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Students' perceptions of lecturer power and authority in a higher education PBL business programme

Abstract

Although often suffering from a lack of conceptual clarity and definition, the use of problem-based learning (PBL) as a pedagogical approach has become almost ubiquitous across many disciplines in higher education in recent years. As well as purported benefits for student learning, the empowerment of students through increased autonomy is frequently cited as a rationale for the adoption and promotion of PBL. However, while significant research has been conducted on the relationship between student learning and PBL approaches, there exists a dearth in research regarding the impact on power relationships within the higher education classroom. This paper attempts to help address this dearth through the use of a qualitative research study involving interviews with 13 graduates (5 male and 8 female) from a PBL master's degree programme. The results suggest that the adoption of PBL as a pedagogical strategy does not guarantee a significant shift in the power relationships evident within higher education. Participants perceived that the dominance of lecturer power was maintained in the classroom via the employment of both explicit and implicit techniques.

Key words: Business education; problem-based learning; power; authority;

Introduction

Since its inception in the 1970s, problem-based learning (PBL) has made a significant impact on pedagogical practices within the world of higher educational, particularly with respect to the

disciplines of medicine and engineering (Gallagher, 1997). In more recent years problem-based learning as a pedagogical approach has enjoyed a high level of adoption across other disciplines such as business and information technology (Barral & Buck, 2013). According to Leon *et al.*, (2015), PBL approaches possess the benefit of greater student engagement and collaboration while encouraging student to “build on their previous training and experiences and their existing competencies” (p. 3). There is also evidence suggesting that students feel engaged to a high level in PBL classes due to being placed in a real-world, problem-solving context (Brush & Saye, 2008). While according to Bowe *et al.*, (2003, p. 742) “the advantage of problem-based learning over other teaching methodologies is its flexible approach to students' learning styles. While conventional lectures assume that all students can learn by listening, problem-based learning allows students to learn in a way that suits them, and it also encourages them to evaluate their way of learning”.

Much of the existing literature on PBL suggests that this form of pedagogy challenges the existing power dynamics in lecturer-student relationships by providing more autonomy to the learner (Czabanowska *et al.*, 2012). Indeed, the lecturer or facilitator role in PBL is “to guide, probe and support the students’ initiatives, not to lecture, direct or provide solutions”, (Kaufman *et al.*, 1989, p. 286). This role as defined by Kaufman *et al.* (1989) suggests a more informal, less autocratic and more democratic environment in which learning can take place. Furthermore, PBL has been described as a model of education which involves “learning in ways that used problem scenarios to encourage students to engage themselves in the learning process” (Savin-Baden & Howell Major, 2010, p.3) and thus adopt a more self-directed and proactive learner role. It has also been reported that the motivation levels of students are enhanced when they are permitted to assume responsibility for identifying the solution to the problem they are tasked with and this identification

process resides firmly with the student (Savery & Duffy, 1995). Hence, perceptions of power and autonomy among PBL students appear to have direct effects on levels of engagement, motivation and ultimately responsibility and direction of their own learning. However, the limited literature in the area suggests that while PBL intends to grant students greater responsibility over their own learning process, students did not always feel empowered (Wijnia *et al.*, 2011). Therefore, questions remain regarding the espoused claims that PBL may promote greater levels of student autonomy and power (Schmidt & Rotgans, 2011). Gore (1995) suggests that while education has experienced relatively significant changes in recent years, it has become apparent that a certain continuity persists in how power relations function in pedagogy between students and educators. She asserts that this continuity restricts new initiatives in educational institutes and slows down potential developments. There exists a dearth in research regarding whether or not PBL is suffering the same fate. To address this deficit, this paper explores students' experiences on a PBL postgraduate programme and through the use Gore's (1995) techniques of power as an analytical lens, specifically examine the ways in which students experienced lecturer power on the programme. Do they feel they are afforded more autonomy and independence? In what ways to they experience lecturer power in their PBL programme?

