

THE DEVELOPMENT OF STUDENTS ORAL SPEECH USING PROBLEM-BASED LEARNING SKILLS

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Abstract

In the world practice, scientific research is aimed at the development of oral knowledge, skills and abilities in teaching English. The technical higher educational institutions and the integration of skills in teaching process are being conducted. The English language proficiency is becoming increasingly important for academic success. English is one of the compulsory subjects in the school curriculum, and it is taught in all disciplines, including teacher training, vocational, science, engineering, and technology. The aim of the article is to substantiate how to teach students to develop oral speech using problem-based learning and to strengthen their knowledge in the fields of engineering, management, and business spheres, to increase the effectiveness of oral speech in English, and how to effectively use Problem-based learning skills (PBL) in the technological processes. Results show the important aspects of Problem-based learning method in today's modern educational environment, the development of critical thinking, independent and creative skills of learners, the further development of the mental activity, the search for various solutions to problem situations, effective methods of problem-based education, general information about its importance and features are given.

Key words: problem-based learning, problematic situation, knowledge acquisition, speech methods, speaking skills.

Introduction

Problem-based learning (PBL) is a new system that uses logical thinking, analysis, research, generalization, problem situations, finding solutions, curiosity, needs, and methods that is why the aim of the study was to substantiate how to teach students to develop oral speech using problem-based learning and to strengthen their knowledge in the fields of engineering, management, and business spheres. PBL is a student-centered method where students solve open-ended problems in groups to gain knowledge about a subject. This issue is what drives the motivation and learning. Problem-based learning is a useful teaching tool in today's high schools. Its job is to form a scientific research method of thinking and promote the process of active learning. Instead of presenting facts and concepts to students directly, Problem-based learning (PBL) uses intricate real-world problems as a means of fostering their understanding of concepts and principles. PBL can help students develop their critical thinking, problem-solving, and communication skills in addition to the course material. Additionally, it can offer chances for group projects, locating and assessing research materials, and lifelong learning (Duch *et al.*, 2001).

Hung introduced the 3C3R model as a conceptual framework for systematically designing optimal PBL problems. PBL is an instructional method that drives all learning via solving an authentic problem. The idea of 'basics first' goes out the window in PBL; rather, one learns the basics in the context of a meaningful, but ill-structured problem-solving activity. A cohesive body of research is beginning to show the effectiveness of PBL (Hung *et al.*, 2008).

Problem-based learning (PBL) is perhaps the most innovative pedagogical method ever implemented in Education. Its effectiveness in facilitating student problem-solving and self-directed learning skills has been widely reported in medical education (Barrows &

Tamblyn, 1980). Although such a statement may appear self-evident, this assumption is in conflict with our public education system, which primarily implements learning only in formal education settings perhaps implying that once we leave school, we cease to learn. Problem-based learning has its implementation roots in the field of medical education starting in the 1950s (Savery & Duffy 1995).

Hung also reported, a related perspective posits that PBL has its roots in theories of situated learning (Hung, 2002).

Jonassen concluded that, fundamentally, PBL is based on constructivist assumptions about learning. Constructivism can be described in terms of five tenets about knowledge, meaning making, and learning (Jonassen, 2004).

As we engage in learning, community and their beliefs and values influence communities (such as the interactions among learners in a PBL environment), our knowledge and beliefs about the world. For instance, our knowledge of the world is influenced by the activities in which we engage at work. The beliefs and knowledge of our fellow practitioners or learners influence our thinking. Duffy and Cunningham (1996), then, see learning, as changes in one's relation to the culture(s) to which one is connected. Our knowledge and belief are distributed among the participants in these communities (Salomon, 1993). This interaction and interdependence are played out particularly in PBL, as learners rely on the experiential knowledge of other team members to help accomplish tasks or articulate beliefs or stances needed to solve the PBL problem.

Although all of these studies may be helpful for understanding what PBL problems should contain, faculty-implementing PBL may still find this work lacking in specificity. Major and Palmer offer that those implementing PBL should consider two techniques for problem improvement: outside

evaluation by experts and content analysis of projects (Major & Palmer, 2001).

