

The Ideology of Problem Based Learning Part 1: Problem Based Learning in Theory

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Abstract

This paper examines the changing roles of students and teachers in Problem Based Learning (PBL) programs. Beginning with an analysis of the more traditional Subject Based Learning (SBL) methods, I look at the limitations of SBL, the subject positions it forces, and the reasons why PBL programs are becoming more dominant. After discussing the underlying theories that inform PBL programs and analysing the needs and demands of them, the second part of this paper will give an account of the inaugural PBL program in English Literature at a Tokyo Medical University.

Keywords: Education. Problem Based Learning. Ideology. English Literature.

Introduction

In academies throughout the world, there is a growing shift away from the traditional Subject Based Learning (SBL) methodologies, (which have their roots in the ancient art of rhetoric and public learning) towards the more flexible and individualistic Problem Based Learning (PBL) strategies. If the current trend of moving from a nominalized to a problematized teaching and learning strategy (Campbell. 139–40) develops into a significant paradigm shift, then such a shift would not only significantly alter the learning contract between the teacher and the students; it would also create a significant displacement of power relations, responsibility and expectations within the classroom.

In this paper I will examine the underlying ideologies inherent in both SBL and PBL programs, paying particular attention to the subject positioning of teachers and students as they adapt to different roles and expectations.

1. Structural Passivity in Subject Based Learning (SBL)

The underlying rationale of SBL programs is based upon an assumption of ignorance. At the beginning of their studies, the students are expected to have little or no grounding knowledge in the area that is to be studied. It is the role of the teacher to decide what should be learned, how it should be learned, and of course, to set up a series of tests and examinations to ensure that the students are succeeding (or failing) in their learning. From the onset, the teacher is positioned as the subject presumed to know: the ultimate authority, the repository of wisdom and the guarantor of meaning.

The term discipline is not, as Foucault reminds us, innocently or randomly chosen. Inherent within the disciplinary force field are various technologies of the body, which contrive to normalise through surveillance, examination and judgemental procedures (188). Thus, at every stage of SBL programs, the supreme authority seems to reside with the pedagogue. Even if the students interrogate their materials, the hierarchical structures surrounding them tend to predetermine any questions or challenges. Indeed, pre-programmed responses are intrinsic to SBL strategies.

In SBL situations, students are always already trapped, not only by the presence of their teachers and the educational facility, but also by the impending examinations and the presence of their peers, who are also their competitors. Roland Barthes makes a similar point when he argues that “language is always a matter of force, to speak is to exercise a will for power; in the realm of speech there is no innocence, no safety” (192). Of course, in SBL programs, the teacher’s voice is the only one that matters. Every student question, every student response, is merely an invitation for further “teacher speech”. Within the confines of the classroom, within the policed margins of the subject, the student is permanently *subjected*. Their position, their posture, is one of ready submissiveness. However, despite the apparently dominant role of the teacher, this subject position is also problematic.

If the students exist as passive receptacles waiting to be filled, then the role of the teacher can best be described as a semi-passive conduit. The knowledge, the information and the technique does not originate with the teachers: it flows through, rather than emanates from them. Despite the popular tendency, particularly by the culture industry, to romanticise or idealise the classroom in movies such as *To Sir With Love*, *Dead Poets Society*, *Dangerous*

Minds and *The History Boys*, Lauter correctly asserts that the classroom is, “seldom, if ever, a neutral, unconflicted site of learning or a safe and homey environment supportive of any and all revelations. Rather, it is a public space and therefore subject to a variety of interactions” (34). Of course, not all of these interactions are visible: department committees, University Presidents, Quangos and government bodies, though physically absent, are gathered in the space, in the curriculum, in the materials chosen. They are the invisible, and sometimes contradictory, legislators of the message; of the lesson that must be learned. Thus, although, the silent, dutiful, note-taking students may *see* their teacher as an active dynamic force, this perception is rarely a lived reality for the teacher concerned. For many teachers, the spotlight is too harsh, too bright. As knowledge is divested like extraneous clothing with each verbal act, until there is nothing more to say, the act of teaching becomes a linguistic striptease, and like the striptease artist, most teachers are oblivious to how their performances are being received by their audience: students scratch invisible notes onto paper, and when asked to respond, they reply according to their own psychological make-up, with varying degrees of programmed passivity. Eventually the bell sounds, another group of students enter the classroom, another teacher takes the spotlight and the show continues. At the end of a term or semester, examinations are given, which again are pre-determined and predictable. Students are graded on how much they have absorbed, while the teachers are assessed on how little resistance they have offered to the free flow of subject material. Subject Based Learning, in other words, reifies both student and teacher, reducing both to objects or commodities. Like the gaze of the basilisk, the subject petrifies everything, and everyone, within its field of vision.

