# GENERALITY AND DIFFERENCES BETWEEN SITUATION PROBLEMS AND CASE METHODS

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Annotation: Situational problem-based learning, its essence. Pedagogical researches on PBL and Case study methods, their results. Strengths and weaknesses of situational problem-based teaching. The essence of the content of the Case study, the peculiarities and weaknesses of the Case study, the similarities and differences between PBL and Case.

Keywords: Situational Teaching, Case Method, Situational Creation, PBL Teaching Methodology, PBL Method Convenience, PBL and Case Similarity, Unique Aspects.

Introduction General information about PBL and Case study. Both of these methods have been used primarily in medical students and are now used in almost all fields of teaching. Throughout my career, I have used these two methods for medical students, and have conducted various pedagogical studies to study the strengths and weaknesses of both methods. Through these studies, I have identified which methods are most effective in teaching the subject. The following are the main aspects of PBL and case studies.

- ❖ PBL is a method of in-depth study of a set of disciplines through the study and analysis of reallife situations. From a medical point of view, a single medical discipline is not enough to make a particular medical practice in real life. Through PBL, students do not have to study and analyze each subject separately. They study a set of sciences through a specific situation.
- ❖ Case research method A type of research that collects in-depth data on a case, conducts research, and uses a variety of methods. Case can be widely used in medicine, security, law, psychology, and manufacturing. A case is an in-depth account of a particular situation, for example in medicine. We conducted a small study to see how these two research methods work in practice and to learn more about them.

**Aim of the research:** To study the effectiveness of PBL and CASE research methods, to develop practical skills in organizing research, to analyze similarities, differences, strengths and weaknesses of these methods.

Component of research: Small groups were formed from the groups 162 and 163 of Bukhara State Medical University. Each group was sent to a separate medical association for 2 weeks of practical training. In the first week, the students of the 162 group were sent to the first state medical clinic, the 163 group to the private clinic "AKFRN". The students of the 163 group were trained this week in a private medical clinic based on the case study method and the students were given the necessary directions.

Table 1. Component of research. For the 1 st week

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Groups		Deadline	Research	Organization for
	students		methods	research
162	9	7 days	PBL	Public hospital
163	6	7 days	CASE	Private clinic

Table 2. Component of research. For the 2nd week

Groups	Number of the students	Deadline	Research methods	Organization for research
162	8	7 days	PBL	Public hospital
163	5	7 days	CASE	Private clinic

## Practical recommendations for organizing problem situations for research

Requirements for the description of the problem situation:

- The situation should force the student to analyze his / her understanding in- depth;
- The situation is able to defend a reasonable solution and the conclusion presented by the student;
- The given situation should create a connection between medical disciplines and encourage the student to re-analyze the knowledge acquired in previous courses;
- The difficulty level of the given situation must be high; o Force the student to work in a group;
- Curiosity of the situation is the most important condition for involving students in the study of the situation;
- In order to find a solution to a given situation, the student must require a step-by-step conclusion, which, of course, determines the level of complexity of the situation

## **Organizing the Case research**

Case studies are looking for an answer to the question of what are the properties of a situation? Case research takes a long time and is being investigated on the surface of the case Components:

- Interviews will be conducted (formal and informal)
- The archive of documents will be reviewed
- Statistical data are collected
- Follow-up research will be conducted (individually or in groups)

#### The case study method consists of two major parts:

The first part is the study of the history of the case (when given in the Case assignment, the information is given at the beginning of the protocol). General information about the patient's condition, age, marital status, mental status, social status, abilities, goals, and even deficiencies. Patient problems are studied and described. External, internal, mental symptoms of the patient problems are described.

Student's Diagnosis: Basis for Diagnosis diagnostic analysis provides statistical data, which summarizes the main factors that led to the diagnosis. It describes the confusion and difficulty in the given conclusions.

The second part - The order of treatment: First of all, the reason for choosing this type of treatment, evidence of the effectiveness of treatment, the patient's attitude to the type of treatment, the problems encountered by the patient during treatment, psychological approach to the chosen type of treatment are displayed.

The pharmacological characteristics of the selected practice or drug as a measure of treatment, the cause of its use, the effectiveness, the results of its effect are indicated.

