

Problem-Based Learning in Plant Biology

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Problem-based learning (PBL) is a teachinglearning method that uses the problem as a starting point for the acquisition integration knowledge. of new development of PBL the problem is the way to achieve the knowledge, skills and abilities. Problem-based learning and case study focuses on the student and therefore imply a change in the teacher role: from protagonist to tutor or guide. On the other hand, information communication technologies introduces important changes in teaching and learning on the basis of two issues: a) access and how to acquire information, b) new forms of teacherstudent relationship.

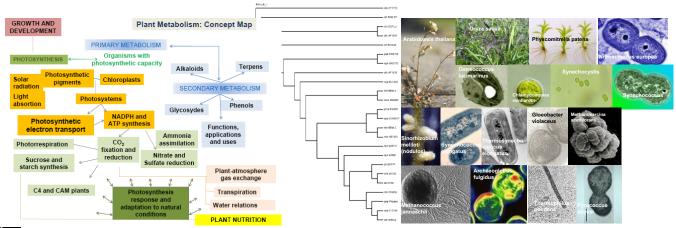
Experiences for the development of PBL: **case studies** and **concept mapping** as classroom experiences for Biological Sciences students at the Complutense University of Madrid. Two biological sciences fields were considered: **plant physiology** and **evolutionary plant biology**.



Problem-based learning and case study implies a **change in the teacher role:** as tutor asks questions and issues that contribute to meaningful learning.

Active role of the student includes the following:

- Identify what you know about the problem.
- Identify what is unknown and needs to know.
- Planning an information search strategy.
- Define the problem explaining what it intends to solve, show or respond.
- · Interpret data.
- Provide coherent explanations.





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