MORE THAN AN APPRENTICE MODEL: LEGITIMATE PERIPHERAL PARTICIPATION (LPP) AND THE RESEARCH CONFERENCE FOR POSTGRADUATE STUDENTS

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The Context of the Conference
The Deakin University Postgraduate Association (DUPA) receives a funding subsidy from the Deakin University Research Office to deliver the annual research conference. One of the reasons that this funding is made available is that the Research Office believes this conference can give postgraduates an enriched research experience. One of the issues for DUPA, and the focus of this paper, is that of the format of this conference to provide the most appropriate support for postgraduate students.

Much of postgraduate work has been based on assumptions by supervisors that research students have come into research programs well versed in the conventions and protocols of what it means to be a research student (Zeegers, 2000b, p. 231). Yet a university-wide survey of postgraduate research students’ perceptions of faculty support for their work suggested a number of areas in which the university was lacking. One of these was that of proper induction into the roles, requirements and rights of postgraduate students (Research Office, 1999).

We were concerned about the lack of systematic approaches to facilitate these students’ operations on the multiplicity of levels required for their success as research students. The research of Barron and Hinton (1999) confirmed that a significant number of students was drawn to the notion of self-improvement and a commitment to educational principles with a desire to interact with other academics in different areas of interest. Being thus drawn was no guarantee, however, that such interaction would ultimately lead to satisfactory completion of postgraduate studies. Particularities of thesis production and dissemination would need to be learned and mastered first.

The annual postgraduate conference emerged as a mechanism by which we could engage much of what was problematic as far as our students were concerned. The conference would allow us to tackle these problems, initially as part of an induction into the research community and ultimately as part of making the transition from acolyte to master. We took the view that such a transition involved more than the sort of thing intended in his discussion paper by the Minister for

Education, Training and Youth Affairs (Kemp, 1999a) in his reference to government support for ‘research and research training’:

> Australia’s capacity to generate new knowledge is fundamental to the strength and health of our society. It must underpin our economic growth and our capacity to effectively [sic] solve social problems (p. v).

Such a narrow view of postgraduate activities indicates a sort of *homo economicus* type of thinking identified by Pusey (1991, p. 1). The subsequent policy paper (Kemp, 1999b) took a similar line in its view that research ‘as a key source of knowledge and new ideas is central to success in the global knowledge economy’ (p. 1). The Council of Australian Postgraduate Associations’ response has pointed up the implications of such limitations:

> …the core problem with the White Paper is the insistence on seeing research education as ‘research training’. The poverty of this concept in grappling with the issues reduces the Government’s policy to mere concern for student throughput. ‘Training’ does not capture the complexity of nurturing knowledges and practices that underpin and enable innovation. (Smith, 2000)

We also took it as meaning more than the sort of thing implied by our university itself in its guide to students (Deakin University, 1999a): “One of the most important functions of a university is to provide training in research”, seen as “a unique responsibility” of universities (p. 1), and repeated in its various advice to potential examiners of types and levels of theses (Deakin University, 1999a; 1999b). The University advised that research degrees were “awarded on satisfactory completion of supervised, but independent research, which is described in a thesis” (p. 79). We saw that the number and range of things to be mastered by research students, from honours upwards, may indeed have culminated in a thesis upon which an award may have been based. We also saw that this sort of undertaking encompassed a number of ancillary skills and activities that, largely unacknowledged in the public statements surrounding research activities, nevertheless abound in the silences of taken-for-grantedness surrounding the discussion. A large aspect of the problem has been that postgraduate students have not been privy to what their supervisors and funding bodies knew existed in the silences. What we were trying to avoid was the trap of taken-for-grantedness that assumed a certain enculturation of the postgraduate student that did not necessarily exist. Neither did we want to assume that those more advanced in their projects had already been well and truly inducted, even if only through an osmosis process.

Our concern was not about academic results but about the ways in which postgraduate students could decode the university research student system. Ranson and Stewart (1994) point to learning as being a revelation of the connection between things which had previously been unrecognised, or opaque.
Discovery is most likely to occur through experience, when people immerse themselves in the practice of activities so that their meaning becomes transparent. Once the working of a particular system has been revealed, it then becomes amenable to change, and it is the experience of change that provides the catalyst to learning (p. 168).