Theoretical understandings of power

Traditional conceptions of power have tended to view power within education as fixed, hierarchical and unidirectional in nature where the teacher/educator possess the balance of power. A prominent perceived manifestation of this power was in the assessment of students where the teacher had the power and authority to 'pass' students, deeming them potentially competent and thus opening up opportunities (Cusack & Smith, 2010). On the other hand, teachers also possessed

the power to 'fail' students and denying them opportunities. Hence, power was seen as something the educator possessed and the students did not.

More nuanced understandings of power however have recognised the relational dimension of power in that it exists within and between individuals and that rather than being imposed by one over another, one's power may be permitted by another - hence power could be seen as bi-directional and shared (McNay 2004). Lewin (1951) first suggested that power is a reciprocal relationship between at least two parties or individuals. He suggests that when a power relationship exists, a person may exert force over another person with the objective of impacting their behaviour. Yet this imposed force can be resisted or permitted by the other.

One can also derive power from different sources. One may be seen as powerful on the basis of their superior knowledge which can allow one to dictate what is considered to be truth (McNay 2004). This can result in the marginalisation of people and alternative ideas (Foucault, 1977 <https://psycnet.apa.org/record/1980-70596-000>). Similarly, one's power can be conferred through explicit legitimate means through a formal position assigned to someone (Weber, 1978). This form of power is largely dependent on others accepting the status, and subsequent power, conferred on the position.

French and Raven (1959) note the presence of a number of power bases that teachers draw their power from. French and Raven (1959) argue that a *legitimate power* base is power based on one's position as an educator, whereas a teacher drawing their power from an *expert* power base is dependent on their knowledge and expertise to achieve status and power. Teacher also however may draw their power and status from their ability to impose negative sanctions on their students (*coercive* power base) and on their friendliness to students which results in students conceding to their requests and preferences (a *referent* power base).

Another aspect of power in education relates to how it is enacted in educational settings. As mentioned previously, the most obvious manner in which it is enacted relates to the will of the teacher being overtly imposed on students. This can manifest itself in direct instructions to students, imposing time limits for student work and expecting specific student behaviour and outcomes (Michail, 2011). More traditional educational settings, where the teacher dominates, contains many of these explicit enactments of power and such power relationships dominate the cultural norms of classrooms and education evident in the popular media. In less traditional educational settings however where students may have more autonomy such as in PBL environments, there is a lack of evidence regarding whether such explicit enactments of power still dominate. In such environments teacher power can be enacted in more implicit ways that ultimately have the same effect. Drawing on Foucault's (1981) micro-functioning of power relations, which shifts focus from the macro functioning of power to pervasive, almost invisible functioning of the micro aspects of power, Gore (1995) aimed to examine the extent to which such micro-dimensions are evident in pedagogy. In her exploration of the operation of these micro-dimensions of power in four pedagogical settings she identified eight techniques of power evident in student and teacher interactions. These techniques of power include;

1. Surveillance (the manner in which students are closely watched, observed and supervised).
2. Normalisation (the manner in which norms and standards are set and maintained by the teacher)
3. Exclusion (the way in which boundaries and parameters are set by the teacher/lecturer and the way they decide what knowledge, skills and experiences students are provided access to. It also includes what ideas and views are included and excluded).

4. Classification (distinguishing individuals or groups from one another is another technique that Gore (1995) suggests is utilised within education as a means of wielding power.
5. Distribution (refers to the ways in which students are organized through means of separating, ranking and arranging which is a means of achieving superiority and authority over them by the lecturer).
6. Individualisation (This means of wielding power is derived from the giving of “individual character to oneself or another” (p. 178) and is regularly used within education according to Gore (1995).
7. Totalisation; The aligning of a characteristic to a collective group where one may or may not be a part of this collectiveness is another technique suggested by Gore (1995). In this way she describes how teachers would use simple oral phrases such as the word “we” in the following manner;
8. Regulation; In this final technique Gore (1995) states that regulation be defined as “controlling by rule, subject to restrictions, invoking a rule, including sanction, reward, punishment” (p. 180).

Hence techniques of power can be either explicit or more implicit but both are equally as effective. The extent to which such techniques are evident in more student-centred pedagogies such as PBL is the focus of this paper.