The study identified that the two most important criteria were that the problem should stimulate thinking or reasoning and lead to self-directed learning in students. Sockalingam and Schmidt characterize the problems for Problem-based learning (Sockalingam & Schmidt, 2011). Students identified eleven characteristics, of which they found the extent to which the problem leads to desired learning outcomes as the most important characteristic. The extent to which the problem stimulates elaboration and the extent to which the problem promotes team effort were considered to be the least important problem characteristics.

Akhmedova says some information in her dissertation where the essence of concepts like Problem-based learning, problem solving as a learning principle, problem-based methods, problematic task, problematic question, problematic task, and problematic situation revealed, the categorical apparatus of problem-based learning technology finds it is largely exhaustive description considering that we accept the definitions in their entirety (Akhmedova, 2012).

Problem-based teaching corresponds to the goals of creative and active personality education. Problem-based teaching has a great potential in revitalizing students' cognitive activity in conscious and solid acquisition of knowledge, determining their active attitude to the environment. In problem-based teaching, the teacher organizes the students' cognitive activities, so that the students independently solve intellectual problems based on the analysis of subjects, draw conclusions, generalize form laws, and apply the acquired knowledge to a new situation.

When we talk about the problem-based education in pedagogy, the first thing that comes to mind is oral, demonstrative and practical methods. Each of the verbal, visual or practical methods of education can create a problem situation in the student's mind. Problem situations, in turn, lead the students to independent thinking, reflection, research, and creativity, in other words, to the growth of his mental potential. In today's era of globalization, the problem approach should find its expression in educational programs and independent activities of students including problem statement of knowledge, encourage students to search, research method of education.

Problem-based education means imparting information to learners in a way that is appropriate to their level and creates problems. Only when education is conducted in this direction, problem situations arise in the students thinking activity, and they encourage them to objectively search, think, and learn to make logical scientific conclusions.

Problem-based education is a subjective form of expressing the need to develop scientific knowledge. A situation objectively arises between knowledge and ignorance in the process of the development of a new

society. A problem situation is a certain mental state of the student, which arises due to the realization of a conflict in the process of performing a certain task. The 'Problematic situation' method is designed to help students develop the ability to examine the causes and effects of difficult situations, identify multiple solutions, and determine which conclusion is the most appropriate.

First, the difficulty of the problem selected for the 'Problem Situation' approach ought to match the students' level of understanding. When choosing problematic situations, the age and level of education are important. Students must be able to solve the provided problem. If they cannot do so, they will become disinterested and lose confidence. The fundamental aspect of problem-based learning is how teachers guide the cognitive processes to learn new material by posing problems in their assignments and helping them find answers to questions and tasks. This establishes scientific research methodology for knowledge acquisition.

In the classroom teachers do a significant role, but students should also take charge of learning. This shift of roles in the classroom significantly influences student's intrinsic motivation to learn English (Alharbi, 2015.)

The following potential didactic objectives must be considered when setting up a problem situation: to draw students attention to the course material, spark their curiosity, increase their level of cognitive activity, and expose them to challenges involving intellectual tension, the current knowledge acquired by students, skills and abilities that will arise in the future, it is necessary to show that students' knowledge requirements and it is vital to help analyze educational problems and determine the most rational ways to solve them.

Several types of problem situations in the educational process are distinguished:

1. Students do not know how to solve the task, so they cannot answer the problematic question;
2. Students are faced with the need to use previously acquired knowledge in a new situation;
3. There is a conflict between the way the task can be solved theoretically and the difficulty of applying the chosen method in practice;
4. In the performance of the task, there is a conflict between the practical achievement of the result and the student's lack of knowledge to justify it theoretically.