Examination of what is perhaps one of the most basic assumptions as to research student performance provides an insight. Computer literacy is a taken-for-granted aspect of the research student, where the ability to establish the physical parameters of the published form of the text generated in thesis writing is assumed, and with this the ability to use tabs, page set ups, styles, and so on. And computer literacy is not just word processing either. The successful research student needs to be able to manipulate the software associated with databases, such as EndNote; with statistical and qualitative analyses such as SPSS and NUD*IST; with data presentation, such as PowerPoint; with Web searches, such as Netscape, and so on. None of this is stated in, for example, the advice to examiners of a particular Doctoral program (Deakin University, 1999b):

> The thesis will be in the form of a folio of research work which has significant implications for educational practice. Candidates are required to present, develop and argue a position which they support by empirical study and locate in a clearly expressed understanding of the relevant research literature and an account of the relevant issues in educational policy and professional practice. (p. 83)

Such a brief statement would encapsulate a whole research culture going beyond the parameters of such a folio, and in the case of other research work, beyond the parameters of a thesis. Taken together with the implications of ‘research training’, it would also include cultural expectations of presentation of research papers, publication of these, and alternative forms of research presentations as well as the production of the folio or thesis.

Not all of this would be apparent to the postgraduate student, however, especially in the case of the newcomers’ experience. Experienced supervisors being matched with inexperienced newcomers could exacerbate the situation of gaps developing between what the supervisor would already know, and what the postgraduate student would not. Failing to acknowledge such gaps first of all would mean that the stage would be set for any number of misunderstandings and second of all that nothing would be done to alleviate the situation.

**Legitimate Peripheral Practice (LPP)**

Once we had taken all of the above into account, we had moved beyond the initial conference planning stages. We had the somewhat ubiquitous model of the master-apprentice (Frankland, 1999) before us, but we felt that this was a model that would limit us somewhat in that we felt that the subjective position of the
apprentice did not encapsulate the research progress that a research student makes. An apprenticeship model would not necessarily present as a seamless master-acolyte relationship, and the issues of conferring legitimacy on the apprentice through the completion of training would present as perhaps more important than issues of what may be taught or learned. The model, moreover, has had a long history of exploitation of what has been described as ‘a traditional form of control over the most valuable, least powerful workers’ (Lave & Wenger, 1994, p. 64). It has also had serious implications for the status of the apprentice, most recently coming to the foreground in a number of court cases (Hemming, 2000, p. 6).

What we were looking for was a model that could be used to help us build a conceptual bridge to take the conference to a more productive level of engagement in the research culture by postgraduates. We did not see students as observers and imitators of experts and more successful postgraduate students brought in to instruct and inform. After all, Australia’s postgraduate research students perform approximately 60% of the research done in universities (Smith, 2000), implying somewhat more than apprentice status. We had the mentoring model as well, with the concept of ‘significant assistance’ provided to the students “in a warm and nurturing environment’ by ‘a skilled and experienced mentor” (Long, 1996, p. 1). This model, though, for all of its benefits even over optimum long-term conditions, has produced its own shortcomings, not least of which is the sort of ‘contrived collegiality’ (Long, 1996, p. 8) that would have had to have been established in the necessarily short term over a long weekend.

What we turned to was Lave and Wenger’s (1994) theory of Legitimate Peripheral Participation (LPP). Lave and Wenger made it quite clear that they were not concerned with any sort of distillation of the apprenticeship models, but with a decentred view of such a model. In such circumstances mastery within a given field would lie not with the master but within the community of which the master formed a part. Thus, a specialist field would contain a number of specialists and specialisms, and at a number of levels. There would be the journeymen, the senior apprentices, the particularly adept newcomers, as well as the masters themselves who would be on their own way to even more refined skill and art. Thus, LPP is concerned with the whole of the community that would develop in a given field where learning would be seen as access to practice, not just access to information or knowledge. The limitation of observation and mimicry is perhaps best seen in this context, as compared with concepts of communities of practice providing participation on a number of levels in the process of gaining full membership of such communities.