Methodology

The research was initially established as an exploratory qualitative study to examine past students' experience of the PBL programme. As a piece of personal unfunded research driven by one of the authors to explore their students' experiences of their programme, the research did not specifically seek the students to talk about power or its enactment on the programme of study. Instead, as an exploratory study, it sought students' perspectives and their experiences on the programme through broader questions that encouraged the students to reflect back on their studies and talk freely about their experiences. The focus on power emerged later following the initial reading of the transcript interviews where the presence of micro-dimensions of power, as articulated by Gore (1995), emerged strongly in the participant responses. As a result, the study focused on this issue of power and, employing the various techniques of power described by Gore (1995) as an analytical lens, aimed to explore the techniques of power evident within a PBL programme as articulated by students in describing their experiences of the programme.

Research setting

The institution

The research focused on students that had graduated from a business master's degree programme in a third-level institute in Ireland. The institution was a publicly funded higher education provider in the mid-west region of Ireland providing higher education programmes in a range of areas including Science, Engineering, Technology and Business.

The programme

The business master's degree programme at the focus of this study was run as both a full and part-time option. The typical annual student intake into each cohort was around 12-14 students on the full-time programme and 10-12 on the part-time, with a strong mixture of international students

mainly within the full-time cohorts. Typically, the full-time students had just completed an undergraduate degree in business or a related discipline and were aged between 22-25 years with a relatively equal mix of male and female students. Part-time students were normally over the age of 27 and were in full-time employment in business related roles within the region. The students were predominantly white middle-class students.

This programme is grounded on a learner-centred instructional philosophy which employs Problem-based Learning (PBL) approaches aimed at preparing learners for the demands of real-life business roles in a rapidly changing, knowledge-based economy. In a PBL environment, learners are encouraged to solve problems, which are set in a real-world framework (Edens, 2000). The deliverables for students on this PBL programme vary based on the problem they are faced with and may include outputs such as; reports, presentations, web pages, news items, posters, manuals, research papers, models, etc. Problems and projects are designed by the academic staff to mirror the types of situations students are likely to encounter when they graduate and involves relatively high degrees of contact with outside companies. These outside companies are a mixture of small to medium sized enterprises (SME's), Multi-national Corporations (MNC's), start-ups, sole traders and non-profit organizations (charities).

Typically, the PBL projects ran for approximately 4-6 weeks each, depending on the needs of the client and the difficulty of the task at hand and involved the programme lecturers designing a problem scenario in line with the required learning outcomes of the programme and with guidance from the client company. The development period for each problem would normally require regular meetings and contacts with client company representatives over several months prior to the assignment commencing to agree the objectives, scope and deliverables of the project. A critical

requirement of this process was that the problem or opportunity facing the client company must be real, authentic and within the parameters of the learning outcomes established for the master programme.

Participants

All graduates from the past three years of the programme were written to and invited to participate. From a cohort of 38 students, 13 participated in the study. In terms of gender, five were male and the remaining eight were female providing a 38% (M) / 62% (F) gender mix. All participants in this study were volunteers and over the age of eighteen and reflecting the broader cohort of students were white, middle class students. Furthermore, participants were all from the part-time programme and attended the Institute one evening each week for a three-hour session and one Saturday each month for eight hours. These part-time students were aged twenty-eight years on average in full-time employment. Apart from some minor experiences by some of the participants of PBL, in general the participants had little experience of PBL on entry onto the programme (indeed the novelty of the BPL experience was a significant draw to the programme).

Research Tools

The chosen research tool for this was the semi-structured interview as this was believed to offer the optimum level of flexibility and control over the interview process and the ensuing discussions with the respondent. It offered flexibility in that follow-up questions could be asked, and responses deemed interesting could be probed and explored further as necessary. It also provided the opportunity to bypass specific questions if the interviewer believed they had been previously answered through other questions. In this way the interview questions acted as a guide in order to keep the interview as informal and conversational as possible, notwithstanding the limitations of such an approach (Wang, 2006; Anyan, 2013). See Appendix for interview guide questions.

Participants were asked to attend an interview scheduled for approximately forty-five to sixty minutes. In some cases, the interview session went slightly over this time but for the majority it was around fifty-five minutes.