The literature lists the following typical methods for putting oneself in a difficult situation:

- encourage students to explain conflicts and inconsistencies between events and facts;
- encourage them to analyze facts and events that cause a conflict between scientific concepts and life ideas;
- encourage them to draw conclusions and compare facts, events, and actions;

- familiarize them with seemingly incomprehensible facts that caused a scientific problem to be posed in the history of science. Teachers have given students a number of difficult assignments to help them explain the nature of concepts they have studied and events.
- analyze the need for, viability of establishing an authentic communicative environment using communicative language teaching (CLT) to teach speaking, listening using computers, and websites.
- discuss the elements of the learning and teaching model in the authentic communicative environment by using CLT with feedback and evaluation from both the teachers and the students (Canale & Swain, 1980).

Materials and Methods

The main goal of this work is to find if studies of foreign language course in engineering technologies institutions will be more effective when PBL method during the lessons is used. If teachers can successfully do these activities, the students will join thoughts, get into the flow of solving problems, think together, and get excited together, thus becoming participants in the training. By doing this, the teacher directs the student's cognitive process by asking questions, thereby drawing attention to the conflicts in the audience on the studied material and forcing students to think thoughtfully. Before the teacher solves the incomprehensible question, students prepare their answers and compare them with the teacher's opinion and conclusion.

PBL includes the following teaching and learning materials: a) textbooks and novels; b) films and television; c) plays; d) radio programs and podcasts; e) multimedia, applications, software, platforms, and games; f) social media; g) digital learning resources such as video, audio, text, websites, animations, and images, and h) lectures.

PBL learning objectives include the following: students can gain oral skills related to engineering, business, management, and social science, as well as skills related to group work, project management, leadership, self-awareness, and group process evaluation. They can also work independently, critically analyze and explain concepts, engage in self-directed learning, conduct research, and become information literate (Nilson, 2010).

There are three parts of problems: known (based on the assignment provided), unknown (finding them creates new knowledge), and prior knowledge (students' experiences). They are essential for conducting research to uncover unknown. Students are first given an unknown learning problem to solve; neither the methods nor the outcomes are known. Instead, they must use their prior knowledge and skills to determine the expected outcome or solution.

The 'Problem Situation' method's framework:

- grouping to identify the root causes of a problematic situation;

- considering the ramifications of a problematic situation;
- creating a solution to a problematic situation;
- selecting appropriate solutions.

The 'Problem Situation' method involves the following steps:

the teachers divide the class into small groups, and the groups analyze the given problematic situation to identify the root causes of the issue. The educator selects a problem situation that is relevant to the topic and decides on goals and tasks. The teacher then explains the problem to the students.

- They make opinions about the consequences of the problem;
- they analyze and discuss various approaches to solving the problem to come up with a solution;
- small groups present their suggestions for how to solve the problem situation.

A problem statement of material is fundamentally different from the statement of information, because the signs, properties, concepts, rules of particular phenomenon are simply described, ready conclusions are stated (Brumfit & Johnson, 1979).

One of the widely used methods in the educational process is the method, which is conditionally called the problematic beginning of the statement of educational information. This method differs from the method of problem statement of the material only in that the problem situation is created at the beginning of the statement of the material. Then the material will be presented in an informative way.

The above methods of creating a problematic situation do not limit its other options. Each teacher in his practical activity finds various possibilities of organizing it in the course of creative work with educational materials. The thoughts of the students become more and more complex, the problematic situation creates a certain emotional presence in them, and they are satisfied with the independently realized cognitive process and discoveries.

To facilitate the process of setting the educational problem, it is necessary to follow a certain order. A problem cannot be posed without activating the framework of previously acquired knowledge that is directly related to the new concepts to be solved. Before giving problem tasks, it is necessary to make sure that students have mastered the methods of establishing cause-and-effect relationships, to study the level of ability to analyze a problem situation. It is also possible that the teachers do not bring to the attention problems that are convenient for him. At the same time, it is necessary not to forget that it largely depends on being able to put it correctly.

