Chapter 6: Understanding a Pedagogic Practice for Analysis and Reconceptualization of an Existing Pedagogic Practice

Introduction

Educational research efforts that investigate attempts to develop and test pedagogic innovations that are intended to support the development of students’ creativity – especially at undergraduate level and within the strictures of entrenched frameworks of teaching and learning in higher education – are most likely to focus on pedagogic theory and how it shapes ideas around what constitutes appropriate teaching and learning to achieve desired outcomes. In contrast, in this study, such educational research efforts focus on a particular pedagogic practice – its features, its current standing in a specific higher education context and its reconceptualization and testing to better serve new educational demands. This framing of educational research efforts, as actualized in this study, attempts to deal with a perennial problem in educational research which is the reluctance of educational researchers to engage with and move beyond generic theories of education and develop models of engaging with variation in theoretical frameworks in order to close the gap between educational research and educational development (Meyer, 2005). I attempted to eschew or, at least, struggled against the limiting entrapment of displaying an educational research approach that glorifies “the generic view of things” (Meyer, 2009: 2).

This study is, therefore, an attempt to move away from the polemics between qualitative and quantitative research and the assumptions that inform their procedures to pay attention to the analysis of the empirical on the basis of underlying theoretical frameworks and the creation of the possibility that the theoretical can be transformed on the basis of the empirical. I sought to illuminate the position that the analysis of the empirical can interact transformatively with the theoretical in order to lead to greater depth and precision.
I sought in this study through invitational pedagogy to navigate and challenge the often sustained binary relation between teaching and research by attempting to develop an integrated framework where “research can move in the direction of teaching, and teaching can move in the direction of research” (Byrne, 2009: Foreword) so as to mitigate some routinizing tendencies in teaching and some esoteric tendencies in educational research or research for its own sake. I view, in this study, teaching and research as complementary and symbiotic so that the nexus between them form a complex, integrated system of diverse and adaptive components (in lieu of formulaic rigid binaries). This integration of teaching and research begins to make even better sense when both teaching and research are seen as forms of learning (Bowden and Marton, 1998) which I shall elaborate on later.

The presentation of results in chapter 7 will not follow a normal formulaic approach; rather it will be integrated with the analysis and synthesis of the emerging contours of a pedagogic practice that was designed and tested over a semester and how such a pedagogic practice created learning environments (organized in the form of learnshops as described in chapter 5) where students experienced learnshops as learning sites different from those they claimed (through interviews) that they experienced in their traditional classrooms. The recognition of such a difference will, if sustained through more research of the same kind, open opportunities in the long-term for teachers and students to move towards a different way of being – one that is rooted in new ways of seeing and appreciating variation in how students experience the learning environment as that which allows for engagement in ‘research-like’ projects that call for problem identification, data collection, analysis and interpretation to solve ‘real-world’ problems in a collective form and, which also include off-campus learning. Such a difference in experiencing the learning environment by students was expected to capture the new mantra in education and the 21st Century economic paradigm that the development of creativity is more important than the development of competence which represents, by current educational efforts, a redemptive relic of the industrial age specialization and, the absolutization and signification of clean, universal knowledge which is based on epistemological foundationalism as stated in chapter 2.
Epistemological foundationalism posits that knowledge can only be considered as legitimate if it is based only on indubitable foundational beliefs (Murphy, 1990). I examine, in this chapter, these issues in more detail in relation to the anatomy of a pedagogic practice – its micro-features and key pillars – and how it makes visible the signified learning environments in a specific classroom context and creates opportunities for reconceptualization and testing of an innovative pedagogy. This chapter addresses question 1 of the study.

Assembling the Pedagogic Analytical and Reconceptualization Toolkit

The Anatomy of a Pedagogic Practice

This study is premised on the understanding that a pedagogic practice organizes learning environments in very specific ways (Bowden and Marton, 1998) which often but not always succeed in enabling or restricting certain teaching and learning activities and actions in varying degrees of complexity. The key aspect of a pedagogic practice that shapes and guides the organization of learning environments in particular ways, I have been arguing throughout this study, is on how a pedagogic practice positions students on disciplinary knowledge in higher education.

