

Experience Day European Public Health



Maastricht University



Content

Programme	3
Problem-Based Learning (PBL)	4
The seven steps of PBL	6
Preliminary discussion	7
Self-Study	7
Discussion and solution	7
Case: Tuberculosis (TB)	8
Seven Step Approach	10
Practical: Debate	11





Programme

Preparation for the Experience Day

During your first Problem-Based Learning session, you will work on a case.

To be able to discuss this case during the Experience Day, we recommend you to read the case in this information booklet and review the links to the literature sources. Studying these literature sources is called self-study. This is necessary to answer the learning objectives from the pre-discussion of the case.

Programme on-campus Experience Day

Time	Activity
12.30-12.40	Welcome at our Randwijck Campus
12.40-13.10	Lecture by Dr. Matt Commers (programme coordinator)
13.10-13.25	Demo Problem-Based Learning: preliminary discussion of the case
13.25-14.10	Problem-Based Learning: experience yourself (tutorial group)
14.10-15.30	Practical experience: Debate
15.30-16.00	Campus tour Randwijck Campus including EUnitas (study association)
16.00-16.30	Q&A with student ambassadors

Follow-up

A few days after the event, you receive an email that gives you access to a webpage with:

- Vlogs by students about their experience with their study programme, housing, study choice, practical trainings, and the atmosphere of the health campus;
- Information about your study association EUnitas;
- A virtual campus tour.

Problem-Based Learning (PBL)

Problem-Based Learning (PBL) offers you a different way of learning from traditional university education. You work in small tutorial groups, engage in hands-on training and attend (far) fewer lectures. Under the supervision of a tutor, you team up with ten to fifteen students to tackle real-life challenges. PBL is an active way of learning that gives you better retention of knowledge, enhances your motivation and encourages you to develop skills that are essential for the labour market in the 21st century.

In PBL you are personally responsible (under supervision, of course) for what you learn. This requires you to play an active role in the learning process.

In short: PBL is all about you, your tutors are very approachable and you learn together in a dynamic way, helping to form you into an assertive professional.



Source: *Problem-Based Learning at Maastricht University (YouTube).*



Some advantages

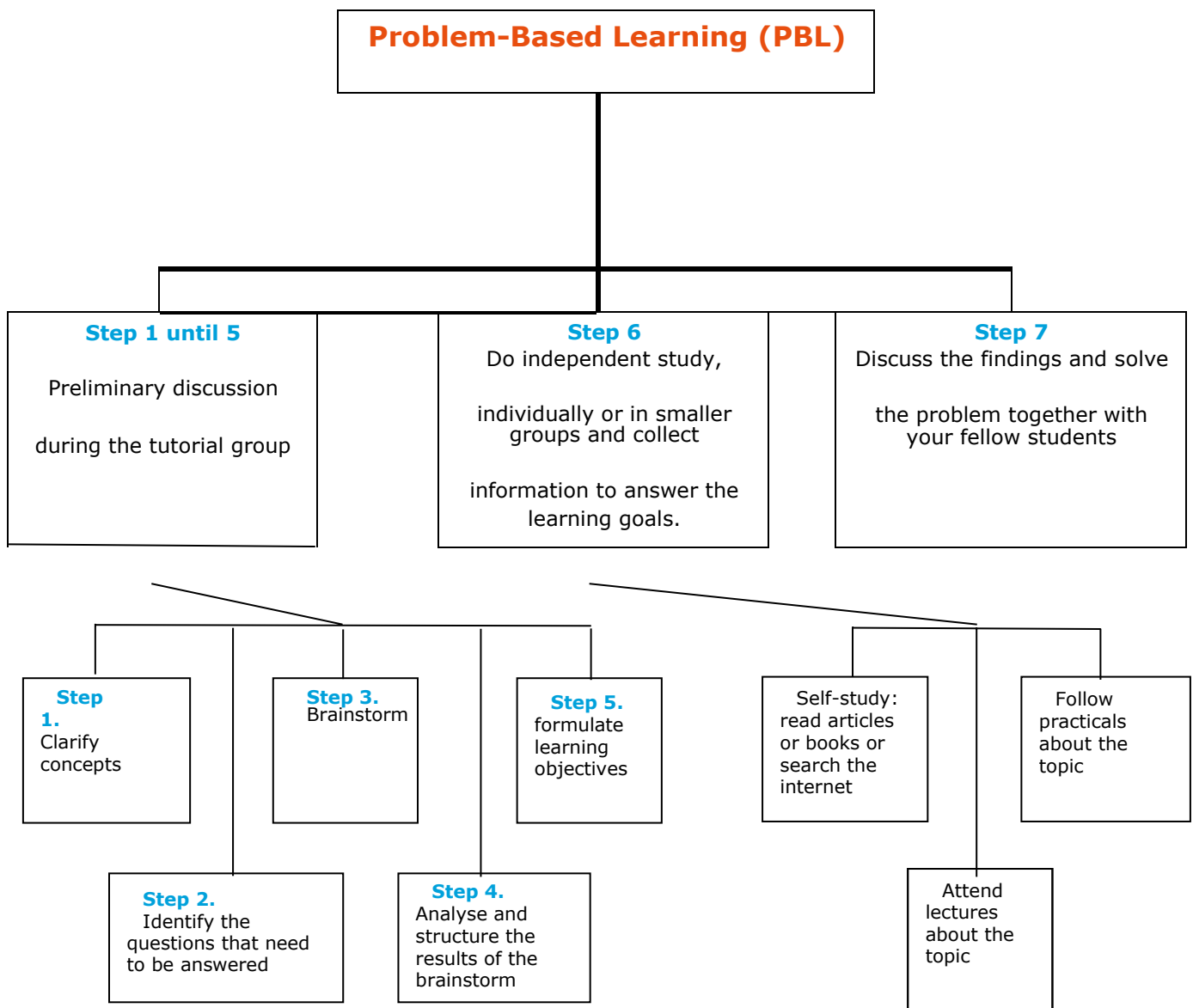
You learn together, in a dynamic way Because you work actively on real-life issues, the theory sticks better in your mind and you learn to apply your knowledge to all sorts of questions. The very different backgrounds of your fellow group members not only make for lively discussions, but also mean you gain experience cooperating in culturally diverse teams.