The teacher should choose a topic based on the interests and experiences of the class so that students become familiar with new words. Students can pick up two or three new words in English. Students can therefore have strong word memory skills. Pupils should be taught to arrange words when they pick up new concepts and vocabulary. The word order in

English is very different. The pupils should fully comprehend it and use it in their speech. To grasp the correct word arrangement, the teacher should encourage speaking among his pupils. He can improve it by posing queries to students and getting their responses. He is capable of setting up talks or debates. Therefore, the student could acquire the habit of speaking.

- The significance of oral work includes the following: It helps students read the text in lessons more effectively and paves the way for textual teaching;
- it makes students perfect in all forms of reading and writing;
- it prevents students from speaking too effectively and from mastering communication skills (Patel & Praveen 2008).

Results and Discussion

As a result of our research, in teaching conditions, the mental and emotional state of a person acts as a special impetus for thinking and intellectual research. The problematic situation arises in specific teaching conditions, which are organized according to the purpose of certain pedagogical tools. The problematic situation is different from any thinking difficulties, in which the student realizes the internal, hidden connections of the object (concept, fact) that required difficulty with the task, a problem known to him (Ashurov, 2016).

Following all conclusions, the same conclusions are summarized under the guidance of the teacher, who chooses the most optimal options for solving the problem situation.

The pedagogue's comprehension of the educational and instructional roles of this education is crucial for planning and carrying out problem-based learning activities. In all phases of the educational process, one can make use of this problem-solving educational technology, for example, in the statement of a new topic, in strengthening and controlling knowledge.

As a result, a task that students are familiar with and can complete on their own cannot be considered an educational problem. Moreover, a task cannot be an educational problem if students are unaware of how to solve it.

The following are significant indicators of a learning disability:

- introducing the unknown, which results in the creation of new knowledge;
- students have a certain knowledge reserve necessary to carry out research to find the unknown.

An important stage of students' mental activity when solving an educational problem to formulate and justify a hypothesis.

The learning problem is consistently developed through problematic questions serving as a step in the solution. The problem components, the character of the relationship between the known and the unknown,

create a desire for knowledge and encourage an active search for knowledge. It should be noted that a necessary condition of problem-based teaching is to create a positive attitude towards the process of searching for the truth and its results.

In problem-based learning, students engage in creative and cognitive thinking by expressing problems in the exercise when they arise, that is, they express in words the essence of the occurrence of cognitive difficulties (that is, what is known to them at this moment), and then they look for ways to solve the problem, taking various assumptions. After solving the problem or completing the task, the students take one of the assumptions they find to be true and conduct research to support it. The self-knowledge activity's search phase can be represented by unique schemes: a problematic circumstance an education issue; an investigation into an issue in education; the teacher must have a solid understanding of the training's instructions and instructional functions to plan and lead problem-based training sessions. The instructor should never provide the students with a prefabricated truth (solution); instead, they should inspire them to learn and assist them in mentally processing the data, occasions, and events that are essential to both training and life. The students take as a hypothesis one of the activities.

The purpose of problem-based teaching is to help students effectively master the system of knowledge and the methods of intellectual and practical activities, to create the skills of creative application of knowledge in a new situation, and to solve the problems of learning and education. The problem of practical analysis of the educational process opens up the possibility of determining the uniqueness of teaching. The teacher's unique arrangement of the material for the student to learn is the fundamental component of problem-based learning.

The system of improving educational information is one of the prerequisites for the setup of problem-based learning. The learner's subjective perspective, comprehension of the objectives of knowledge and decision-making, and capacity to assess the available options for problem-solving and outcome-achieving constitute the third prerequisite for problem simulation.

The instructor considers the lesson's goal, the subject matter of the teaching aids, the audience's makeup, the students' preparation level, listening to them, and making connections between them. The high level of educational efficiency can only be guaranteed at that point. It is advised to begin with a problem statement, progressively advance to research work, and progressively advance from simple to complex in the chain of all problem-based teaching techniques in order to engage students in creative activity. It is stressed in pedagogical literature that the development of reproductive and re-development strategies is a prerequisite for implementing students' creative activities (Woods, 1996).

