# PBL
Problem-Based Learning 3.0

Motivation

The current ever-changing world causes economies, technologies and professional domains to constantly transform. As a result, all sectors require competent workforce with skills to quickly adapt to rapid changes. The Problem Based Learning (PBL) strategy addresses this challenge by accommodating active learners' participation and corresponding skills development. However, PBL in its present mode has reached its maximum potential and should exploit innovative ways to unleash new capabilities. On the other hand, innovative approaches, like Learning Analytics (LA), can be confusing and overwhelming since they are still under-explored and lack structure.

Project aim

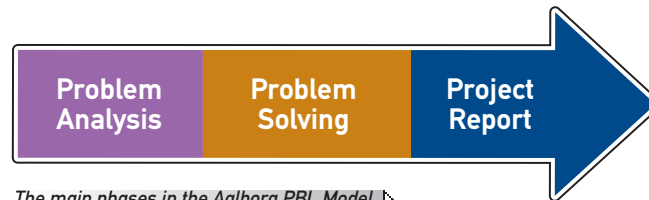The project aims to integrate LA in PBL to capitalize on their respective strengths and overcome their drawbacks. In addition, the semantic annotation of resources can enhance this new paradigm by enabling personalized learning.

Project goals
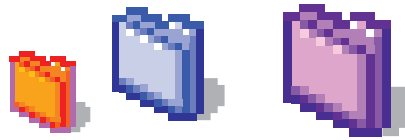
Construct a new educational approach that combines PBL with LA respecting legal and ethical considerations (termed PBL_LA). This approach will take into consideration the whole LA lifecycle:

- design a semantic model for PBL_LA for the annotation of learning resources
- adapt open source tools to support PBL_LA and develop an intuitive semantic annotation tool
- create relevant, semantically annotated educational materials and perform trials to draw evidence-based conclusions
- produce relevant policy recommendations that can raise the quality in education and training
- create an organic ecosystem of organizations, researchers, learners, etc. with an interest in PBL_LA.

Problem Analysis	Problem Solving	Project Report

The main phases in the Aalborg PBL Model

Project Approach

The project consortium aims to create a new paradigm by integrating PBL with LA in order to capitulate on their respecti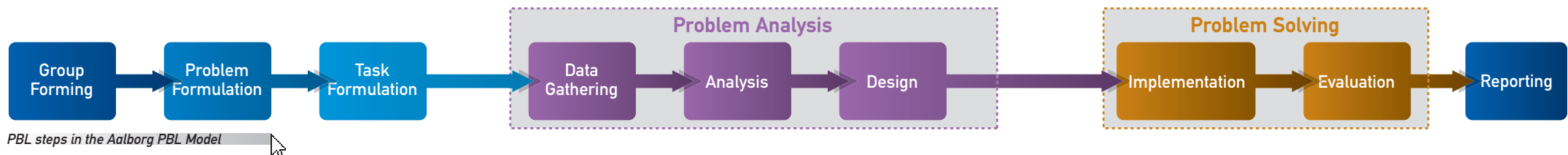ve strengths and address their drawbacks. This new paradigm will bring about PBL 3.0, which will merge PBL with Web 3.0., i.e. the connective intelligence, where we can connect data, concepts and even people. In this project, it is essential that education and training will connect with the web of data, and participate in providing meaning to data, enabling personalized learning and resources discoverability as well as enriching knowledge and processes utilized by observing the worldwide developments.

The project will proceed to test all the innovative solutions identified and designed in various educational and training settings and derive valuable conclusions on their validity and ability to be mainstreamed. This is in keeping with the Digital Agenda Assembly report, where it's stated that the innovation gap identified in the field of Education and Training comes from lack of "the application of research knowledge into real life practice".

The project aims to propose new innovative pedagogical and technological approaches that will tackle existing issues in education and training and raise their quality. These approaches will be identified and designed using robust cooperation activities carried out by stakeholders of multiple sectors, disciplines, and countries to ensure their ability to be mainstreamed and scalable. Finally, the project will translate the evidenced conclusions into policy recommendations that could bring about systemic change across Europe.

Project impact

- educators and trainers will be able to use novel pedagogical approaches
- learners will be equipped with competitive skills
- learning resources will be semantically annotated and opened for re-use
- policy actions will be available for adoption by universities and organizations that carry out trainings
- a culture of collaboration will be developed to foster innovation in the new PBL3.0 paradigm.

Group Forming	Problem Formulation	Task Formulation	Problem Analysis				Problem Solving		Reporting
			Data Gathering	Analysis	Design		Implementation	Evaluation	

PBL steps in the Aalborg PBL Model

PBL

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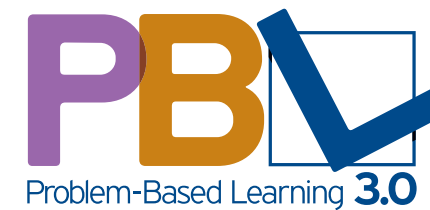
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