

A web of interconnectedness: The implications of coordinating a peer mentoring program

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Abstract: *A multifaceted approach to evaluating the peer mentoring program at the University of Western Sydney (UWS) enables the Learning Skills Unit staff involved in this program both to sustain an appropriate training program and enhance their skills base. The approach taken to coordinating this program follows the action research cycle: observation leads to reflection, which informs planning, and then action. There are substantial pedagogical implications for Learning Skills staff working on this program as the teaching practices employed during mentor training inform and enhance their work with students in other teaching contexts. Regular meetings between the coordinators, trainers and School academics, along with debriefing sessions with mentors, provide insights which are applied to inform an evolving and dynamic program and create a web of interconnectedness which not only promotes cross fertilisation of ideas but also leads to exciting collaborative projects.*

Key words: *reflective practice, evaluation, peer mentoring*

Introduction

Substantial literature has examined the benefits of participating in peer mentoring (PM) programs for students in their first year at university as well as for the students who mentor them (Arendale & Martin, 1993; Wood, 1997; Rubin & Herbert, 1998; Playford, Miller, & Kelly, 1999; Bruffee, 1999; Boud, Cohen, & Sampson, 2001; Dook, 2002). While such benefits for students are the hallmark of success for a PM program, benefits accrue also to the staff involved in PM, and these benefits are the focus of this paper. Our experiences

of coordinating the University of Western Sydney (UWS) PM program, initially while novice LAS advisers, have been a significant factor in our professional development, and the staged and embedded cycles of reflection, evaluation and action that underpin the program have enhanced our roles as reflective practitioners. Moreover, the insights we have gained from involvement in this program have extended into our more specific work, with consequent pedagogical implications such as the application of the training technique of facilitation to our teaching practice. Additionally, this involvement has created a network with academics and has provided fertile ground for collaborative projects and research. As such, working on the PM program has woven two novice LAS advisers into the web of academic community at the University of Western Sydney (UWS).

Peer mentoring at UWS

Peer Mentoring, introduced in 1998 at UWS, is a preferred means employed by many schools to assist in the integration of first year students into their discipline at university. PM sessions are run by experienced and trained students who facilitate 'group interaction in relation to university study activities amongst small groups of less experienced students' (Farrell, Pastore, Handa, Dearlove, & Spalding, 2004, p. 1). Focussing predominantly on the learning processes of first year students, the program is based on the Supplemental Instruction (SI) model from the University of Missouri-Kansas City where this program has been running successfully for the past 28 years. It has been found to be an effective way of improving the first year experience of students in many educational institutions (Arendale & Martin, 1993; Parker & Montgomery, 1998; Watson, 2000; Farrell et al., 2004). By focussing proactively on at-risk classes rather than reactively on at-risk students, SI fosters systemic improvement and avoids being stigmatised as remedial (Gardiner, 1996). Since its foundation, the PM program at UWS has evolved into a comprehensive, wide ranging program. The authors have been co-coordinating the program across the six campuses of UWS since July 2003. In that time PM has been run in diverse subjects representing a wide range of faculties, and in both voluntary and compulsory modes. Potential mentors are usually recommended by their subject lecturers, the main promoters and supporters of the program within their school. Lecturers who are committed to PM have been instrumental in the success of this program in their subjects. The training sessions for mentors are organised and conducted jointly by the Learning Skills Unit (LSU) and Counselling staff. The main aspects of training include reviewing and discussing the mentors' first year experience, sessions on group dynamics and roles and responsibilities and practice mentoring sessions. Training is substantially based on the principles of SI so that student involvement is maximised - sessions are facilitated, not instructed, and small group activities are used where possible.

