of the occasion, etc. It needs our university English educators’ continuous efforts to achieve the ideal combination of PBL and university English class teaching.

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