Resistance to this subject positioning is difficult, if not impossible. Although many teachers are aware of the problem, they frequently find themselves caught in a double bind: their principles and pedagogical ideology insist upon one approach whilst the very strictures of their discipline and the subject they are teaching demand another.

Althusser regarded the educational establishment as the most important of all the Ideological State Apparatus (ISA). ISA's he argues, function not by repression but by ideology, by the unconscious transmission of the ruling classes codes, values and societal norms. Ideology, in the Althusserian form, is a continual, unconscious process, rather than an ossified set of beliefs. It is, he argues “a system of representations, but in the majority of cases these representations have nothing to do with ‘consciousness’: they are usually images and occasionally concepts, but it is above all as *structures* that they impose on the vast majority of men, not via

their ‘consciousness’” (88).

The structural image of the good student, or good teacher, is so potent, so seductive, that we aspire towards this idealisation, and in doing so, we accept as *our choice* the subject positions that the conforming pressures have created as our only option. The subject positions within SBL are simple: the good student listens and absorbs without question whilst the good teacher talks at and drills their students, offering only scripted questions or pseudo problems that can be solved by an instinctive, pre-programmed response. The ideology of SBL, in other words, is one of conformity; it is a training program in which success is based upon one’s ability to obey instructions, to follow a pre-set pattern and, most importantly of all, to think and act passively rather than critically and proactively. This is a system that has functioned since the days of Plato and Aristotle. It is dominant at all levels of education and, despite credible and growing research which suggests that “Students do not like classes in which they sit passively ...They do not like classes where the teacher controls everything” (Widdows and Voller. 2.) its supporters would argue, it works. However, there is another pedagogical strategy, PBL that is gaining momentum.

2. Problem Based Learning: Towards A New Paradigm?

SBL learning programs follow a fairly linear path. The students are given material, they learn it, they repeat it and, when they are tested on the material, it is their ability to redeliver cued responses that is, in essence, being tested. The dynamics of, and the ideology behind, PBL programs appear radically different. First and foremost, PBL courses are student led. The teacher’s role is no longer that of master or oracle, and having been absolved from their role as *the subject presumed to know*, the teachers are given a greater degree of fluidity and flexibility. They are no longer “teachers” in the traditional sense of the word, they are now guides or project consultants. Thus, rather than drilling their students and eliciting stock responses, teachers have to deal with unscripted questions and assist in analysing and dealing with problems that can rarely be foreseen. This alone creates a greater area of risk. Because each individual student group will offer unique challenges, the relative safety of teacher’s manuals and study guides has to be abandoned. This point can best be illustrated by looking at the primary assumption made regarding PBL students.

In SBL courses, an assumption of ignorance is made, whereas in PBL courses there is

always an assumption of knowledge. Students are actively encouraged to use their existing knowledge base and life experience as assets that allow them to engage immediately with the problem, or problems, that are set. Having identified what they already know, and analysed their strengths and weaknesses, the students can then begin to examine their areas of ignorance. By locating the information vacuums they have, they can begin to direct their learning towards filling them, always keeping the goal in mind. Finally, having learnt what they need to know to solve the problem, they then apply it. Research projects and group work provide the ideal environment for PBL programs, which not only provides a critical environment but also, as Nunan asserts, provides valuable experience which will be taken into the workplace:

Group work is essential to any classroom that is based on principles of experiential learning. Through group work, learners develop their ability to communicate through tasks that require them, within the classroom, to approximate the kinds of things they will need to do to communicate in the world beyond the classroom. (84)

Thus, whereas SBL programs are inherently passive and abstract, PBL programs appear to be proactive and pragmatic. Simply by identifying what they already know, the students begin to clarify the problem they have been set and, correlatively, by identifying what they do not know they are already working on the solution. Similarly, by becoming a guide or study assistant rather than a pedagogue, the teacher gains a greater degree of freedom and personal responsibility.