You acquire skills for life

Our graduates serve as the evidence that Problem-Based Learning is effective. They are assertive, independent and professional. They are especially skilled in analysing complex issues, gathering and structuring information, working in international teams, leading discussions, and forming and presenting ideas.

The seven steps of PBL

In its essence, PBL involves seven steps that you follow with your fellow students in a tutorial group. Together with your group, you analyse a case. Often, the problems you analyse are also the subject of important academic research being conducted at Maastricht University. During the preliminary discussion, you formulate learning objectives that you all have to study at your own for the next meeting. You can find more information about the seven steps of PBL at the next pages.



Preliminary discussion (step 1 until 5):

1st meeting with tutorial group (live-demo)

During the preliminary discussion, the group established which knowledge is already present with respect to the task set. In this way, the existing knowledge is activated, providing a starting point for the search for additional knowledge.

Step 1. Clarify concepts

To avoid confusion or misunderstanding, the concepts used in the task set are first clarified. This enables all participants to start from a common starting point.

Step 2. Define the problem

The essence of the task is determined in order to establish the boundaries of the topic.

Step 3. Brainstorm

Refreshing and establishing the knowledge present within the group (activating previous knowledge), followed by a process of providing as many explanations, alternatives and/or hypotheses as possible for the underlying problem.

Step 4. Analyse and structure Classifying explanations provided in the brainstorming session, indicating their interrelationships.

Step 5. Formulate learning objectives Determining on the basis of the explanations given what knowledge is still lacking and what has remained unclear. On the basis of this, learning objectives are formulated.

Self-Study (step 6):

In your own time (preparations for Experience Day)

Step 6. Self-study

On the basis of specific questions (learning objectives), acquiring knowledge that is understood and can be applied.

- Scheduling: finding regularity and a proper balance between study time and time off, making efficient and effective use of the available time.
- Selecting sources of information: looking for relevant sources of information and selecting the appropriate ones,
- in terms of quality and quantity, with sufficient depth, for effective studying.
- Studying sources: acquiring new information that one understands and is able to apply in such a way that an answer can be given that is in line with the learning objectives, and the information can be applied, for example to solve the problem set in the task.
- Preparing report: looking back critically at existing knowledge, making links with the preliminary discussion and learning objectives. On the basis of the latter, preparing what must be dealt with in the tutorial group in order to participate efficiently and effectively.