When we established the protocols for this conference we took deliberate steps beyond those normally associated with apprenticeships, mentoring and/or
shadowing within a community of academic endeavour. One of us had already
developed and trialled an LPP program with a group of undergraduates from across
the five faculties, with a fair measure of success (Zeegers et al. 1999). We already
had a community of practice. It consisted of the student group drawn from five
university faculties, ourselves as conference organisers, and a number of
postgraduate student supervisors anxious to support the idea of this conference. We
decided to build upon this, being quite specific about how to set about what it was
that we wanted to achieve in the best interests of the membership of that
community. More was needed than what we already had in the form of highly
motivated students intensely involved in their own research processes and an
excellent teaching program provided by the Faculties. We decided that that would
be a mechanism for increasing the participation of postgraduates in expert
performance and designed the program accordingly.

Lave and Wenger (1994) have taken the view of a community of practice as ‘an
intrinsic condition for the existence of knowledge’ as it provided the very essence
of what was necessary for members of that community to make sense not only of
its existence but of the reasons for and the heritage associated with it. In that sense,
“participation in the cultural practice in which any knowledge exists is an
epistemological principle of learning” (p. 98). We had nothing in the way of
systematically implemented academic research development on a University-wide
basis. What was needed was a way to establish each student's participation in a
successful university program on a multiplicity of levels, an “activity system about
which the participants share understandings about what they're doing and what that
means for their lives and for their communities” (p. 98). It was not enough for
them to work on the basis of their supervisors’ assumptions and applications, for
even with the apprenticeship system, the learning that is done via other apprentices
is not to be treated as an insignificant feature.

LPP learners are habituated to the practices of a group of skilled practitioners, and
newcomers to this group move and are moved forward into their own full and
legitimate participation over a period of time. This is done by means of a process
that moves them through a series of activities based on knowledge imparted by
those with expertise at various levels in the chosen field from the periphery
through to centre stage activities with full and formal acknowledgment of skills
and knowledge developed in the process. Lave and Wenger (1994) view the
traditional apprenticeship systems of various cultures as manifesting the
transformative possibilities of the newcomer to the master in a given field, but
stress the importance of the development of the whole person rather than the
transference of a body of knowledge from one person to another or others. They
present the concept of peripherality as positive and dynamic (p. 37) in its being
suggestive of access to sources of knowledge and understanding through growing
involvement. We used this concept to inform our activities, allowing us therefore to concentrate on the more positive aspects of peripherality as opposed to negative aspects associated with marginalisation.

**Method and Madness Theme**

In deciding upon the theme(s), venues and activities of the conference, we looked at perhaps one of the most famous of all university students, Hamlet, and took the notion of method in his madness (*Hamlet*, Act ii, Sc. 2: “Though this be madness, yet there is method in it”—Polonius). Our research (Prince and Barron, 1999) had told us that students had real problems not with the substantive aspects of their research, but with such things as the systematic organisation of the project. We had, in effect, started at one end with the problem of method and methodology and proceeded to close the loop from that point. We did not engage with the content associated with any particular or identifiable subject discipline. Rather, we attempted to construct a means whereby participants would encounter the best practices involved with being a learner at whatever the level of research scholarship involved. It was much more to do with certain attitudes, behaviours and conditions of the research than it was about the knowledge to be acquired. We had the unequivocal support of our University Research Office, who provided major funding for the Conference, and a subsequent application to our student body umbrella organisation provided some extra funding to enable us to include honours students. This last was a group that we felt was in a no-man’s-land situation as to support for their research activities. Thus, we began to close the loop by establishing research method and methodology for all levels above that of undergraduate.

