

PBL step by step

How does Problem-Based Learning work?

Research has shown that people learn more effectively when they can discuss the study material with others. Problem-Based Learning is therefore based on tutorial groups, in which groups of students work together on a specific problem. In some settings, the study material and related tasks are included in what is referred to as a 'block book'. The tasks form the core of this book, which also includes the course schedule, the literature list, an explanation of how your work is evaluated, etc. The block book is basically a 'screenplay' intended to help you navigate all the necessary learning activities. In our class, we will use the syllabus, the course books and days of guided discussion as our "block book".

A task is also called a problem or case. The aim is for you to solve the task. Each task deals with a specific subject related to a particular theme. After working on all the tasks, you will have dealt with all the subject matter related to the theme in question.

To deal with the task in a structured fashion, you use the 'seven-step' method. Steps 1 through 5 are preliminary steps and will take place on the first day of team meetings in class, step 6 is self-study, and step 7 is the post discussion.

The seven-step method (with example):

- STEP 1 Clarifying difficult terms
- STEP 2 Defining the problem
- STEP 3 Brainstorming
- STEP 4 Taking stock of and analysing the possible solutions provided in step 3
- STEP 5 Formulating learning objectives
- STEP 6 Literature study / self-study
- STEP 7 Post discussion

STEP 1 - Clarifying difficult terms

After reading through the task, you get down to work with the rest of the group. First, you identify and explain all the difficult words, so that everyone at least understands what the task is about.

Example: Relationship Marketing at McDonald's

Example of difficult words:

Franchising – is the practice of using another person’s business model. The **franchisor** grants the independent operator the right to distribute its products, techniques, and trademarks for a percentage of gross monthly sales and a royalty fee. Various tangibles and intangibles such as national or international advertising, training, and other support services are commonly made available by the franchisor.

Customer satisfaction – is a measure of how products and services supplied by a company meet or surpass customer expectation. Customer satisfaction influences customer loyalty and thereby customer retention.

STEP 2 - Defining the problem

The second step leads to a precise definition of the problem. The group needs to agree on which aspects need to be explained or resolved. What is the central issue or question involved in this task? You make a list of all the questions which need to be answered. This provides you with a good overview of issues you need to discuss.

Example: Defining the problem

1. Why did McDonald grow fast?
2. How can McDonalds get better?
3. What are the needs in different countries?
4. What is the added value of a franchise system?
5. What is a Business Strategy?

STEP 3 - Brainstorming

You are now ready for step 3, in which you attempt to analyse all the questions listed. Everyone can provide input on the various questions. This is a process of ‘thinking out loud’, also referred to as brainstorming. The aim is not to immediately evaluate the ideas and input of other members of the group. All ideas and pieces of information are welcome at this stage – good or bad, right or wrong.

Example: Brainstorming

“Fast food is popular all over the world” “McDonalds has nice fries and burgers”

“McDonalds also serves healthy food”

“McDonalds had a young and energetic image”

“In Asia they should serve meal with rice and fish”

“A business strategy is concerned with how a business competes successfully in a particular market. It concerns strategic decisions about choice of products, meeting needs of customers, gaining advantage over competitors, exploiting or creating new opportunities etc.”

STEP 4 - Taking stock of and analysing the possible solutions provided in step 3

In step 4, you make an overview of all the solutions which have been provided, and everyone is given the opportunity to express an opinion on the solutions. This stage of the analysis makes it clear what is not understood, which aspects the group members have their doubts about, and in which areas there are conflicts of opinion. The group may even be able to solve some of the problems during this step

Example: Taking stock and analysing

Questions 1 and 5 have been answered satisfactory, but we could use more background on questions 2-4.

STEP 5 - Formulating learning objectives

During the next and final step of the preliminary review, step 5, learning objectives are formulated for all those problems which the group has not succeeded in solving or about which the group has insufficient information.

Example: Defining Learning goals

How can you increase customer satisfaction? What is Relationship Marketing? What are the different needs and preferences across countries? What can McDonalds do to keep growing while maintaining quality?

STEP 6 - Self-study

With the help of these learning objectives, you then start working on your own, at home or during a free period at the university library. In order to work out the learning objectives quickly and effectively, you should focus on the following aspects: Select your study material efficiently:

- Don't just look in a book in a particular section, but also use your literature folder.

- Take an active attitude when studying: While reading, check whether your insight into the issues involved is improving.
- Try to put the material into your own words: Ask yourself, “How would I explain this to someone else?”
- Take clear notes of the most important points.
- Read up on background information regarding the learning objectives. It’s not enough to look only for information needed to answer the learning objectives – you also need more background information.