Therefore, in order for problem-based teaching to be effective enough, it should be an integral part of the educational process. In the process of conducting problem lectures, the formation of motives, valuable guides and referrals necessary for creative activity in students takes an important place. It should be noted that the range of educational activity motives is a sum of many motives, but two groups of them are decisive. Speaking topics can be given in the form of a problem that cannot be solved immediately. In preparation for the workshop activities aimed at revolutionizing the way of thinking, the teacher develops a carefully thought-out scenario that covers the following issues:

- description of students ability to reveal their knowledge sufficient for their participation in problem-solving, as well as the tasks necessary to reveal knowledge;
- getting into the problem and expressing the problem on the basis of bringing out the knowledge of the students;
- formation of the final conclusion (decision)-result of the correct solution of the problem;
- formulating a problem that ensures the complete solution of the problem;
- formation of intermediate conclusions consisting of answers to problems within the problem;
- formulation of problem questions that provide correct answers in solving the issues in the problem.

‘Problem situation technology’ development of learning language and speaking objectives is a problem-based learning method that aims to develop language and speaking learning goals.

‘Speaking’ determination of educational goals based on Bloom’s taxonomy on the subjects are the following:

Categories of Bloom’s taxonomy: learning objectives for speaking topics.

A learner should know: information about speaking processes; knows how to form concepts through oral speech methods.

Must understand: the speaking process-the activities that ensure the creation and implementation of speech; the practice of the humanitarian school understands the development of specific forms and methods of speaking activity and their essence.

The learner should be able to apply: to find ways of forming concepts through oral speech methods, to enrich the form and content of modern teaching in order to stimulate students’ motives for learning; effective use of speaking methods in the educational process.

The learner must analyze: the difference between speaking skills processes.

The learner must be able to synthesize: practical application of the created speech, summarizing the ways and stages of achieving high efficiency by further developing it and introducing additions; generalization

of knowledge about the essence of innovative process and methods.

The learner should be able to evaluate: speaking activity, the importance in increasing the effectiveness of the educational process; the importance of speaking methods in increasing student learning rates.

This teaching method can be implemented by switching from the informational-visual approach of reading to a partially creative method, which creates certain cognitive difficulties in students at different stages and conditions which are successfully solved based on the introduction and processing of previously formed knowledge and skills during the teaching process. In the system of preparing students for creative activities, the teacher needs to be able to pay attention to them during the lesson and give appropriate instructions for learning activities. It should also be noted that such an experiment practice aims to confirm the truth of acquired knowledge and ways of seeing thoughtful judgments. Such a course of training forms skills for conducting scientific-theoretical research and experiments, thereby they engage in scientific creativity, and business communication, plan the stages of research, express its goals and tasks (Bloom, 1956).

When asking problematic questions to students, it is necessary to ensure the continuity of problematic questions and their connection with the results of their creative work.

In general, the development of speaking and critical thinking skills include the following stages:

1. bringing to light the knowledge necessary for active participation in creative activities to solve educational problems;
2. getting into the problem and expressing it;
3. organizing problem-solving based on students’ previously acquired knowledge;
4. organizing a creative activity on problem-solving (posing a problem and problematic question of finding an answer to a question, expressing intermediate and conclusions).

Conclusions

1. Speaking topics were selected and educational goals were determined in the teaching of this topic, and innovative educational technologies were used.
2. Based on the plan drawn up for this topic, educational goals for teaching the topic (according to Bloom’s taxonomy) were developed.
3. The learner’s learning was regularly and effectively monitored, control questions related to the learning material were created.
4. As a result of the study of the topic, it was possible more effectively organize the English language lessons using innovative methods, problem-based educational technologies, and problem-based teaching technologies, and reveal the importance of the topic in a broader and deeper sense for students to master.

5. The methodology of teaching this subject has been developed when the training is conducted using the above methods, the level of mastery of the subject increases, the efficiency of the lesson increases, and the training is conducted in an unconventional and demonstrative way.

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