Our focus was based on the issue of conferring the legitimacy of professional practice upon their research activities, which, as Lave and Wenger (1994, p. 92) argue, “is more important than the issue of providing teaching”. The focus was not really about teaching after all; it was about providing the context in which learning could occur and in which the learner would be absorbed into at the same time as absorbing that context. We wanted to foreground aspects of postgraduate activity that had been taken for granted, that of the research culture that was so obvious to anybody in the know as far as this aspect of postgraduate life was concerned, but which was not necessarily so transparent as far as initiates to the system were concerned. We decided that we would concentrate our main efforts on easing postgraduate students via a staged process into their situations as postgraduate scholars within a community of university scholars. We designed a structure based on a model of multi-levelled research activity with a professorial/doctoral level at the top of a pyramid-shaped structure, the base of which was formed by the more
numerous postgraduate non-presenter level. The following diagram is illustrative of this:

![Diagram of LPP Characters]

**Figure 1: Model of LPP Characters**

**Working the Model**

**Professorial**

“Scholars should be offered a choice of content that presents essential skills…and also ideas” (Prince and Barron, 1999, p. 6). Thus, we constructed a schedule to reflect the generic and educational stages of student development. On the first day, we based all activities on experienced practitioners in the field, but we also included professional practitioners in research-associated fields of Library, in the use of computer programs, and in the use of the conference room equipment. The professorial level was used to establish the tenor of the proceedings. The University’s own professorial class (in which we included PhD Lecturers and tutors and Senior Lecturers) acted in the roles of scholars presenting papers on research methodology appropriate to the disciplines in which they were involved. The librarians who specialised in liaising with specific faculties made themselves available to give postgraduate students individual or group advice in making the best use of the library as a resource. At the same time, experts in a number of fields in computer software programs and technicians skilled in the use of technologically advanced equipment of the conference room gave hands-on sessions in those areas. The people that formed the elite group at the apex of the pyramid thus established an endpoint and a means of getting there in their presentations to the larger groupings of postgraduate students at various levels that followed them. The postgraduate students worked a mixed program of observation and hands-on practice in this way, with each session designed to give them the best advice on how to proceed with their research. On the one hand subjects in an audience, they were on the other objects of discussion and practice. This is illustrated in the following extract of schedule, the first day of the Conference program.
Figure 2: Extract of Schedule, Day One

The blend of the observational and practical activities allowed us to present professorial and doctoral academics wrestling with the issues of research in relation to their disciplines and their own research work, realising for the students a context for learning through immersion in the number of activities on that day. By systematically exposing each student on the periphery to the scholars operating before them on the centre stage, we were able to present role models at the same time as those models were taking them through the protocols and processes relevant to their own particular disciplines. The dual positions of subject and object of all activities on that first day worked to make transparent a number of taken-for-granted issues regarding postgraduate students, as the title Behind the Scenes of Educational Research alone would suggest. This meant content being covered, but it also had the advantage of seeing that researcher’s role in action, that of the mainstream professorial role being the focus of the postgraduate student role on the periphery. The role(s) of each was apparent, ensuring that each participant in the exercise was aware of the structure of the relationship. The relationships thus established were intentional rather than based on happenstance or even whimsy regarding the central and the peripheral characters. The systematic building of this relationship legitimised its existence and its activities in terms of Legitimate Peripheral Participation (Lave & Wenger, 1994, p. 92). We fed another loop into this setup in that we invited each postgraduate member of the conference to critique each session in terms of its effectiveness in supporting student research activities. In doing this we were attempting to reinforce the status of the students as legitimate participants in the exercise rather than as observers of what was happening on the centre stage.

Advanced Postgraduate

It was not until the next day that we began to introduce another level of characters on the postgraduate student scene. It was here that we introduced papers presented

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by postgraduate students themselves, essentially works in progress or projects undertaken in conjunction with or in addition to their thesis and/or folio work. Thus we were displaying achievements by postgraduate students at a more advanced stage than those in the audience, but a stage which was less developed than that of the professorial/doctoral levels of the day before. We had set this up the previous day by leaving the judging of the poster competition to the end of the day, thereby illustrating alternatives for presentation of research. We merged the levels of characters here, incorporating one from the professorial level to conduct the judging from the postgraduate student levels, and to comment on this form of research presentation at the same time. We followed up the next morning with the Keynote address being given by a PhD student whose thesis had been submitted for examination, and who had therefore almost gone through to the top level of the pyramid model. An Associate Professor presented a session on qualitative methodology while two students presented on quantitative methodology. Experts also presented on appropriate software, to be followed later in the day by postgraduate presenters. The following excerpt from the schedule is a brief illustration:

