



## Case-based Method and its Implementation in English for Medical Purposes

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### Abstract

*The case study or case-based technique has been widely employed in a variety of areas due to the tremendous benefits it provides for teaching and learning. The Indonesian government also encourages the use of the case method as one of the methods emphasized in the Key Performance Indicators of Higher Education (IKU) guidelines. The 7th data attribute in IKU specifies the use of case method in classroom activity besides team-based project. This article presents a literature review of the case study by exploring the benefits and the challenges of implementing this method in the classroom. Since the globe has grown more interconnected and interdependent, there is a greater need for English proficiency in healthcare settings. In addition to clinical abilities, medical students should be able to use problem solving, critical thinking, and effective collaboration to perform well in their field. Thus, the author also presents an alternative scenario of the case study implementation in English for Medical Purposes. Case studies or case-based strategies can help students learn and communicate successfully in the classroom, yet it is a challenging activity. As a result, lecturers must plan ahead for some classroom preparations and other technological concerns.*

**Keywords:** Key Performance Indicator, Case-based Learning, English for Medical Purposes

### INTRODUCTION

In the middle of the Covid-19 pandemic situation in Indonesia, the government continues to place a high priority on the Indonesian education sector in order to promote Indonesia Vision 2045, which is currently in progress. The endeavor to increase educational performance targets is reflected in the Key Performance Indicators of Higher Education (IKU) guidelines contained in the Minister of Education and Culture's Decree No. 754/P/2020.

There are eight data attributes from the IKU that can be used to improve the quality of Indonesian education. One of the data attributes is IKU 7 on Collaborative and Participatory Classroom. In IKU 7, the case method is one of the learning approaches emphasized in the Guidebook for the Key Performance Indicators of Higher Education in 2020.

The case method, often known as case-based learning, is one of the most extensively used teaching methods in a wide range of subjects, including English. In educational terms, case-based learning is a paradigm that is closely linked to the more often used PBL. It addresses both clinical and non-clinical concerns that are prompted by real-life issues (Schmidt, 2000).

Through conversation, contemplation, and decision-making, students are urged to integrate their prior experiences in order to assess cases and discover answers (Wang & Bonk, 2001). Thus, implementing case studies in English for Medical Purposes class will offer significant benefits for both the lecturers and students.

## **II CASE-BASED METHOD**

### **2.1 Basis of Case-based Method**

Case method learning, also known as case-based learning is a pedagogical method that has been around for a long time. It is a well-established teaching and learning method that can be defined in a way depending on the discipline and type of "case" used. The Harvard Business School made a significant contribution to the development of the case method the nineteenth century. Several bits of evidence imply that the HBS provided an epistemology that served as the foundation for the practical approach to education that is evident in the case method (Jones & Monieson, 2015). The case method is a flexible form of learning that includes problem-based learning and encourages the development of reasoning skills. It enables students' high order thinking skills following Bloom's taxonomy of cognitive learning by exposing knowledge in the form of a narration with questions and activities that foster group debate and problem solving (Anderson & Krathwol, 2000; Herreid, 1994; Herreid et. al 2011)

Teaching with the case approach is a time-consuming process. It involves time to evaluate, discuss, reflect, and evaluate. When selecting the number of cases to analyze, lecturers must take into account the duration of the course, the number of times the class meets, and the length of each class session. Teachers must also select when cases should be assigned and how much time should be set up for class discussion. The invention and effective use of cases in education can be an effective instrument for lecturers and students to get even more actively involved in issues related to the real-life situation. The case presented in the classroom should meet several requirements to make it as an effective source of learning. As cited in Thistlethwaite et.al. (2012), the National Centre for Case Study Teaching in Science established some criterion of good cases. Cases should be authentic, include common situations, tell a storyline, be associated with specified learning objectives, be meaningful, arouse attention, develop empathy with the characters, encourage decision-making, and have broad application.

