

Joao Cordeiro | University of West London, UK

# PROJECT-BASED LEARNING IN MARKETISED HIGHER EDUCATION: FRIEND OR FOE?

*Project-Based Learning seeks to promote engagement and prepare students with critical thinking skills but pressures due to the marketisation of Higher Education may lead to some frustrating learning experiences*

Project-Based Learning (PBL) is an active learning method where students 'learn by doing and applying ideas, [engaging] in real-world activities that are similar to the activities that adult professionals engage in' (Krajcik & Blumenfeld, 2005, p.317). Although PBL methods enjoy greater popularity in pre-tertiary education, there are many examples which describe its use in the context of Higher Education (HE), in particular in the fields of Applied Sciences and Engineering (Perrenet, Bouhuijs & Smits, 2000). One explanation for this apparent trend is offered by Norton (2016, p.155), who suggests that, 'the employability drive has led to an emphasis on designing curricula that focus on graduate skills where pedagogies such as work-based learning, problem-based learning and skills acquisition take priority over more liberal-inspired values such as knowledge, wisdom and criticality'.

Whatever the reasons for adopting PBL in HE may be, this article explores its use based on pedagogy literature and my 10 years of experience as a media lecturer across three different institutions. The answer to the provocative question in the title (friend or foe?) may, in the end, be left unanswered, but I hope to have contributed insight to this discussion; in particular to the tension between pedagogy and managerial decisions dictated by the marketisation of HE.

## The business of knowing

The choice of a suitable model of teaching and learning is inevitably linked to the concept of knowledge; a topic that has intrigued philosophers across time. For years, several schools have expanded the big tree of Epistemology – sometimes developing an existing branch, sometimes growing another one in an opposite direction. Objectivism, for example, is an epistemological theory that supports the existence of an objective reality that can be known independent

of the subjectivity of the individual. Elsewhere we find that Empiricism builds on the notion that there is an objective reality, and that we can understand it mainly through our sensory experience but that it is the systematic observation of the empirical evidence that accounts for the formation of knowledge. Whilst these approaches are relevant, and are the foundations of the scientific method - essential for us as researchers – other theories of knowledge have stated that the mere observation of events and phenomena are insufficient to explain how humans learn and create meaning.

Constructivism is one of these theories that 'recognises that reality does not happen preformed and waiting for us merely to copy a picture of it' (Kegan, 2009, p.44). Constructivism critiques the epistemological dualism that blindly separates the object from the subject, acknowledging that who (and where) we are – in all the complexity of what a human being can be – influences the way we know and produce meaning about the world. For lecturers, as promoters of knowledge, this distinction is of the utmost importance and opened the door for what has become known as a student-centred approach to teaching and learning. The mass of students in front of us in the classroom is no longer a homogeneous set of empty boxes ready to be filled with our sapient words, but a complex set of individual producers of knowledge bundled in different shapes, sizes and colours.

When I started my lecturing employment in China, teaching media-related subjects (such as Radio Practice; Video Practice, and Multimedia Programming), I was surprised when I learnt from my students that the phrase 'to study' in Chinese roughly translated to 'read out loud'. I never really confirmed this translation, but at the time – based on my initial (and limited) lecturing experience there – the idea of learning by listening and memorising







made perfect sense, as the students in the classroom were not, in general, as participative as my students in Europe. However, I soon realised that issues related with language and other cultural implications (for example, the fact that it is not common practice to question the lecturer in front of the whole class) were actually deterring students from being more actively engaged. When I adopted more active learning strategies, the engagement balance shifted.

Reflecting on the effect that my naïve etymological discovery produced, I realised that the Western tradition of teaching and learning was not far from the idea of reading out loud to an audience. The word *lecturer*, for someone, like me, with a Portuguese background, clearly brings up the association with the word *leitor* (reader), which – in the context of a classroom – is nothing more than the one who reads out loud. Although the lecture format is not incompatible with a constructivist approach to teaching and learning, active learning pedagogies tend to lend themselves better to the user-centred approach, as they are more malleable in accommodating students' idiosyncrasies and eventually allowing less 'academic' students to adopt a deeper approach to learning (Biggs, 1999).

In the field of pedagogy, Jean Piaget is one of the first authors to highlight the importance of the learner's experience to the cognitive process, but others have followed, emphasising that:

*learners construct knowledge with their activities, and that they interpret concepts and principles in terms of the 'schemata' that they have already developed. Teaching is not a matter of transmitting but of engaging students in active learning, building their knowledge in terms of what they already understand*  
(Biggs & Tang, 2011, p.22)

On a similar note, and equally relevant to this case, is the concept of Situated Learning, a learning

theory based on the assumption that knowledge cannot be constructed independent of the context where the learning takes place, encompassing elements of culture, social interactions and engagement in activities. This concept, coined by Lave (1988), is based on the idea that what we call cognition is, in fact, a complex social phenomenon that focuses on the importance of engaging in an activity within a community. These two elements – 'doing' and 'community' – are central to my teaching methodology.