The advantages of PBL courses should be immediately obvious. They are goal directed; they create and encourage active and critical students; they build confidence; they improve communication; they increase time and resource management skills; they encourage a synergistic relationship between a variety of academic skills that are normally isolated and compartmentalised in the student's mind and, most importantly, they give students a personal investment in their learning process whilst developing positive and creative attitudes that will bring long-term benefits in the world of work after graduation. However idyllic or utopian this seems, however, there are many inherent problems with PBL for students and teachers.

PBL programs are fraught with hidden difficulties. For such programs to be effective, the teacher has to be focused for long periods of time, making sure that goals and objectives are

clearly set, that the resources needed to complete the tasks are available, and that there is a constant and clear line of communication between the teacher and the students involved. Also, in PBL courses, students frequently work in groups, which means that the teacher also has to allow for personality clashes, which could prove time consuming and destructive. Similarly, because the students spend long periods of time unsupervised, maintaining discipline, particularly with regard to attendance, can be extremely difficult. Furthermore, because there is no way of predicting what the students may or may not come up with, the teacher has to prepare for as many eventualities as she can think of.

Because the learning contract is no longer centred around authority — it is centred around *trust*, an unprepared, or poorly prepared teacher spells immediate disaster for a PBL program. In the final analysis, the students need to trust that the teacher is a confident practitioner of his art in the same way that the teacher has to trust that the students are in the library, or in the computer lab rather than sitting in the coffee bar or lying on the sofa eating bon bons.

For the students concerned, PBL programs bring similar concerns. Students must overcome and reject their habitualised learning patterns, and many are reluctant to do this at first. They already have some knowledge and practical experience of how to pass examinations, how to write term papers, and how to make the most of the materials that are given to them. PBL is an unknown factor, and the unknown always brings with it a loss of, or crisis in, confidence.

Because the learning process is ongoing, with each discovery bringing with it a new challenge, PBL programs rely on Short Term Memory (STM). This means students must develop new note-taking and charting skills to allow them to record their findings and discuss them with ease. Similarly, because there is no secure vantage point, no detailed map to follow, the fear of failure amongst students is also greatly increased with PBL programs. The students are no longer tourists, they are explorers and exploration is always potentially perilous. Finally, and most importantly, many students may not possess inherent problem solving skills. These may need to be learned and developed as the course progresses, which places an extra burden on the teacher who may find themselves in the paradoxical position of utilising SBL strategies to teach skills which insist on the redundancy of SBL.

Although he was speaking specifically about the 'hard' sciences, Kuhn's notion of a paradigm shift could prove useful in discussing the shift of resources and attention from SBL to

PBL. A paradigm shift occurs, Kuhn argues, when the methods and vocabulary of the traditional paradigm are reappropriated by a new way of seeing the problem. Paradigm shifts, unlike hegemonic shifts, are never gradual. They are ruptural, decisive and irreversible. A move from SBL to PBL would be a clear paradigm shift in education. Although there are signs, that PBL courses are gaining momentum, it would be foolish to assume that the paradigm shift had already occurred. A new paradigm, Kuhn suggests, rarely wins support from current practitioners. On the contrary, it only occurs as the old guards fade away and the new intake realises that there may be another way of doing things.

One must, however, be cautious about assuming that novelty and quality are synonymous. If the ideology of SBL is one of conformity and homogeneity, then one could easily be seduced into believing PBL is both radical and heterogeneous. This, however, would be like saying a lion isn't a cat because it bears very little resemblance to the average Siamese. The ability to follow orders, obey instructions and conform to pre-legislated standards is still dominant within the ideology of PBL. PBL programs merely create different subject positions for both students and teachers to conform to. Here the 'good' student is one who is self-motivated, individualistic, entrepreneurial and requires little supervision. The 'good' teacher is not the authoritative pedagogue of old. On the contrary he or she is the perfect administrator, capable of multi-tasking and directing resources.

What we are seeing, in other words, is a mutation, rather than a revolution, within education. Just as the post-modern, post-capitalist world is transforming and adapting itself to the new sciences, the primary ISA is responding to these transformations by encouraging greater flexibility. It would be naïve, however, to assume that these new roles are offered for the student's benefit. On the contrary, as human society moves away from the politics of space and hard capital and towards the politics of speed and information, it requires its subjects to be able to anticipate its desires within nanoseconds of articulating them. What is lost, both within the three-minute jukebox culture of postmodernism and the instantaneous transmission of information in the post-capital world, is the moment of reflection essential to any critical thought process. There is, in reality, a great danger that PBL programs will become reactive, rather than proactive and thus deny the students the opportunity to develop the very skills they purport to promote. An acute awareness of this risk was omnipresent in devising and running the PBL course in English Literature.