Discussion and solution (step 7):

Tutorial group during the Experience Day

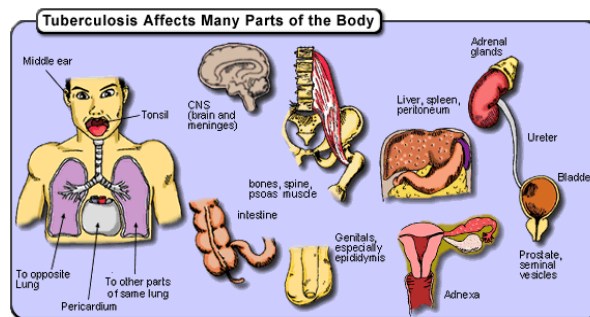
Step 7. Discuss the findings

In a discussion with fellow-students, answers and learning objectives are presented, questions are asked, and unclarities are discussed. After the discussion, each student knows whether the new knowledge has been understood, the subject matters had been studied with sufficient depth, and the subject matter can be explained to others.

Case: Tuberculosis (TB)

Introduction

Tuberculosis (TB) is one of the most common infectious diseases affecting over 2 billion people worldwide and more than 9 million people fall ill in the active forms of the diseases annually. It is a disease that is closely related to poverty and more than 80% of the infected cases come from developing countries. Globally, TB affects mostly children and young adults but in many European countries, it is a disease of the elderly.



TB is emerging as a disease of European importance since:

- There is a clear link between TB and HIV/AIDS.
- The incidence is high in some EU Member States and their neighbouring countries.
- There has been an increasing global problem with multi-drug resistant TB (MDR-TB) and extensively drug-resistant TB (XDR-TB), also affecting Europe.

Example of a real-life issue: Tuberculosis/crossing borders

Michael Berger has been living in Aachen for a while now but he only started working as a professor at the Department of International Health at Maastricht University this summer. It took him a while to get used to his new job but now he has settled down and enjoys it. He anticipated that he would feel tired at the beginning due to the pressures of adjusting to the new environment but he started to feel quite ill since the end of November. Given that Michael quit smoking in April, it surprises him that he started coughing only recently.

During the Christmas break Michael became very sick. He is now experiencing shortness of breath, fever and his coughing has worsened. He has also lost weight. The GP prescribed antibiotics but since Michael still did not feel better after 10 days he was referred to a pulmonologist. Michael told the pulmonologist about his recent activities, such as starting a new job at Maastricht University only two days after he came back from a trip to Zambia.

The pulmonologist immediately starts asking about what he had done there and whether Michael had contact with locals regularly. Michael claimed that he was working in hospitals and in health promotion programmes such as informing people on how to prevent HIV infection since about 16% of the people in Zambia suffer from HIV/Aids. He added that another problem is co-morbidity, as a number of people suffer from both HIV and tuberculosis. Michael wonders, "Oh no, could I be infected? How come? Am I susceptible to HIV infection? Has my immune system been weakened by a HIV infection?"

The doctor explains that he will need to do a few tests to find out whether Michael suffers from tuberculosis. Michael also needs to make a list of the people with whom he went to Zambia and of the people he had close contact with over the last few months, as he might have infected others. However, this list should not be discussed with the pulmonologist but with the local public health service. Moreover, he must not forget that he should not only consider his German relatives and friends but also his Dutch colleagues.

References:

Beers, MH., Berga, SL. (ed.). (2003). The Merck manual of medical information. (2nd new and rev. ed.). Whitehouse Station: Merck Research Laboratories

Veen, J. (1992) Microepidemics of tuberculosis: the stone-in-the-pond principle (PubMed)

Literature Tips

<http://www.merck.com/mmpe/index.html>

<https://www.who.int/health-topics/tuberculosis#:~:text=Every%20year%2C%2010%20million%20people,major%20contributor%20to%20antimicrobial%20resistance.>



Seven Step Approach

1. Clarify concepts
2. Define the problem(s)
3. Brainstorm
4. Analyse and structure
5. Formulate learning objectives

6. Self-study

7. Discuss the findings



Practical: Debate

Step 1. Create arguments

Step 2. Speech of the proposition team

Step 3. Speech of the opposition team

Step 4. Debating

Proposition 1

Contact tracing for infectious diseases

25 euro per month reward for downloading and maintaining full GPS functionality of contact tracing app, that include:

- Location-tracking through a device's GPS;
- Identifying proximity contacts through Bluetooth;
- Using mobile phone towers to determine approximate location



Proposition 2

Tuberculosis treatment services

Should the European Union guarantee that all forced migrants (asylum seekers) into the EU be given equal access to treatment services for tuberculosis to those guaranteed to citizens of EU countries (regardless of the expense)?