Students’ Positioning on Disciplinary Knowledge as an Aspect of Pedagogy

There are, at least, four ways in which a pedagogic practice can position students on disciplinary knowledge with three playing a significant role in higher education over many years. The reader is referred to Figure 6.1. Students can be positioned on disciplinary knowledge in terms of developing knowledge that is largely unknown and new to them but relatively well known to others within the discipline (Bowden and Marton, 1998). For purposes of analysis, I may call this state of students not knowing what is already known at the outset of a new course or programme the quadrant of “unknown, known” from the perspective of the students.
The purpose and intent of the pedagogic practice, in this situation, has been mostly to develop learning environments in which students are taken from the state of not knowing this knowledge to a level where they could be declared competent and capable of knowing what is already known in the discipline. I may call this the quadrant of “known, known” of what Bowden and Marton (1998: 4) call “learning at an individual level” which refers to students being positioned on disciplinary knowledge that is existing and settled and being competent at it.

The organizing pedagogic form in this linear model of teaching is either a transmission or apprenticeship teaching perspective. These kinds of pedagogic forms develop learning environments where classroom activities and actions including routines and techniques used to engage students on content knowledge are often geared towards students’ acquisition of this new knowledge (Pratt, 1998) through memory strength and being acculturated into a field of practice, especially true in engineering. The other pedagogic form of organizing this disciplinary knowledge is when learning environments are organized in such a way as to allow students to self-construct on this existing and settled knowledge where quality learning is seen as processes of socially-based, active co-construction of contextualized knowledge (Kearney, 2002). Students, on the other hand, can be positioned on knowledge which the discipline is still grappling with and attempting to develop. When students are positioned on knowledge that the discipline is still grappling with and attempting to bring into being, so that it can, in the future be made public as new in the absolute sense, then students are positioned on knowledge that is largely unknown in the discipline. However, there can be established research tools and, in the case of engineering, problem-solving tools (algorithms or heuristics). In this sense, students are positioned on unknown knowledge of the discipline but have the advantage that the discipline, at least, knows what it does not know – what I may term “known, unknown” which represents quadrant 3 which Bowden and Marton (1998: 4) calls “learning at a collective level” or even, research level.
This form of positioning students on unknown knowledge in the discipline for which research or problem-solving tools exist is not new in education, as we know from Chapter 2. There I describe how, in the 19th Century, Friedrich Kohlrausch, the Physicist, used his student-centred pedagogy to successfully contribute in developing the Physics canon through students’ experiments.

For the purposes of a conceptual gestalt, there is also quadrant 4 where students can be positioned on the unknown knowledge of the discipline for which no research or problem-solving tools have been developed in the discipline, and research may proceed on the basis of exploration and development of research or problem-solving tools. This form of positioning students on disciplinary knowledge may be called the quadrant of “unknown, unknown”. Figure 6.1 shows these various positioning of students on disciplinary knowledge with quadrants 1 and 2 representing reproduction of existing knowledge in the discipline and quadrants 3 and 4 indicating knowledge production within the discipline. The figure below shows various levels on which students can be positioned on disciplinary knowledge:
Agency as an Aspect of Pedagogy

The second aspect that relates to a pedagogic practice is agency as Kalantzis and Cope (2008) suggest, as stated and elaborated on in chapter 2. Also in chapter 2, the work of Runté (1995) uses teachers’ agency to demonstrate how the use of 20th Century industrial images of a strict timeline based on the notion of “flow”, task management in terms of labour division shaped curriculum and pedagogic practices along the lines of industrial production systems, as models of efficiency and, generally centralized curriculum planning and development, which reduced teachers to curriculum technicians. Agentic power or agency, as it relates to a pedagogic practice, should, I argue, be understood at an institutional and classroom level.
At an institutional level, it relates to the extent to which teachers are involved in decisions on learning content coverage (breadth) and the trade-offs that are made in terms of the depth with which curricular topics (learning content) can be engaged and interrogated at the classroom level which also determines the learning pitch, the sequencing of the curricular topics and the pacing of learning in the classroom. At a classroom level, agency relates to how students are positioned on classroom activities and actions in terms of their degree of engagement with curricular topics ranging from extreme passivity to extreme active participation. It is also axiomatic that classroom agency is shaped and influenced by the positioning of students on disciplinary knowledge.