**Figure 3:** Extract of Schedule, Day 2

Ferro (1993, p. 29) has discussed the importance of the supportive nature of the sorts of relationships developed in undertaking such activities as these, pointing to the need for establishing high trust levels, fostering an accepting atmosphere and creating positive self-awareness. Being postgraduate students ourselves, it was possible to indicate to each participant that we really were on their side, that there was no judgment involved in their handling of the life of scholarship upon which they had launched, and that problems arose to be overcome rather than otherwise. Much of the pre-conference efforts were directed towards establishing that sort of trust level, with no suggestion that anybody who wanted to present would not be able to do so. We encouraged each participant to present, in fact, we followed up each registration and/or request for information with telephone calls to suggest this. We accepted all papers, and advised on content, form and style when we were approached. We included a panel session devoted to such things as intermitting, falling behind schedule, solving the practical problems associated with postgraduate studies. We were able to refer specific problems as they arose to other students present at the Conference for immediate advice and assistance. We thus had students who had made a deliberate decision to be observers this time around,
to learn how to present for the next conference. We had others who had never presented their work before decide to test the waters with this conference, looking for feedback and critiques of their work to help them to master the conference presentation skills they felt they were lacking. Again, we fed a feedback loop into this day’s activities, inviting critiques of presentations, just as we had the previous day. Students in the audience treated student presentations in the same way as they had those of the professorial and doctoral level, making no distinction as to perceived differences between the levels. In this way the postgraduates themselves were drawn onto the centre stage by others within the cohort, and in doing this the cohort was exercising academic skills that served to move them even further from the periphery as they acted out the supportive nature of the activity.

**Beginner Postgraduate**

It was on Day three that we set up the day with an Associate Professor to deliver the Keynote on the more salient aspects of research supervision, and followed up with a focus on Honours Students to round off the various foci on staged progress in the postgraduate field. After the keynote, all sessions were conducted by students themselves, with the professorial level virtually absent. Postgraduate students held the floor, conducted the conference proceedings and were generally very much in evidence. The conference protocols had thus effectually closed its own loops, tied up its own ends, and had finished on a student note. All participants in the audience were surveyed. Some aspects of the program were deemed by students to be more successful than others, and we had good data to help us to refine the program should we decide to conduct it in this format. All participants rated it in positive terms, as being Good, through to Excellent. None rated it below this, although Fair and Unsatisfactory were options open to them. The immediate results assured us of the success of the system as far as postgraduate students were concerned.

We did go further to close the loop, however, in terms of postgraduate students being involved in legitimate peripheral participation. The Education Faculty Graduate School offered to fund the publication of conference proceedings, and once again presenters were invited to submit their revised papers (because of the feedback that they had received as a result of their presenting) for inclusion. The result, entitled *A Research Snapshot* (Zeegers, 2000b) was produced. There was quite a range of papers, including those from professorial and doctoral level—Arts, Commerce, Education, Behavioural Sciences and Science and Technology; a range of levels—Honours, Masters, Doctoral; a range of situations—on campus, off campus, international, local.

The book indicates only part of what happened behind the scenes of this particular postgraduate conference exercise. This paper tells a more complete story. We
started with at one end with an idea to create as full and rich a postgraduate experience as possible. Planning, procedures and publication has allowed us to come out the other with a successful, developed a model upon which to base similar undertakings in the future. It allowed us, for that long weekend, to work at “closing the circle and addressing major issues from getting started to finishing successfully within the overall context of a quality postgraduate research experience” (Liljegren, 2000).

References
Deakin University (1999b) Advice to Examiners of Higher Degrees of the Doctor of Education Degree, Deakin University, Guide to Higher Degree by Research Candidature, Deakin, Geelong, 83-86.


Zeegers, M. (2000b) (Ed) A Research Snapshot: Selected and Revised Papers of the 1999 DUPA Methods and Madness Conference, DUPA in Association with the Faculty of Education, Deakin University, Geelong.


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