**Table 3.The result of the research Groups** 

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Group	Accuracy of reports on the problem situation	The quality of the information studied in the medical	The accuracy of the study of the course of treatment of	Correctness of conclusions on the consequences of	Effectiveness from general academic disciplines	The number of the used literatur
162 163	89 % 85 %	78 % 95 %	85 % 83 %	63 %	87 % 68 %	11

#### The 2nd week

162	87 %	74 %	68%	70 %	87 %	9
163	88 %	94 %	80 %	88 %	68 %	4

Recommendations based on the results of the study:

Recommendations for teachers:

What to pay attention in a PBL?

Idea Clarity - Choose a clear principle for the student. Start the concept with concrete tasks; Accuracy of Learning Objectives-Define in advance the tasks that the student needs to know through the given task;

When creating a problem situation statement, enrich it with situations that force the student to deepen the concepts they already know;

Customize the problem for the student — avoid simple situational assignments as much as possible;

Denial of simple solutions - the more complex a student learns, the larger his field of study will be and the easier it will be to give conclusions from simple solutions;

When you give a problem situation, include steps and principles in solving the situation so that you give the student the right direction;

Set a time limit for students to study the situation;

When small groups are given a situation, get short reports from students and comment on the reports;

Organize short lectures in small groups so that students can work on their own and find the lectures they are looking for interesting and effective.

Based on your own knowledge and experience, prepare handouts for students on a set of special case studies. In such handbooks, give examples from the results of practical research with students and their reports. Another important task for us is to encourage students to go to the library when looking for a solution to the situation. Many students present simple conclusions, many of them use only internet sources. Introduce interesting and important inter-literary ideas as you listen to their reports. Students will consciously understand that the answers to the questions they are looking for

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can be found in these publications, not through the Internet, and will learn to use the library's large database through volunteer interest.

Conclusions based on the results of the study

#### Conclusion 1.

#### **Strengths of PBL training:**

- Creates an exchange of views,
- Guarantees interdisciplinary coherence;
- -From a medical point of view, in real life, one medical science is not enough to teach a particular medicine.

By teaching PBL, students do not have to study and analyze each subject separately, they study a set of sciences through a certain situation.

- Encourages the students to learn theoretical knowledge, through this, they develop their skills. The conclusion to a given situation is that as it requires proof, it motivates the student and builds confidence in his knowledge.

Another achievement of PBL is that teamwork and short reports which teach students to think critically. Independent research forces them to make independent decisions, which in turn play an important role in their future. PBL allows for the development of high-level skills without the need for more learning. It plays an important role in the formation of a skilled workforce for the modern medicine.

Ability to adapt in distance and traditional education. Situational learning, whether collective or individual, forces students to use a variety of resources, both online and offline, creating a wide flow of information. The findings provided by the student also provide a wide range of opportunities to assess the student's interests and opportunities, which is very important in directing the student to the field in the future.

#### Conclusion 2.

## Different peculiarities to distinguish the Case method from the PBL method:

In medicine, the Case method was considered to be a method of teaching through in-depth study and analysis of a work, which can also be called a method of teaching through in-depth study of concepts. It allows to compile a large, in-depth database on a single topic. It provides practical skills in such situations, mainly through in-depth study, which is rare in medicine. Creating a personal hypothermia that arises through a student's independent research offers a great opportunity to prove it. The results of the case study are presented in chronological or biographical descriptions, not as a simple statement. Your conclusion must answer to the certain requirements for confirmation. It is very convenient to study a certain person or group.

#### Conclusion 3.

## Weaknesses of the case study method:

Although some Case students have a deep knowledge of the disease and the disease itself, they have difficulty explaining the causes and consequences of the disease. In this method, the student has difficulty in scientifically interpreting the diagnosis, which is largely based on his own knowledge and creative thinking.

#### Conclusion 4.

## General aspects of research methods:

- -General aspects for small groups or individual work;
- -Online and offline education also works in the system;
- -Creates interdisciplinary connections
- Forms a wide flow of information in the study of the disease;

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- -Exchange of ideas, guarantees the diversity of ideas;
- -Teaches students to search independently, to make independent decisions;
- -Develops deep skills; Teach your student how to learn, he will learn throughout the day. Teach your student to explore he will learn throughout his life.

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