Data Analysis

Interviews were audio recorded for later transcription using an independent transcriber and then analysed. To ensure accuracy, participants were provided with an electronic copy of their transcribed interview and asked to verify correctness and clarify any discrepancies. Following this opportunity for the participants to clarify the content, all interviews were initially read for familiarisation as the first stage of Braun and Clarke's (2006) six phases of thematic analysis. The interviews were initially thematically analysed using deductive coding where the initial open codes were subsequently thematically categorised. At this stage, when the presence of power emerged from the coding, it was decided to also code the transcripts using Gore's (1995) 8 techniques of power. Two of the research team selected one interview and coded it separately using the 8 techniques. This independent coding was then compared and at this point the application of each of the eight techniques was agreed. On foot of this clarification and agreement the remaining interviews were coded using the 8 techniques by one member of the research team. Once coded, these 8 techniques were then categorised in an excel sheet to identify the commonalities in each technique. In this way the coding enabled a detailed analysis of the presence of the micro-dimensions of power while at the same time, the deductive coding also captured themes not captured by the Gore (1995) framework. The findings outline the dominant techniques of power to emerge from this analysis.

Findings

Techniques of Power

Regarding Gore's (1995) techniques of power, the use of this lens allowed the analysis and categorization of the comments made by the respondents and facilitated the grouping of text according to the various headings. This lens formed the basis of the overarching framework of the presentation of the findings and the main techniques of power outlined by Gore (1995) are outlined in this section. However, before detailing the dominant techniques evident in the data, it is worth noting that in general the participants all reported a similar experience of the programme in that they were not afforded the level of autonomy that they initially expected. This was particularly evident by their feeling of been continually monitored or subject to a form of surveillance as described by Gore (1995). The first aspect therefore details the presence of 'surveillance' as perceived by the students. Following this, four other techniques of power, which were the most dominant in the participants responses are outlined.

Surveillance

Gore (1995) refers to this means of exercising power as supervising students closely and creating the environment where students expect and/or anticipate being monitored by the lecturing staff on the programme. Surveillance carried out by lecturers emerged as a powerful means of retaining and demonstrating control over the students based on the comments of participants. For instance, while it was clear that students expect a certain degree of lecturer overview at times it extended beyond what was expected. Comments such as the following below suggest that lecturers were playing "God" at times and that students feeling like they were in a "goldfish bowl";

"When the lecturers weren't in the room - you could relax, you could say what you wanted and even switch off sometimes" (Sarah)

“They do play God every so often though and that can be a bit annoying, like they are watching you all the time, especially in the first year” (Dan)

“They were always watching what you were doing” (Laura)

“Kind of like you were in a goldfish bowl, that you had to be really careful what you said or did when the lecturers were in the room” (Sarah)

It is worth noting that not all students had an issue with the level of surveillance employed on the programme. For instance, the following comments from Anne and Sarah both reflect the view that this level of surveillance had a purpose and provide a benefit to the students in that the lecturers could observe those students perceived to be making an effort in addition to those that were not.

“I think lecturers were very observant and very aware of the level of work the people were putting in. That’s the one thing I liked about the whole approach, was that your lecturers knew who was on top of their work, who was falling behind, who was struggling with a certain subject area maybe. (Anne)

“They were kind of watching the groups and the people in the groups to make sure they were contributing so it kind of really felt that we were under surveillance a lot of the time. I suppose they had to really, as how else would they know what’s going on and keep an eye on things?” (Sarah)

Regulation

The concept of regulation also featured significantly within the interviews, where respondents described in detail how they believed power was demonstrated using regulatory practices. This was most evident in the way in which the lecturer dictated and controlled the direction and pace of the students’ projects. As one student noted;

“The lecturer is still controlling the whole experience and the lecturer is still very much in control of the room and the students. It was a bit of a surprise to be totally honest. And we all felt the same way, you know” (Anne)

This level of regulation appeared to frustrate some students who believed they would be afforded greater autonomy in their project work;

“We always got to a point where we were afraid to go any further and we'll always put forward our ideas and thoughts to our lecturer and where we were and where we needed to go. He would then assist us, but there might be times where we might come out and you might find out that we've actually gone in another direction from our discussion with him. So whether that's a good thing or a bad thing I don't know in that we were trying to find our own way but felt that we could only go so far 'cos we still need the assistance of our lecturers so although it is problem based learning it's seems like we always at some stage ended up going back to our lecturer to see if it's ok and he either gave us the yes or no and lead us to either the route that we were going or might just tell us to verve left and go up another way” (Frank)

The following views outlined by Michelle demonstrate the thought process she goes through and finally agrees that the word “power” correctly describes a label to describe the role of the lecturer. She refers to the feeling she had when she says, “we couldn’t really think outside the box” in solving a client problem because they wanted to ensure the “lecturer was happy”.