**Autonomy as an Aspect of Pedagogy**

The third aspect of a pedagogic practice relates to autonomy which refers to, at an institutional level, the degree or zone of discretion the teacher has in decisions related to the shaping of curriculum and in determining the direction of the scope of learning content, its depth of engagement, sequencing, pitching and pacing and is thus closely related to agency. It relates to the extent to which entrenched or otherwise institutional decision-making processes – bureaucratic, performative, collegial or managerial – make room for such teachers’ discretionary power to design learning programmes and decide on the positioning of students on disciplinary knowledge. According to Bernstein's theory of pedagogic practice (Bernstein, 1990), the degree of control the teacher has over curriculum and pedagogy depends, largely, on the extent to which the institutional decision-making processes make explicit the sequencing and pacing rules as exemplified in syllabi, in curricula and in the clear temporal demarcations of knowledge units. In traditional/conservative forms of education, the relations of authority and conduct are immediately clear to the teacher and the rules of legitimate expectations in terms of what students should be taught and how that teaching should proceed, sequencing-pacing rules and temporal demarcations of knowledge are explicitly expressed (Bernstein 1973a, 1990).
The traditional/conservative forms of education also have a strong classification propensity where “the degree of boundary maintenance between contents” (Bernstein, 1973a: 205) is strictly enforced so that there is clear insulation and boundaries between subjects and knowledge areas so that curriculum is highly differentiated and separated into traditional subjects. In such curricular and pedagogic contexts, the role of the teacher in the curriculum planning and classroom is highly regulated and restricted.

The degree of control teachers and students possess, under traditional/conservative education, over the selection, organization, pacing and timing of prescribed curricular knowledge as also received in the pedagogical relationship is significantly curtailed by the institutional decision-making processes which also sets limits on the rules of communication within the institution and the classroom. Bernstein (1973a: 88) uses the concept of “strong framing” to refer to pedagogic relationships where there is “a limited degree of options between the teacher and students” so that their discretionary power is severely limited whereas weak framing suggests more discretionary power and freedom for the teacher in deciding the direction of the curriculum and pedagogy.

At a classroom level, autonomy relates to the extent to which the learning environment provides such discretions to students or creates opportunities for students to increasingly gain control over their learning and, approach and experience learning in their own unique ways, without compromising the general rules of making the classroom functional and conducive for learning whether on an individual or collective level depending on their positioning on disciplinary knowledge. It is axiomatic that, within strong curricular classification of knowledge areas and strong framing of pedagogic relationships, students’ discretionary powers will be significantly curtailed and in weaker classification and framing of knowledge areas and pedagogic relationships respectively, there will be more border crossing between knowledge areas and more freedom for students to sequence and pace their learning.
Classroom Relations as an Aspect of Pedagogy

Classroom relations constitute, within the framework of this study, the fourth and last critical aspect of a pedagogic practice. Classroom relations are more complex as they involve more than the consideration of the three micro-features of a pedagogic practice as described above (students positioning on knowledge, agency, and autonomy). Classroom relations are mediated through a complex web of ontological commitments that either the institution or the teacher – depending on the degree of autonomy the teacher enjoys as mediated through entrenched institutional decision-making processes – has made.

The relationship between the teacher and the student in the classroom is thus shaped and guided by three interrelated aspects of commitment – epistemic assumptions being made about the nature of knowledge which inform students’ positioning on knowledge, the institutional or teacher intentions about what must be taught, how it should be taught and the rationale behind these decisions on the classroom set-up and the classroom activities and actions that could reasonably be permitted and restricted. Epistemic assumptions are particularly strong on shaping and guiding classroom relations in terms of the role of the teacher in the classroom and how that role mediates and mitigates the teachers’ authority and, its limits and potential on what could reasonably be achieved in assisting students to learn as understood by the teacher or in terms of the broader framework of the entrenched institutional decision-making processes. In order to make better sense of classroom relations, the work of Tom (1997) becomes relevant. Her study is based on her concerns with power relationships between faculty and students as well as between teachers and students and she views these relationships as being mediated and moderated by power imbalance. She identifies two key responses to these relationships of power imbalance, responses of distance and denial. In the response of distance, Tom (1997) argues that such responses are captured in professional codes of ethics which set out prescribed roles for teachers and students.
The implications of the response of distance in the relationship between the teacher and students is that such a response, at least, acknowledges power and makes it visible, thus putting the teacher in a privileged position. That, however, fails to adequately provide support to students to grow and negotiate real changes in teaching and learning relationships. The response of denial involves, according to Tom (1997), attempts by teachers to minimize and mitigate power differentials between themselves and students so that teachers can be in a better position to try an equalize or even disavow the inherent power imbalances that exist in the pedagogic relationships. Tom (1997) suggests that instead of teachers falling into the trap of responding in a distant or denialist way to the power imbalances in the pedagogic relationship, teachers should rather accept that their expertise and institutional roles bestow such power on them, so that it becomes “something that they must own and use responsibly rather than disavow...if we are to truly teach we must acknowledge and use the power of our own position” (Tom, 1997: 11). Tom suggests that teachers should, in a thoughtful and deliberate way, create pedagogic relationships in which students can learn and grow in confidence and self-belief so that, over time, teachers can provide support to students’ increasing ability to claim agentic and discretionary power in the enterprise of learning and knowing.