### Problem-Based Learning

Although the jargon associated with Problem-Based Learning (PBL) – learning by doing, active learning, situated learning, etc. – may not be as pervasive across the education spectrum as one would expect, by the end of the 19th century, John Dewey was already pointing in this direction and argued that activities like manual training and cooking were 'fundamental forms of social activity; and that it is possible and desirable that the child's introduction into the more formal subjects of the curriculum be through the medium of these activities' (Dewey, 1897, p.78).

Throughout my last ten years working in HE, I have favoured a learning-by-doing approach, typically following a PBL methodology. This is, for most of the time, the obvious choice for me as the modules I teach are usually practical modules, where the learning outcomes emphasise the acquisition of skills to produce media artefacts (e.g. videos, radio programmes and videogames).

In PBL, projects must have two main components: 1) a challenge (question/problem) that organises and drives activities and 2) artefacts that are developed to embody the answer to the initial challenge and thus represent students' emergent states of knowledge (Blumenfeld et al., 1991). My approach to PBL generally starts with the definition

*Adopting active learning methods in the classroom is a challenging, risk-taking exercise where so much can go well and so much can go wrong. To those willing to venture into this territory for the first time, get acquainted with the methods and practices through the literature, and through participating in workshops and training activities*



of a task (project) during the first sessions of the module, which then drives all the subsequent activities throughout the unit. It also includes stating the 'rules of the game in a clear way' – introducing students to the available resources (equipment, facilities, support, etc.) and forming workgroups (media products are usually the result of a collaboration between multidisciplinary teams).

In the real world, media projects tend to follow an industry-standard production pipeline defined by three main steps: Pre-Production, Production and Post-Production. This industry process is incorporated into the module's delivery and assessment as project milestones, corresponding to formative and summative assessment opportunities. The conclusion of each stage is usually well defined, both in terms of the timing and outcome, and in each step, students reflect back on what they have produced and make informed decisions regarding the next stage of production. The incremental learning that students experience is represented in the contribution made towards the production of a final artefact. Throughout the whole process, hands-on activities are interwoven with (generally short) lecturing sessions, to provide students with the basic knowledge to tackle the sub-task ahead. Video tutorials and other task-specific materials are also made available online so that each group can access them during each sub-task.

Because learning through experimentation takes place when working towards the final artefact (which will be assessed), I usually have to emphasise the substantial weighting given to the work process in order to ensure students (especially in modules related to the Creative Industries) are not afraid to experiment or even to fail. All failure is a step towards success and the main 'sin' in PBL is failing to engage with the module activities, followed only by failing to learn from previous mistakes. This emphasises the importance of reflective practice in every step of the process.

As a full-time academic member of staff, I've taught in Portugal, Macau (P.R. China) and recently in the UK. I have prepared and delivered modules across all levels, from summer courses to Higher Education, including modules at bachelor, masters and doctoral levels. In all these contexts I've used the PBL approach, and although I've never conducted a systematic study comparing the success of PBL against traditional 'chalk and talk' approaches, PBL has led to excellent results, which are reflected in student engagement (attendance, participation, etc.); the quality of the work produced; skills acquired; student feedback, and my own motivation towards teaching.



### Challenges and opportunities

Adopting active learning methods in the classroom is a challenging, risk-taking exercise where so much can go well and so much can go wrong. My suggestion to those willing to venture into this territory for the first time is to get acquainted with the methods and practices through the literature, and through participating in workshops and training activities. However, it is not only the novelty of the method which may be a challenge for some lecturers. Other factors beyond their control can be even more detrimental. Some of these factors may be attributed to the marketisation of HE.

One year working in the highly marketised Higher Education context in the UK made me rethink my whole PBL experience. Methods that I had perfected over the years were now eliciting mixed responses from the students and myself. Gary (2015) has introduced some of the reasons why PBL can be difficult to implement. I have enriched that list with my contributions while providing – when appropriate – the reasons why a marketised HE context can create further difficulties to this practice.