“But at the same time isn't the...what's the word... isn't the person who is not...power...the person that comes in to tell us what to do when we could, we will be working on something and we've been writing up something but we'd be very aware to the fact that a lecturer was coming so we had to make sure we...our writing styles was right or our critical thinking was evident. That we're actually following something...we couldn't really think outside the box...a small bit...for the client because we wanted to make sure that the lecturer was happy. So at the end of the day “power” is the right word and they have the power and you know, we were working for them as opposed to working for the company” (Michelle)

Regulation was by far the strongest technique used by lecturers to create and retain power as experienced by the students and mentioned during the interviews. It constituted a highly direct

(explicit) means used by lecturers in the classroom to demonstrate power and authority. Even when conducting the interviews, the emotion that this technique elicited was highly significant. It became clear that most students expected and indeed anticipated a certain degree of regulation but not to the extent that they experienced.

Distribution

The technique of distribution, meaning how students are organized through means of separating, ranking and arranging, was also evident in the interview responses although the students' views of this did not align with other comments. Surprisingly students believed that the lecturer should be the individual to decide which students get allocated to each group. This was justified by students on educational grounds where students would be put outside their 'comfort zones' and others seemed to accept the lecturer's role in this distribution based on their position;

“I think it was more beneficial for us that it was picked externally or randomly. Because if we decided to select our own groups we would have only selected the people that we were comfortable working with and I always would feel myself that it's always beneficial to play outside of your comfort zone sometimes. Because that...of course helps the learning process and you gain more experience by doing that. So, the selection of groups I think it was there for the lecturer to decide rather than us picking them” (Frank)

Exclusion

According to Gore (1995), *Exclusion* refers to defining differences, setting boundaries or indeed the formation of parameters. Within the research conducted it became clear that the students believed this direct (explicit) technique was being utilised within the programme as a means of demonstrating and wielding power over the students. In most cases this was completed through the restriction of knowledge or guidance that was distributed to students as the lecturers saw fit

and while some students appear to recognise that this could relate to the lecturer purposely wishing the student to attempt to find the most desirable route themselves, it still resulted in significant frustration. Indeed, this distribution appeared to create a sense of unease among students who viewed it as a method for maintaining a distance or gap between themselves and the lecturers.

In the following comment from Dan, he outlines his sense of frustration as he is progressing through a problem and he feels this struggle is potentially unnecessary as the lecturer “knows the answer” and could offer greater direction. It becomes clear that he feels the lecturer is holding on to the knowledge and that this may make them feel important or powerful, rather than the lecturer withholding information for the purpose of promoting independent student learning.

“Frustrating in the sense that, right, you know, we know the lecturer knows the answer and we may be looking for a little bit more guidance right” (Dan)

The following comment from Mary outlines the view that she believes that the lecturers created an environment or process where the students were dependent on lecturer knowledge and guidance and that the lecturers “liked it that way”.

“They made it so we were kind of dependent on them...and to be honest I think they liked it that way. We always got to a point where we were afraid to go any further and we’ll always put forward our ideas and thoughts to our lecturer and where we were and where we needed to go. He would then assist us, but there might be times where we might come out and you might find out that we’ve actually gone in another direction from our discussion with him. So, whether that’s a good thing or a bad thing I don’t know in that we were trying to find our way but felt we could only go so far ‘cos we still need the assistance of our lecturers so although it is problem based learning it seems like we always at some stage ended up going back to our lecturer to see if it’s ok and he either gave us the yes or no and lead us” (Mary)

As these two excerpts from the interviews highlight, the students believed the lecturers were 'holding back' information as a form of power yet it is also possible that this was done for educational purposes to scaffold the students and purposefully provide a level of challenge to the students. Therefore, as this example highlights, a perceived technique of power by one group, may have quite different intentions by the teacher utilising it.