The constitutive features of a pedagogic practice have been gleaned from the works of Bowden and Marton (1998) in the case of the positioning of students on disciplinary knowledge, the works of Kalantzis and Cope (2008) and Runté (1995) in respect of agency, from Bernstein (1973a, 1990) with regards to autonomy, and from Tom (1997) in the case of classroom relations. I present these constitutive, though not necessarily exhaustive, features of a pedagogic practice as a model for analyzing, observing and reconceptualizing an existing pedagogic practice. The fundamental basis of these constitutive features of a pedagogic practice is, I argue, the beliefs the institution, faculty or teacher holds about the nature of knowledge and how that knowledge should be transferred to the next person.
When epistemic beliefs about what constitutes knowledge are taken and settled within an institution, and/or a discipline, such decisions are carried through to the classroom level to shape and guide how students are positioned on knowledge, the degree of control students have over their learning, students’ discretionary power in relation to that of the teacher, and the teacher-student relationship.

I am now going to bring the notion of dialogue, and its constitution in the classroom, into the picture as a macro-feature of a pedagogic practice. This focus on dialogue as one of the central pillars of a pedagogic practice assists with the synthesis I am attempting on what constitutes a pedagogic practice at a conceptual gestalt level.

**Dialogues as Necessary Condition for Pedagogy**

This key focus on dialogue as a macro-feature of a pedagogic practice is that it is already shaped and guided by institutional or teacher positioning of students on disciplinary knowledge, thus limiting students’ control of their own learning. Assumptions about what constitutes knowledge that students could reasonably learn at what level of sophistication as well as students’ placing and progression through educational placing stages (undergraduate, graduate levels) and certification mediate such dialogues.

Dialogue as mediated and constructed through the strictures of the settled epistemic beliefs within an institution or discipline defines the parameters of the level of deferment that a student could reasonably be expected to make in the range and cacophony of a constructed and pre-determined dialogic arrangement in the classroom. In order to make this seemingly opaque and almost obfuscated argument clearer, I focus on what constitutes dialogue, its types and how it is used as one of the determining aspects of a pedagogic practice as guided by the four micro-features I identified earlier in this chapter and how that, in turn, assist us to make sense of how learnshops were constituted dialogically and the rationale behind such constructions of dialogues. Dialogue has been problematized in various areas of specialized knowledge ranging from philosophical accounts from Plato to the present day as largely shaped by the influential work of Mikhail Bakhtin in his 1981 book, *The Dialogic Imagination.*
The dialogical construction represents, quintessentially, the external expression of an internal, dialectical thought process of reason but primarily of ratiocination as it proceeds back and forth. It is important to note that Plato’s philosophical meaning of dialogic construction has had a great influence in education over the years. Plato’s meaning of dialogue relates to the entrenchment of didacticism in education which is a belief that the first function of education is to teach. This is an idea that has received withering criticism over more than four decades with scholars such as Bowden and Marton (1998), Burbules (2000) suggesting that teaching is one of the aspects of education that contributes to learning and students’ development of knowledge or competence.

Teaching is not necessarily the only way students learn or gain new knowledge or develop competence. Indeed, unchecked, teaching could lead to indoctrination of disciplinary knowledge, especially when such knowledge is considered settled and absolute, that is, if institutions of learning, disciplines or teachers commit to the idea that disciplinary knowledge and its learning is more important than any other educational consideration, then teaching is no more than indoctrination of a special kind. In such educational scenarios, the pedagogic practice framework is more likely to position students on this knowledge as deficit and accentuates the authority of the teacher in the delivery of this knowledge in the classroom with the ultimate meaning that classroom agency and autonomy are those of the teacher and classroom relations are mediated through extreme forms of the teacher’s active role and the students’ passive submission to the dictates of the learning environment. Dialogue is reduced, in such didactic educational scenarios, to professional authority (the language of the discipline) which Bakhtin (1981) argues is notorious for its single-voiced approach and its demand of complete deferment to its authority. In such a scenario, professional authority pronounces itself strongly on the object (student) through suppressing both the scaffolding of pre-existing knowledge of students and outright marginalization of alternative knowledge forms and points of view of students in the classroom.
In Apartheid South African education, the underlying educational philosophy that informed such an approach to education was Fundamental Pedagogics which turned the teacher into the fundamental bearer of professional authority and the student as one who demands such authority (Landman, Kilian, Swanepoel and Bodenstein, 1982). Based on this understanding that learning environments can be organized in such a manner as to restrict dialogue as one of the key pillars of a pedagogic practice, to the vortex of limiting classroom interactions to an unawareness of the existence of a second voice within the classroom utterances, education and more specifically teaching becomes a form of persuasion of the severest kind – conquest.

