

SOME FEATURES OF PROJECT-BASED LEARNING

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Abstract: This article shows some features of project-based learning. Key words: English language learning, Project-based approach, principles

In the past decade, Project-Based Learning (PBL) has increasingly been trialled and adopted across a diversity of educational institutions worldwide [Lehmann et al., 2008; Kolmos, 2009]. In the Higher Education (HE) sector PBL is notably widespread in engineering; for instance in Denmark, most engineering institutions incorporate PBL to some extent. However a review of the literature confirms the use of the approach across a wide breadth of disciplines in differing including Media and Business national contexts, Studies, Geography, Environmental Science, Education, Information Technology and Sustainability. Defining PBL is problematic; as Hanney and Savin-Baden explain, the term "is broad, far reaching and means different things in different countries and different disciplinary areas" [2013]. Furthermore it is closely related to, and sometimes used interchangeably with, Problem Based Learning or included under other umbrella terminologies such as the Inquiry-based Approach [Edelson, Gordin, & Pea, 1999] or the Trans-disciplinary Case Study. Nonetheless it is clear from the literature that most of the key features of PBL are included in the concept of an approach whereby "students pursue solutions to non-trivial problems by asking and refining questions, debating ideas, making predictions, designing plans/and or experiments, collecting and analysing data, drawing conclusions, communicating their ideas and findings to others, asking new questions and creating artifacts" [Blumenfeld et al., 1991]. As will be discussed below, other key features highlighted in the literature are the importance of collaboration between students; that the problem investigated should be authentic (relate to the real world), and that the inquiry covers more than one discipline [Blumenfeld et al., 1991]. The stated advantages of PBL are numerous and include the development of skills related to professional practice, some evidence of improved academic achievement, and the fostering of less tangible qualities such as motivation and self-discipline among students.

Central to the PBL approach is the idea that learning is most effective when students put theory into practice - a philosophy derived from US educationalist John Dewey. In PBL the student role changes from learning by listening to learning by doing, a key tenet identified by the majority of studies reviewed [Baron et al., 1998]. As Blumenfeld et al. [1991] explain: "the doing and the learning are inextricable" and the "artifact can be shared and critiqued leading to revision and further learning". The hands-on element of the PBL approach may be particularly well-suited to some disciplines such as Business Studies which is 'practical-orientated' [Botha, 2010] or to Geography with a tradition of fieldwork. However the use of the approach within a wide range of disciplines suggests the 'doing' element may be successfully incorporated into a broad range of subjects. The central position of praxis within the approach links to a further important characteristic: that of the doing being centred on real life problems which capture students' interest.

Central to PBL is the use of group work. As Hanney and Savin-Baden explain: "Student activity revolves around a complex series of interactions between team members over time and draws on a range of key transferable skills such as communication, planning and team working" [2013]. Thus the process of team working, and the skills and qualities this engenders, form part of the learning outcomes [Danford, 2006]. Collaboration can also include partners external to academia such as community groups or corporates, or even an overseas consulate, leading to the development of further professional skills, behaviours and networks.

In the PBL approach, significant emphasis is placed on the end-product of the project. For Danford [2006] production of a "quality product" is a "distinguishing feature of PBL" and one which "drives the project planning, production, and evaluation." The types of outputs described in the literature vary widely, usually depending on the discipline, but it is generally asserted that some form of end product or artefact is desirable. Donnelly and Fitzmaurice, for instance, describe PBL as a prolonged activity "resulting in a product, presentation, or performance. Products vary from a standard academic dissertation or presentation, to a professional consultant report to exhibitions such as fashion shows, reality TV shows, music videos and board games. As with the question of who defines the problem, the output may be chosen by the students were free to choose any final product which could form part of an exhibition, or the academic staff. Furthermore the product is usually shared, either among peers and academic staff or external audiences such as partners in the community or business sector, although it is important that the chosen target audience be authentic and appropriate.

The academic literature describes a wide variety of projects under the label of PBL. These can be categorised into three types based on the type of outputs produced: the research project (similar to small-scale research projects that have traditionally formed the basis of third year undergraduate dissertations); the construction project and the professional work context project based on collaboration with external actors. These types of projects will be described in the next article.

References:

1. Lehmann, M., Christensen, P., Du, X. & Thrane, M. (2008) 'Problemoriented and project-based learning (POPBL) as an innovative learning strategy for sustainable development in engineering education'. European Journal of Engineering Education, 33 (3). pp 283-295.

2. Hanney, R. & Savin-Baden, M. (2013) 'The problem of projects: understanding the theoretical underpinnings of project-led PBL'. London Review of Education, 11 (1). pp 7-19.



3. Edelson, D., Gordin, D. & Pea, R. (1999) 'Addressing the Challenges of Inquiry-Based Learning Through Technology and Curriculum Design'. The journal of the learning sciences, 8 (3 & 4). pp 391-450.

4. Blumenfeld, P. C., Soloway, E., Marx, R. W., Krajcik, J. S., Guzdial, M. & Palincsar, A. (1991) 'Motivating project-based learning: Sustaining the doing, supporting the learning'. Educational psychologist, 26 (3-4). pp 369-398.

5. Barron, B. J. S., D. L. Schwartz, et al. (1998). "Doing With Understanding: Lessons From Research on Problem- and Project-Based Learning." Journal of the Learning Sciences 7(3-4): 271-311.

6. Botha, M. (2010) 'A project-based learning approach as a method of teaching entrepreneurship to a large group of undergraduate students in South Africa'. Education as Change, 14 (2). pp 213-232.

7. Danford, G. L. (2006) 'Project-based Learning and International Business Education'. Journal of Teaching in International Business, 18 (1). pp 7-25. 8.