Normalisation

Gore (1995, p.171) defines normalisation as 'invoking, requiring, setting or conforming to a standard - defining the normal'. Also, Foucault (1977) describes how norms differentiate individuals from one another by reference to a minimal threshold, an average to be respected, or as an optimum towards which one must move. In terms of the nature of *normalisation* it is regarded as being an indirect (implicit) means of wielding power (Donnelly *et al.*, 2014). With this in mind the following views and comments emerged from the interviews as being key. The following three comments from Frank, Anne and Sophie describe how lecturers on the programme would describe the norm or standard that students should aim for or aspire to. It becomes clear that this message was internalised by students and taken seriously as a means of determining success in the programme.

“We would be told all the time that this wasn't a 1st standard or that this was only a bare 2:2 grade or whatever. It got to you after a while you know. The lecturers would say stuff like, “well if you want a first then this is the type of paper you need to write”. It would get you down sometimes” (Frank)

“The lecturers would show us previous papers and projects that would be scored really high, versus those that didn't. It was always a case of which group did you really want to be in? What was funny was that we would always ask what does a 1st grade paper look like

*and then the lecturer would either show us one from a previous year or describe one”
(Anne)*

“Sometimes we would be told what constituted a pass and the message was very clear, you need to do more than this. The lecturers would also reiterate with us that this is presented to an outside company or client so this really had to be good” (Sophie)

As the findings have highlighted, it is perhaps to be expected that the various techniques of power outlined by Gore (1995) were present in the programme and subsequently reported by the students. However, there are a number of other issues that emerged in the study. The first relates to the student reaction to the explicit power enacted by the lecturers. It suggests that the students’ expectations in relation to the level of autonomy they would have on the programme was quite high. The extent to which this expectation is justified is a matter of debate, but it does highlight the perception amongst students of the perceived autonomy provided by such programmes, perhaps driven by the institutions themselves in the promotion of them. The second issue to emerge from the interviews related to the contradictory nature of the students’ talk where they often lamented the lack of autonomy and overt power of the lecturer in some instances and yet at other times assented to the lecturer authority and indeed expected it. This contradictory talk highlights the complexity of the issue and also highlights perhaps the ‘à la carte’ nature of their approach to more independent, self-directed learning

Discussion

PBL challenges power dynamics & allows greater autonomy

Research in education has suggested that PBL encourages a more informal, less autocratic and dictatorial environment where learning can take place (Kaufman *et al.*, 1989). Furthermore, Kaufman *et al.*, states that the lecturer or facilitator role in PBL is defined as “to guide, probe and support the students’ initiatives, not to lecture, direct or provide solutions”, (1989, p. 286). This is important to note as it suggests a very different method of teaching and classroom culture to the

historical and well-established norms of traditional education where the lecturer adopts a position of authority using both explicit and implicit means of maintaining power. Indeed, much of the existing literature on PBL suggests that this form of pedagogy challenges the existing power dynamics in lecturer-student relationships by providing more autonomy to the learner (Czabanowska *et al.*, 2012). Based on the students' experiences reported in this study, it appears that within this PBL programme very little has changed and that the PBL approach does not, in the eyes of the students, appear to disrupt the existing power dynamics or encourage greater degrees of student autonomy. In attempting to understand this perception it may be the case that student expectations are simply unreasonable. Perhaps they are expecting too much in terms of autonomy from a third-level programme that simply cannot be met, given the reality of responsibilities on the lecturers and accreditation requirement of third-level institutions. The lack of student experience of PBL in their previous education may also be a contributing factor in this regard. Further still, given the fact that the participants were also all part-time students, their experience of the PBL programme may be quite different from the full-time students, therefore the views expressed may not represent the experiences of all the students. The reported experiences of the participants could also be a result of the institute adopting PBL on a partial basis where authentic tasks are indeed being implemented by the students working on projects for client companies, but autonomy is not being granted to them in turn by the lecturing staff and the institution. On the other hand, perhaps the students' perception of autonomy as opposed to their actual autonomy is the issue here in that their perceived need to report and 'check in' with the lecturer initiates a particular pattern of behaviour and engagement that they have internalised as essential to successful completion of the programme. It could also be the case that the students' desire for greater autonomy and control is simply the manifestation of a type of self-defense mechanism