STEP 7 - The post discussion

At the next group meeting, you discuss the answers you have found regarding the learning objectives. You can also provide a summary of the material you have learned and mention which material, if any, you have not understood, so that the group has the opportunity to explain it. In addition, the tutor can of course also help you out. As you see, the activities involved in carrying out the task are divided into three stages. First, the tutorial group works together to determine what is already known and what is not and holds preliminary discussions. After that, you start working on your own to learn the subject matter involved. Finally, you return to the group to discuss what you have learned. You will more easily remember the material, as you have already been working on it three different times. When reviewing the material to prepare for a test, you will be dealing with it for the fourth time.

Example: Post-discussion

How can you increase customer satisfaction? Increase the level of perceived value (costs vs. benefits) by a customer.

What is Relationship Marketing? Relationship marketing refers to a long-term and mutually beneficial arrangement (relationship) wherein both the buyer and seller focus on value enhancement. Important relational variables are commitment and trust, which lead to higher customer satisfaction and retention. An important idea behind relationship marketing is that customer retention is less expensive than customer acquisition.

Different needs and preferences across countries – you can ask for examples (These examples are extracted from the annual report 2008 of McDonald’s) **U.S.** – focus on menu classics, specialty coffees, trial of new products (more conservative, less healthy products) **EU** – focus on transparency (of McDonald’s as employer, product quality and nutrition), menu variety (more healthy products, e.g. McDonald’s sells more different salads in the EU)

Examples of McDonald’s key success factors:

1. Branded affordability

2. Menu variety and beverage choice
3. Convenience
4. Day part expansion (i.e. extended opening hours)
5. Ongoing restaurant reinvestment (reimagining its restaurants)

The role of the discussion leader and the note-taker

Each group member takes on the role of note-taker once and the role of discussion leader once. The person acting as the note-taker for a meeting will act as the discussion leader for the next meeting. This is only logical, as the discussion leader can only function effectively if s/he knows what was discussed during the previous meeting. The roles are assigned to the various group members during the first group meeting. The note-taker During the meeting, the note-taker writes down notes on the note sheet. The group can also use the blackboard/whiteboard to better understand and remember certain concepts, draw diagrams, and write down agreements etc. This too is one of the note-taker's tasks.

The notes must always include the following points:

1. The date of the meeting, the task involved, the name of the note-taker, the name of the discussion leader, and the name of the tutor;
2. Difficult concepts;
3. Definition of the problem;
4. Learning objectives (points 2, 3 and 4 comprise the preliminary stage of the task);
5. Summary of the follow-up discussion of the task;
6. Day's agenda (including all the matters agreed upon within the tutorial group).

If you were the note-taker for a meeting, you will be the discussion leader the next time. Always make sure you bring the notes, typed or neatly written, with you to the next meeting.

The discussion leader

If you are the discussion leader for a meeting, you are actually acting as the chairperson for the meeting. Your most important responsibility is to ensure that everyone in the group continues to work effectively. As you have prepared the notes yourself, you know exactly what the agenda of the meeting looks like, which matters were agreed upon previously, and how much time is available. You also make sure that everyone is given the opportunity to speak and that the discussions are conducted effectively and orderly. If you find that the discussion is veering away from the topic on the agenda, you must remind everyone of what the meeting is actually about (the 'thread'). To do so, it helps if you provide a summary of what has been discussed every now and then.

So the discussion leader actually has two responsibilities:

1. She/he must make sure that all the learning objectives are dealt with and that the seven-step method is carried out effectively;
2. She/he must make sure that the group members work together effectively and that each group member behaves appropriately.

If you are the discussion leader, you should pay attention to the following points:

- Make sure a clear agreement is reached on who the note-taker for the meeting will be;
- Check whether everyone has received a copy of the notes, and give everyone the opportunity to read them;
- Does anyone have any questions regarding the notes?
- Always start with the follow-up discussion; explain briefly what the task is about (the thread), and summarize the discussion held during the previous meeting;
- Discuss the learning objectives and the subject matter to be studied;
- Are there any questions, problems, comments?
- You have now completed the post discussion stage, and you can simply continue with the next group task (the preliminary stage).
- You must now make sure that steps 1 through 5 of the seven-step method are carried out;
- You bring the meeting to a close.

So the primary task of the discussion leader is not to deal with the subject matter under discussion, but to ensure that the discussion is carried out in an effective and orderly way. Of course, in addition to the discussion leader, there's also a tutor/teacher present, who keeps an eye on the entire process