In addition, Gwenna Moss Centre for Teaching and Learning (2017) also proposes ten characteristics of good cases. Good cases should:

- Be useful and valuable for teaching
- Represent a broad issue
- Convince a compelling story
- Focus on a topic that attracts students' attention or be debatable.
- Pose a problem with no obvious solution
- Try to deal with the major characters.
- Require the students to apply the case's facts to solve the problem.
- Demand critical and analytical thought to help address the issue
- Contain only the information necessary for a thorough examination
- Relate to students' situation

Since a case study or case-based method is a dynamic and flexible method to be used in the classroom, there is no exact steps or procedures in implementing the method in teaching and learning activity. However, some experts have tried to propose some alternative ways of implementing case studies in a classroom. The Maastricht seven-jump process cited in Gupta & Grover (2021) outlines the steps in implementing case study into the following order:

1. Establishment of the case
2. Group analysis of case
3. Brainstorming session
4. Learning objectives formulation
5. Results presentation
6. Group sharing
7. Identification of areas for improvement

Another alternatives procedure is proposed by Roell (2019) in which she outlines 6 steps in implementing case study method. The steps are as follows:

1. A brief overview of the scenario
2. Analyzing further materials and reading the case
3. Exploring other alternatives
4. Presenting results and explaining how to address the issue (explaining solutions)
5. Follow-up session
6. Reflection by students
- 7.

### 2.2 Benefits of Case Study

A series of studies on the role of student participation in the educational process has proven beyond a doubt that active participation in the learning process enhances students' retention. When the students engage in group discussion with each other about the cases, they are able to learn in an active manner, which is one of the characteristics of case-based learning. The direct experience they get during the discussion serves as a tool for better knowledge transfer. Other researchers have examined the benefits of case study or case-based learning. The following table summarizes the benefits from several literature.

No.	Researcher(s)	Year of Publication	Benefits
1	Williams	2005	Individualized learning is made possible through the development of intrinsic and extrinsic motivation, which stimulates self-evaluation and critical reflection, as well as scientific investigation and the development of supporting evidence for their conclusions.
2	Dowd & Davidhizar	1999	bridging the gap between theory and practice by identifying and explaining common problems; illuminating human intentions, feelings, and misinterpretations; providing models of expert practitioners' thoughts on clinical dilemmas; increasing students' range of problem-solving strategies; preparing students for real-world situations
3	Kunselman & Johnson	2004	Case studies encourage active learning; their use enables students to comprehend difficult and difficult situations as well as interpret explanations of interconnected processes.

4	McLean	2016	Some of the benefits of employing case-based learning are a greater focus on learning objectives, greater flexibility in how cases are used, and the opportunity to induce a higher degree of learning through eliciting more critical thinking abilities.
5	Chammas	2017	Teaching through case discussions is a great approach for several reasons. First, it enables students to engage among themselves. Also, it allows participants to express their own perspectives, and helps participants to decide at solutions to issues together.
6	Grosse	1988	She points out that the case approach helps students in a variety of ways, including chances to read, talk, listen, and write. Additionally, rather than using conventional practices, vocabulary and grammatical structures are taught and mastered in the context of the case.

### 2.3 Challenges of Case Study

Although the case study approach has been shown to provide a range of beneficial results in student learning, there are certain constraints and challenges that may be experienced by both of the lecturers and students during its implementation. Case studies are effective in complicated scenarios where problem solving is required, but they are not well-suited for conveying factual information. Furthermore, developing cases is time-consuming and may be difficult to accomplish. Some lecturers may struggle to locate materials that are relevant to the actual world. Besides, the lecturers must be able to ask effectively in order to successfully use cases in the classrooms. Furthermore, case study might be frustrating for learners who do not have time to prepare themselves or who are accustomed to more conventional methods (Billings&Halstead,2005).

An extensive literature review was performed by Mosterts in 2007. He outlined the challenges of implementing case-based method into two categories including pedagogical challenge and practical challenge. The possible challenges in pedagogical are unfamiliar teaching scenario, relating the problems to the learning objectives, preparing the appropriate cases, teaching strategies, and encouraging meaningful discussion. Meanwhile, the practical challenges are students' number, time allotment, classroom settings, and students' proficiency. Based on the author's experiences, most of the challenges are from the students' side. As explained in the beginning of this article, case-based method requires higher level of thinking. Thus, inexperienced students will find it difficult to follow the instructions and contribute to the discussion.