where they use it as an opportunity to attribute any potential failure to external factors outside their control (Sanderson, 2010; Heider, 1958). In a sense this could be students performing a “ritual of resistance” in the manner suggested by McLaren (1985, p. 85). As highlighted above, there are numerous possible reasons for the students’ perceptions, highlighting the complexity of PBL. Not only is its pedagogical implementation challenging, it is often implemented in settings with established practices that may be at odds with the goals of PBL. In addition, perceptions amongst staff and students of what PBL entails adds a further level of complexity to this already nuanced pedagogy. The project also highlights the tension that exists between providing appropriate scaffolding for student project work and providing appropriate autonomy. What one person perceives as too much interference may be perceived by another as providing important support and guidance. How this equilibrium between lecturer power and student autonomy is achieved is complex, however as this study highlights, it may not necessarily be the actual level of student autonomy that is the issue but rather the perceived level of autonomy. For that reason, the greater level of student input, particularly into the assessment components of programmes is needed to increase the students’ sense of ownership and agency in the process. In addition, providing a clear rationale as to why the lecturer is providing the level of support they do, such as checking in with students, needs to be communicated for students to recognise the educational merits of their behaviours. This could reduce the potential for misinterpreting the lecturer’s actions. That being said, all educational settings will have underlying power dynamics regardless of the attempts to reduce them, therefore a recognition of this is also needed.

Authentic tasks

Following other research conducted in this area, this research explored the power dynamics between lecturer and students. This is typically the way in which power dynamics in education is

viewed, essentially between the educator (the traditional power broker) and the students. The role of the client company was not initially framed as being part of this power dynamic nor does it appear to have been given much attention in the literature to date. The theoretical model adopted in this study (Gore, 1995) for example focuses on the micro-dimensions of power between students and the educator. The extent to which other partners in the educational process are included in this conceptualisation is open to question. On reflection, this is somewhat of a blind spot in this research study.

During this study the students commented on the value of engaging with the external client companies. They noted several benefits to this including having the opportunity to interact with potential employers and being given real authentic problems to solve. Yet within this context, student project work is only assessed by the lecturers with little formal involvement from the company representatives. Following the student presentations at the end of the project the client may volunteer their views over each group's effort, but this is typically done in an informal and non-binding manner. It is the lecturers who formally assess the student outputs and develop the assessment results and deliver these to the students in follow up review meetings. The students had raised this issue and questioned why the client company was not formally involved in the assessment of the completed projects.

To an extent the existing assessment of the projects reflect a traditional setting of boundaries between the institution and the client company where in effect the client company provides authentic tasks to be tackled for the students but is not afforded input into the assessment of the students' work. A reassessment of this boundary setting between an external entity (the industry partner) and the institution to allow the external entity to contribute to the grade being awarded to the student is perhaps needed, given the students' comments. This more formal recognition of the

client company in the assessment has the potential to significantly impact on the existing power dynamics within the programme and in so doing may reduce the status and power of the lecturer. This adjustment may be perceived by the student as providing a power dynamic that is more reflective of the two 'masters' they must respond to. This has the potential to create a level of complexity to the student / lecturer relationship that current theories of educational power have not considered to date. In addition to this, involving the student in a greater way at the initial stage of this problem identification process with the client company would further disrupt the existing power dynamics. Within such a triumvirate relationship how is equilibrium established and what are the most appropriate arrangements? The potential implications of this change are significant in that they have ramifications for the authority of the lecturer, the autonomy of the student and the role of the industry partner. Before concluding the study, it is important to highlight some limitations that need to be considered when reflecting on the findings. Firstly, this was a small-scale study conducted in a single institution and therefore the extent to which these findings can be generalised is somewhat limited. In addition, the study did not explore the lecturers' experience and expertise of PBL or the pedagogical environment that the students engaged in. Drawing exclusively on the students' perceptions of their experience therefore may not reflect the entirety of the PBL programme. That being said, there is enormous benefit in exploring students' experiences of PBL, particularly how they experience it. What this study does highlight for other researchers and practitioners of PBL however, is that there can often be a gap between the intentions of a programme and the lived experience of students engaging with it. As Brookfield (1995) notes, the sincerity of educators' intentions does not equate to purity of their practice.