3. Designing The PBL Course 1: Identifying Problems

PBL systems require a degree of instant, individualised innovation, which most textbooks cannot supply. When the time constraints placed on PBL programmes, (which for the most part are held over short yet intense periods of time), are also factored in, one realises very early on that it is impossible to predict, with any degree of accuracy or effectiveness, what support materials may be needed. Thus, rather than beginning with the relatively firm foundation of transmittable knowledge, a PBL course must come into being around a constellation of principles and assumptions. In designing the PBL course in English Literature I began with the following assumptions:

- The students would be a curious mix of over and under achievers. The course, therefore, would have to be accessible and enjoyable to both.
- The students would be more likely to engage with the material if they could immediately see its relevance and usefulness to their academic success and/or their chosen career plans.
- Some strategies of self-motivation had to be put in place from the first session to prevent or deter a cautious, passive attitude amongst the students.
- Time constraints and the majority of the students's reading skills would not be sufficient to deal with unabridged primary texts.
- For the PBL program to be successful, attendance and enthusiasm would be crucial.
- There would be a degree of hostility, uncertainty and reluctance on the part of the students to open themselves up to a different learning experience.

Having thus identified several structural problems immanent within the PBL program it was necessary to provide tentative solutions to them. Before this could be achieved, however, a manifesto for the program, clearly identifying the aims and objectives of the course needed to be put into place.

4. Designing the PBL Course 2: The Imperfect Student

When setting the aims and objectives for any learning program, it is essential to avoid the seduction of utopianism. Every teacher begins with the idea of the ideal student, that perfect construction who will respond to, and benefit from their pedagogy. Such a student rarely exists outside of Hollywood and, even if a teacher is fortunate enough to find one, he or she must realise that there will be another ten to twenty students in the classroom who fall well short of this ideal. In creating the aims and objectives of the course, therefore, it is wiser to begin with another theoretical construction; that of the imperfect student. The imperfect student is, theoretically at least, the subject who is unwilling to respond, has little or limited knowledge of the subject, brings very few resources into the classroom and has minimal confidence. Unlike the defective student, who combines the traits of the imperfect student with a perverse resentment of learning and a wilful absenteeism, the imperfect student *wants* to learn: they just feel incapable of succeeding. The imperfect student is one who has built up a case history of negative experiences within the classroom and is thus trapped within a cycle of self-fulfilling, self-defeating prophecies. Considering that, to some degree or other, the majority of the student body falls under the rubric of the imperfect student, it is self-evident that the success or failure of any learning program will depend upon its willingness to address the concerns and anxieties inherent in the imperfect student. In devising the aims and objectives of the course, therefore, a high degree of pragmatism was necessary. How effective this proved to be, and what lessons can be learned from it can be discerned by looking at the course and the student's response to it.

Works cited

- Althusser, Louis. "Selected Texts" *Ideology* ed Terry Eagleton. London. Longmans. 1994
- Barthes, Roland. *Image Music Text* trans. Stephen Heath. London. Fontana. 1977
- Campbell, A. "Teaching Literary Theory To Undergraduates: What Have We Learned". *English* Vol. 46 No. 185 Summer 1997
- Foucault, Michel "The Means of Correct Training". *The Foucault Reader* ed & trans. Paul Rabinov. New York. Pantheon. 1984
- Kuhn, Thomas. *The Structure of Scientific Revolutions* 2nd ed, Chicago. University of Chicago Press. 1970

- Lacan, Jacques Ecrits A Selection. *Trans.* Alan Sheridan. London. Routledge. 1977
- Lauter, Paul "Teach/Discipline" English As A Discipline or Is There A Plot In This Play? *Ed.* James C Raymond. Tuscaloosa & London. University of Alabama Press. 1996
- Nunan, David. Second Language Teaching and Learning. Boston. Heinle & Heinle. 1999
- Widdows, S. and P. Voller. "PANSI: A survey of ELT needs of Japanese university students." Cross Currents XVIII