

Pedagogy: How do we learn?

Pedagogy | noun

The method and practice of teaching.

The science and art of education. Its aims range from the full development of the human being to skills acquisition.

Problem Based Learning & Place Based Learning

Davie Philip has a background in designing and delivering education using active learning methodologies.

The needs and expectations of society, communities and citizens are changing very rapidly. Therefore formal and non-formal education providers need to create and implement innovative projects and methodologies.

This requires:

- a) generating and managing innovative learning projects through reflection on the needs and opportunities of communities or the environment**
- b) the conceptualization of new intervention strategies and resources**
- c) action for implementation of innovative proposals**
- d) evaluation of results.**

As Illeris says (2007:21) “all learning involves three dimensions, **content, incentive and interaction**, which must always be considered if an understanding or analysis of a learning situation is to be adequate”.

This requires creating innovative active learning projects that:

- Place the student at the centre of education
- Begin with an understanding of the educational contexts from which a student comes
- Evaluate the student's progress towards learning objectives.
- Place the responsibility for learning on the student.
- View the instructor's role as facilitating the student's learning
- Strive to be flexible, competency-based, varied in methodology and embedded in time and place, i.e., contextualised

Problem-Based Learning (PBL) is an instructional method of practical, active learning centred on the investigation and resolution of real-world problems. In problem-based learning, students/learners work in teams to explore real topics and create presentations to share and apply what they have learned, resulting in deeper knowledge of subject matter, increased self-direction and motivation and improved research and problem-solving skills.

According to Hmelo-Silver (2004) the following are some characteristics of PBL:

- Learning is driven by challenging, open-ended problems with no one “right” answer
- Problems/cases are context specific
- Students work as self-directed, active investigators and problem-solvers in small collaborative groups.
- A key problem is identified and a solution is agreed upon and implemented
- Teachers adopt the role of facilitators of learning, guiding the learning process and promoting an environment of inquiry

Rather than having a teacher provide facts and then testing students' ability to recall these facts via memorization, PBL attempts to get students to apply knowledge to new situations. Students are faced with contextualized, ill-structured problems and are asked to investigate and discover

meaningful solutions. And as Hmelo-Silver says (2004), PBL develops:

- Critical thinking and creative skills
- Improved problem-solving skills
- Increased motivation
- Student capacity to learn to transfer knowledge to new situations

Also as pointed out by the European Commission, the lifelong learning should be based on educational competencies. For example, the Delors Report (1996) says that 21st century education should put emphasis on four pillars:

- 1. learning to know**
- 2. learning to do**
- 3. learning to live together**
- 4. learning to be.**

Any significant learning process that takes into account all these investigations and recommendations should be composed of three elements:

- a) Cognitive learning based on problems, project, experience, place and social and community context
- b) Interdisciplinary contents; and theory and practice including research methodologies
- c) Collaborative or cooperative learning based on participant-directed teams

Place-Based Learning

It could be said that Place-Based Learning has a lot of the same elements outlined above. Place-Based Learning is an educational approach that uses all aspects of the local environment, including local cultural, historical, and sociopolitical situations and the natural and built environment, as the integrating context for learning.

According to Smith and Sobel (2010:23) Place-based education is

“learning that is rooted in what is local -the unique history, environment, culture, economy, literature, and art of a particular place. The community provides the context for learning, student work focuses on community needs and interests, and community members serve as resources and partners in every aspect of teaching and learning. This local focus has the power to engage students academically, pairing real-world relevance with intellectual rigor, while promoting genuine citizenship and preparing people to respect and live well in any community they choose.”

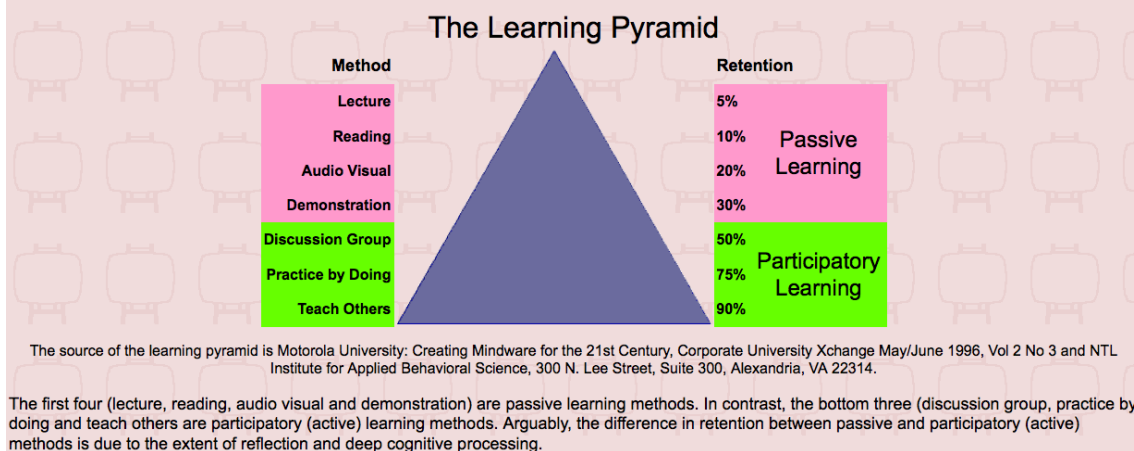
The key aspects of Place Based Learning are that it is:

- Rooted in the specific natural and human-created environment students live in
- Cuts across all academic subjects and invites interdisciplinary work
- Engages students in the community and the community in which the education is delivered to students
- Simultaneously promotes academic, intellectual rigor and active, responsible citizenship

In its most developed forms, it includes a clear focus on learning through civic engagement and participation in service projects of obvious relevance to the local school and community. In fact, PBL integrates a number of related teaching methodologies, including environmental education, education for sustainable development, project-based learning, community-based learning, experiential education, learning service and civic engagement.

This pyramid is from <http://www.simulations.co.uk/pyramid.htm>

Teaching methods are frightenly different in terms of retention and if you cannot remember what you learned the time you spent learning is wasted.



And, from wikipedia:

http://en.wikipedia.org/wiki/Action_learning