Conclusions

While existing research indicates that PBL has the potential to facilitate greater levels of student autonomy and disrupt the traditional student-lecturer power dynamics, the reported student experience on this programme suggests otherwise. What has emerged in this study, as reported on by the students, is that institutions can adopt PBL-type pedagogical frameworks but that this does not necessarily automatically result in a shifting of the perceived power relationships between lecturers and students. In looking back at the assumptions brought to this exploration of power, the role of the client company in this power dynamic was largely omitted. With increasing involvement of external partners in the higher educational process, research needs to consider how such partners disrupt the traditional educational power dynamics. In addition, educational researchers need to explore the extent to which current understandings of power in education (largely focused on a bi-lateral interaction between educator and students) reflects the more complex relationships with external partners, particularly when such external partners (such as supervising mentors, client companies etc.) begin to play a more central role in the students' educational experience. Therefore, with increasingly more complex pedagogies in higher education that stretch beyond the campus boundaries, are bi-lateral conceptualisations of educational power out of date?

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Appendix 1 – Semi-structured interview questions

Section A: Introduction

Can you describe your educational journey to date and how you came to join the course? What motivated you to enroll?

What was your initial thoughts of PBL when you heard about it? What did you think it involved? What came to mind when you heard about it? Did you feel well prepared?

How was it explained to you on the programme? Did this explanation match what you understood PBL to be?

Section B: Roles

How would you describe the role of the lecturer in your PBL programme? What 3 keywords would you use to describe this role?

Was this role different to the lecturer role you encountered in previous educational courses?

How would you describe the role played by the student in your PBL programme? What 3 keywords would you use to describe this role?

Did these roles change or alter in any way over the course of the programme?

Were these roles as you expected them to be within a PBL run course prior to starting the programme? If different, how so?

Section C: Assessment

How did you approach your assessments?

Did you feel you were fairly assessed based on your efforts? Did you feel that your classmates were assessed fairly?

As a student, did you feel that you possessed an input into problem design, problem allocation and/or group allocation?

Did you feel that your performance within group work was accurately assessed? What about your performance in individual work?

How do think your class mates on the programme felt about the marks allocated for their contribution to group work? If you think their views are likely to be different to yours, why do you believe this may be the case?

Do you feel that it was more important to solve the problem or to demonstrate to your lecturers that you solved the problem?

If unhappy with allocated marks for an assignment, did you feel you had a route of appeal? Did you ever request an appeal?

Did you feel that you could pursue alternative paths when attempting to solve problems to those suggested by your lecturers?

Do you believe that the student possesses enough control over marks allocation currently within the PBL programme?

Do you feel the lecturers should alter the assessments in any way?

Section D: Experience

What was your first experience of PBL on the programme and how did you feel when you engaged with it? For instance, did you feel nervous or excited?

Did it take you time to get comfortable with working with PBL? If so, how long approx.?

Tell me what you think your classmates think about PBL? Do you think it's for everyone? Do you think there are times when PBL is not really suited to learning?

Do you think PBL fits with how you learn best? How do you think you learn best?

What was the highlight of the PBL experience for you so far? What has been the lowest point / worst aspect?

Did you feel PBL made you more engaged with the programme? Did it encourage you to be more engaged with your classmates?

Did you enjoy the level of participation that you feel you possessed? Would you have preferred more / less?

When working on PBL problems, did the solutions you create surprise you?

Looking back at it now, what are your views of PBL?

What suggested changes would you make to how PBL was delivered?

Section E: The Future

Would you recommend a PBL programme to a friend?

What are your future career goals? Are they different to the ones you had before starting the programme?

Has your PBL experience changed you in any way? Please explain.