### Resource demanding

PBL requires accessing resources in a semi-structured fashion. The facilities, equipment, literature and other technical resources needed for the module are dependent on the type of project a student chooses. This problem can be minimised by defining some boundaries to the project brief (which usually happens in the first year of study), but a complete fixed schedule of the activities (and therefore, resources) cannot be easily defined before the start of the module. For example, radio studios are not, by nature, optimised to sit large numbers (>15) of students at the same time, and even less to have a large group producing work for a long period of time (>1 hour). Nonetheless, it is important to have ad hoc access to the studio during timetabled sessions, so that students can use it when they their scripts are ready to record. This will happen at different times of the semester for each group/student, depending on their skills and project. In the marketised HE environment, the pressure to optimise room occupancy is pervasive. Allocating rooms that are not used in every session raises red flags in the attendance monitoring system and is usually seen as poor resource-management practice. Additionally, multipurpose rooms/studios (with AV display and recording equipment, computers, roundtables, etc.) lend themselves better to this kind of delivery than the traditional room layouts usually available in HE (lecture room, amphitheatre etc.).

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#### **Difficult assessment**

Using one set of assessment criteria to assess projects that are entirely different in nature (different medium, different topic, different group size, etc.) is challenging. Criteria tend to be rather abstract in the beginning and are later narrowed down to more concrete elements depending on the type of project. Students may find the criteria (and brief) too vague, and because some students tend to focus on the assessment rather than learning outcomes – a characteristic amplified by the conceptualisation of the student-consumer – this has the potential to make some students uncomfortable and confused. Additionally, rewarding students for their effort in experimenting and reflecting over their work process can prove to be a challenge. Submissions of media artefacts with lower production values may receive better marks if the correct work process; a reflective approach, and the achievement of learning outcomes related to graduate attributes (creativity, proactivity, etc.) are demonstrated. Finally, Project-Based Learning often involves the use of groupwork, which raises a set of complex issues related to ownership. All these issues can contribute to making the marking process of a PBL project a daunting task.

#### **Economically challenging**

Scaling PBL presents economic challenges to institutions, as it performs better under a low instructor-student ratio; by using assignments that are time-consuming to mark, and through the allocation of facilities that may not have full occupancy. Additionally, the nature of the projects may demand that other lecturers (with specific skills) are assigned to the module halfway through the term as guest lecturers or supervisors, making the overall budget for the module difficult to assess from the start.

#### **Exhaustive practice**

Project-Based Learning is usually an exhausting practice for both student and instructor. Being an on-going process, it is not possible to simply disengage when leaving the classroom. The flow of communication between lecturer and student tends to continue in-between sessions, especially when the projects have a relation to real-world events (for example, doing the media coverage for an event). Student availability outside the timetabled sessions is usually problematic, as many students have part-time jobs that occupy considerable chunks of their independent learning time. On the other hand, even if the bulk of the project is to be produced during the timetable sessions, attendance becomes a key element for the module (and therefore in the assessment). Institutions with a laidback attendance policy may struggle to implement PBL methods successfully.

#### **Students' comprehension of the process**

Students accustomed to more traditional teaching techniques and well-defined assessment briefs tend to find PBL briefs and methods slightly confusing and difficult to grasp. Ill-defined problems form the basis of some PBL assessment briefs, where students have to actively define the goals and production process for their project. It usually takes some time for students to be aware of their agency towards the assessment and overall content of the module, and to understand that their active participation in class activities is essential for their success.





### PBL: friend or foe?

All the above difficulties are real (teaching) experiences, however they should not deter lecturers from pursuing active learning methodologies that may support students to engage with their learning at a deeper level. In order to set the right conditions for this method to work, there are some strategies that may prove beneficial. One is the effective use of online technologies for collaboration and communication between members of the group and the lecturer. Project management software widely used in the context of remote co-working can be a useful tool for managing and keeping track of the contribution of each student, while introducing them to a type of tool widely used in the industry.

A completely different approach is to remove quantitative assessment from the equation. The marking system works as an extrinsic motivation factor, which is said to hinder engagement at a deeper level with the module content. This problem is amplified in the neoliberal educational system where the student-consumer is more likely to form idealised expectations regarding the quality of their work; experience, and performance in Higher Education.

Thus, PBL may become a problem as assessment tends to be less objective than in traditional assignment briefings. A system where summative assessment plays a minor role could favour learning, especially in the field of Creative Industries where experimentation should be rewarded.

Problem-Based Learning is a fantastic tool in promoting engagement and preparing students with critical thinking and interdisciplinary transferable skills with which to solve the unforeseen problems of the future. Pedagogy research can be used as a defence against the marketisation of HE, by highlighting that many current practices (such as large class numbers) can be detrimental to effective student learning (Norton, 2016), and 'academics need to become more proactive, positively insisting that educational considerations should prevail over administrative convenience' (Biggs, 1996).



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### About the Authors

Author: Dr Joao Cordeiro, is a Lecturer in Broadcasting and Digital Production at University of West London

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