### III USING CASE STUDY IN ENGLISH FOR MEDICAL PURPOSES

The case study or case-based method was initially used for fields related to business and health care study. As the use of this method increases, educators are elaborating this method into other fields of study. According to Basta (2017), the case method was created for non-

linguistic disciplines. However, it became prevalent in the area of English for Specific Purposes (ESP), with educators believing it provided better and more engaging language learning methods. Besides, Roell (2019) also argues that case studies can be tailored to different language levels and teaching situations, such as English for Specific Purposes (ESP) or content-based learning (language acquisition combined with the study of a subject matter). Therefore, the case study is also used in one of the branches of ESP, namely English for Medical Purposes (EMP).

The following section presents an example of a short case study in the School of Medicine. This case study is adjusted to the students' requirements as the students in this faculty. This scenario helps the author when teaching a large class with different levels of students. After studying formal language, learners apply the knowledge to the real-life context. In this activity, the students experience learning speaking and writing. The time allotment for this activity is approximately 100 minutes.

#### *Procedure*

1. Defining the case  
After finding the seminar's topic, the students should browse the information related to the speakers' previous research or publications in *Google Scholar*. The students should analyze the specialty of the doctors or nurses they are going to invite to suit the topics discussed in the upcoming seminar. They should find some names to be proposed as the speakers.
2. Analyzing materials  
After finding the topic of the seminar, the students should browse the information related to the speakers' previous research or publications in *Google Scholar*. The students should analyze the specialty of the doctors or nurses that they are going to invite so that it suits the topics discussed in the upcoming seminar. They should find some names to be proposed as the speakers.
3. Exploring alternatives  
The idea of finding information from *Google Scholar* is proposed by the lecturer. Thus, in this step, the students are also allowed to browse more information from other possible resources.
4. Presenting results  
After discussing the possible candidates for the seminar, the students will share or presents the results. In this section, the students should come up with names and the reasons why they choose these candidates.
5. Follow-up session  
In this follow-up section, the lecturer will review the results of the discussion and the students' justification. The lecturer also gives reinforcement on how to contact the candidates through a formal letter.
6. Reflection  
The last step is the reflection in which the students discuss again with their groups regarding the follow-up session. In this section, the students also make a draft of the formal letter that they are going to send to the speakers.

The above short case study has been used with the students majoring in Medicine who have an intermediate level of English. The students' English proficiency was previously assessed at the beginning of the semester. The author received positive feedback from the students regarding the implementation of this teaching scenario. The main feedback is that the

students feel enjoy doing this task because it relates to their requirements. Besides, they also have an opportunity to share different opinion with the students. In this activity, the students are assessed by their performance in speaking and writing skills thus the main focus is in the language aspects.

Roel (2019) also presents an example of short case study in an ESP classroom. She also implements 6-steps procedures with different approach. Learners apply what they learned about character traits to a hypothetical scenario with a sense of authenticity. Additionally, they use their reading skills and spoken skills when communicating with others and expressing their thoughts. In addition, students can enhance their writing skills with an extra exercise. Depending on the method, it will take 45 to 60 minutes.

#### **IV CONCLUSION**

As presented in the previous sections, case studies or case-based methods have significant benefits for teaching and learning. This activity may stimulate students' willingness to communicate effectively in the classroom and learn the language. However, implementing this method will not be simple since some preparations in terms of choosing cases, designing the scenario, and other technical issues should be anticipated first by the lecturers. The students may need more time to follow the given instructions. Therefore, some trial and error are allowed to find the best way of presenting a case-based method in a classroom. Related to EMP, the lecturers are encouraged to explore more topics that can be used in the teaching and learning activity. The cases presented at the beginning of the activity do not have to be complex first. When the students are able to follow the rules and instructions, the lecturer may level up the complexity of the cases and follow-up activities.

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