Our framework

Action research, as defined by its systematic and participatory nature and its underlying focus on improvement of practice through action and reflection (Ebbutt, 1985), is compatible with the scope of our work as coordinators of the PM program. Action research, which is usually recognised by its collaborative core (Kemmis & McTaggart, 1988) and is context specific, again complements our work, as PM is premised on the power of collaborative work as well as is adapted to a diversity of contexts across UWS. Although most educational

practitioners recognise the need for consistent reflection, flexibility and adaptation in their work, they are usually challenged by workload pressures and time constraints. The action research approach can address such constraints by providing the possibilities and means to integrate research and practice. It also allows practitioners an opportunity to address the gap between their espoused theory and theory in use (Kember, 2000) and as such addresses 'the binary between [their] research and practice' (Moller, 1998, cited in Bretag, Horrocks, & Smith, 2002, p. 66). Within the PM program the cycles of planning, acting, evaluating and reflecting that comprise action research are systematically implemented. As is the nature of action research, these stages overlap and are at times messy but nevertheless are integrated. Planning occurs multi dimensionally so that on one level it involves the ongoing institutional and organisational aspects of the program such as recruiting interested lecturers and subsequently students to be trained. On another level, which is more reflective, planning relates to the adaptability and flexibility of the program and the two-day training. The reflective nature of our inquiry is more focussed on the training aspect of our program as the site in which we have some 'control' and ability to implement change. Implementation, as the acting stage of the research cycle, follows the planning stage, which is conducted at a series of both formal and informal meetings, and then a series of evaluative processes ensue which feed into reflection, which again informs the next planning stage.

Using each phase of the program as a learning experience we engage in the process of reflection both individually and collectively. Our adherence to reflection has helped us build and increase our learning (McAlpine & Weston, 2000) and improve our practice because we constantly 'examine and construct, evaluate and reconstruct' (Grundy, 1986, p. 28) our practice. As coordinators of this program we are continuously questioning our procedures, redefining our assumptions and reviewing our policies. As reflective practitioners we recognise the inherent interconnectedness of means and ends and value the process of learning while doing (Schön, 1983). Therefore, through enabling us to critique our practices and subsequently provoke change, reflection allows us a 'perspective transformation' (Mezirow, 1981, cited in Kember, 2000, p. 29). As reflection is not carried out in an ad hoc manner but as a structured part of the program, we have become more attuned to a reflective practice in our other work as LAS teachers. We concur that reflective practice in teachers benefits their students (Zeichner, 1994; Brookfield, 1995) and creates opportunities for their own personal and professional development as it confers a scholarly status on them (Pratt, 1997).

Reflective practice however needs to move beyond the subjective and undergo rigorous evaluation to review its effectiveness. The evaluation of personal and professional practices may lead to decisions to improve, adjust or discount them. However, as the discourse of higher education is shifting from 'scholarship' to 'efficiency, productivity . . . [and] accountability' (Bean, 1998, p. 497), often in evaluative practices it is the quantity rather than the quality that is measured. Consequently, practitioners consider evaluation an unwelcome and 'unnecessary intrusion' (Smith, 2005, p. 1) in their practice, and not an invaluable tool for reflection. Evaluation of the PM program rather than being an impediment is actually embedded in our practice. As a process of 'looking, thinking and acting' (Everitt & Hardiker, 1996, p. 129), it has two main purposes: to ensure an effectively functioning and contextually appropriate program and to sustain a dynamic and responsive training program. We do collect quantitative data for providing statistical evidence of the progress of the program, such as the numbers of mentees who attended

sessions and their outcomes compared to students who did not attend sessions trained (Carmichael, 2004). However, evaluation of our program is not only 'counting and measuring' the numbers; it involves valuing the outcomes (Gitlin & Smyth, 1989, p. 161). Therefore it is our qualitative approach that most effectively feeds into the reflective action cycle of the program. The qualitative evaluation methods are varied and continual throughout the year ranging from informal to formal. These methods include discussion at the steering committee meetings, structured feedback and discussions among trainers and more formal evaluation via debriefing sessions with students, recorded focus groups and questionnaires. Hence planning, implementation and results, the three aspects of teaching requiring evaluation in a developmental teaching process (Pratt, 1997), are the three phases of our program which undergo evaluation presenting excellent opportunities to reflect and to evaluate our practices and then providing an impetus to learn from the insights gained.