Dialogue, within educational didacticism, is framed in such a manner as to make the purpose of classroom interaction between the teacher and the students to be the securing of disciplinary knowledge as the ultimate and only form of knowledge. Dialogue thus conceptualized, as leveraging professional authority, is not only one-voiced but serves also to control students' ways of thinking and knowing through signifying disciplinary sources of knowledge as impeccable and beyond reproach which undermines alternative sources of knowledge. In recent times, dialogue as an instrument of teaching beyond the limits of professional authority framing, has been couched as serving democracy, promoting communication across difference and an enabler of active co-construction of new knowledge and understandings. These extolled virtues of dialogue as a transformation tool in education range from various pedagogic approaches from Socratic question and answer instruction, constructivist scaffolding and Freire’s liberatory pedagogy which preaches the value of interactive engagement in the classroom interactions that take place between the teacher and students. Yet, these claims of dialogue as transformative in this sense are couched in persuasive language similar to the proclamations of didacticism on dialogue, only varying in degrees of severity, with the former slanting towards conversion and the latter towards conquest through persuasion both of which have the intent to change students into either social activists or “responsible adults”.
More importantly, both forms of education consider teaching through dialogue as the necessary human function to attempt to change students into forms each of these educational approaches considers appropriate. Dialogue as thus conceptualized within the mould of “demos” (people) has its definition drawn from “double-voicing” which Bakhtin refers to as the suggestion that whoever speaks must be aware of the right of the listener(s) within the utterances and enter into a dialogic engagement (Bakhtin, 1981) with the listener(s). In this sense, classroom dialogues have been mediated through communicative options that are loaded with epistemic beliefs held or committed to by institutions or teachers, and should thus be understood from the context that teachers are never free from the intention of persuasion especially at undergraduate level. I call for a different kind of dialogue in pedagogies that are intended to foster students’ creativity. These are dialogues that attempt to go beyond persuasion and embrace the need to create safe conversational spaces where the audience is given the opportunity to self-persuade based on the discussion that ensues rather than on the rhetor’s, explicit or implicit, intention to change or convince the audience of the superiority of his/her position on a matter.

Transitions as Essential Aspects of Pedagogy

In every education endeavour there is an axiom that education is about managing transitions, whether from the level of taking students from the unknown state to the known state of disciplinary knowledge or from basic dualism to extreme relativism as elaborated by Perry (1970). Transitions, therefore, become the second pillar of a pedagogic practice, which suggests that learning environments are organized in ways that ensure that transitions take place and are keeping the learning environment in a kind of self-correcting dynamism. The first key to transitions, as pillars of a pedagogic practice, is that each one of them has a beginning (a point of entry) which exposes students into the assumptive worlds of the discipline or teachers. The second key is the liminal space which is mediated through students’ positioning on knowledge (epistemic beliefs), agency, autonomy and classroom relations.
The third and last key to the transition comprises the new challenges that they will face once they have been through the learning experience which is at the point of exit. This is where students have potentially become rooted in the assumptions of the discipline, making them capable in the economy and society or able to secure higher placing in further education levels of the discipline.

**Knowledge Sites as Necessary Condition for Pedagogy**

The third and last pillar of a pedagogic practice, I argue, is the knowledge site. The knowledge site refers to what is considered to be legitimate spaces within which a discipline’s knowledge and/or competence can be gained. It implies the signification of what is considered legitimate knowledge for a discipline and how such knowledge is legislated through curriculum (Muller and Taylor, 1990) and regulated within a pedagogic practice. The legitimization of a knowledge site by a discipline determines what counts as the only impeccable sources of access to disciplinary knowledge and only within its own strictures of what constitutes textual and practical sources of knowledge such as textbooks and laboratories. Knowledge site as an aspect of a pedagogic practice is about the determination, by the entrenched institutional decision-making processes, of the legitimate places of appropriation of disciplinary knowledge.

**Summary**

This chapter attempted to develop an analytical tool in the form of the four key features (micro-features) and three pillars (macro-features) of a pedagogic practice. The micro-features of a pedagogic practice were noted as students' positioning on knowledge, agency, autonomy and classroom relations as understood at both the institutional and classroom level. The key pillars of a pedagogic practice were identified as dialogue, transitions and knowledge site as mediated through the micro-features of a pedagogic practice.