Once the semester has begun, the running of the program is essentially the province of the subject lecturers and the mentors. Throughout the semester our role is particularly to monitor mentors, as a form of both support and evaluation, and to maintain a WebCT discussion site which enhances supervision of the program and more importantly is often a trouble-shooting or support forum for mentors. However, it is in the training realm that we feel our involvement is most meaningful and aligned with the radius of professional development. In our trainers' meetings we are informed by feedback from the debriefing sessions and focus groups, evaluative forms completed at the conclusion of training by mentors and trainers, end of semester evaluations and any anecdotal feedback that may have been recorded throughout the semester. In terms of the action research cycle our meetings are the site of reflection which leads to planning and it is here that either amendments or substantial changes are made to the training program and/or literature. As noted, action research is contextual, and this is very much recognised in the planning process that occurs at each trainers' meeting. In planning the next training the different cohorts are considered and the order, priority and time given to elements of training as appropriate. For example, the upcoming training program for a subject requiring 40 mentors for a compulsory program has been substantially reduced time-wise and redesigned to encourage mentors to give input into the focus and content of sessions.

The qualitative aspects of the evaluations are further enhanced through the power of group dialogue. This intellectual engagement of discussing the responses and implications of students' comments as a group has provided many learning opportunities to all PM trainers and has benefited the program. These opportunities to learn through dialogue (Bruffee, 1984, 1999) have enriched the skills base of the staff, particularly since trainers have begun to record and structure their reflective processes more consciously. Due to our collaborative and constructive discussions over the past two years, the training program has altered in a number of ways. These changes in our program are also critically examined in our meetings, thus bringing the power of 'collective, self-reflective enquiry' to our practice (Kemmis & McTaggart, 1988, p. 5). An outcome of the developing nature of the program has been two documents which inform the training process: the trainers' manual and the students' workbook. These documents are significant in that they are evolving documents and modified or enhanced as we reflect on our training program, as we respond to feedback from students and as the program responds to the requests of the UWS community. For example, changes in the last two years to the training program include the format and length of time devoted to different aspects of the training as well

as the level of input required from mentors in terms of constructing their knowledge of mentoring.

Possibly the most significant change to the training program that has arisen from reflective practice is the challenge to model the skills of facilitation which are so integral to the philosophy of peer mentoring. Modelling skills rather than explicating them through direct instruction has been at the core of the training process since its inception at UWS. However, the degree to which this can be practised has been incrementally realised as trainers have reconceptualised the possibilities. This is an element of reflective practice enabled through the action research framework that allows the envisaging of the 'influence of past assumptions and constraints so as to permit a movement towards actions more consistent with new understandings' (Kember, 2000, p. 29). The action research project undertaken by one of the trainers for her master's degree into the effectiveness of the training program has encouraged ongoing improvement of the training (Armstrong, 2004). For instance, in 2004, reflective post training forms informed intensive discussions about trainers modelling the facilitation process. As a result, in 2005 we have shifted our focus onto more experiential learning, so that students begin to have mentoring opportunities from the first morning of the two day training.

Implications for practice

The approach to learning as a process of constructing knowledge rather than receiving it has long had currency (Vygotsky, 1978; Andresen, 1994; Duffy & Cunningham, 1996; Abbott & Ryan, 1999). However the University learning environment does not necessarily support this process, particularly as cost effectiveness drives the educational agenda. With large classes and lectures tending to supplant smaller tutorial size classes the opportunities for discussion about subject matter are limited. Discussion is a powerful factor in the construction of knowledge and 'an investment in quality learning' (Andresen, 1994, p. 7). Of course discussion may occur spontaneously among students in study groups that they initiate but equally students may not necessarily have these opportunities; our role as coordinators of the PM program is to facilitate the creation of space and structure for such discussion. Furthermore, an interaction between faculties, students and Learning Skills staff can ensue which is an important dialogue to take place in universities for students in terms of developing their learning (Hardin, 1994).

Since a reflective, evaluative and active cycle of learning occurs in this program, potentially everyone involved in peer mentoring becomes a reflective practitioner. Learning where the purpose of reflection is to improve the practice and procedure (Usher & Bryant, 1989) without questioning one's role involves only individual learning and is considered single loop learning (Argyris & Schön, 1974). However, in peer mentoring learning happens at both individual and organisational levels. While reflecting on the program the trainers, the mentors and the lecturers jointly bring insights into both the area of first year experience and their own practices. By questioning the rationale and validity of their own actions and joined in a common mission they act as a 'community of practice' playing an important role in organisational learning (Lave, 1993, Gerhardi et al., 1998, Seely-Brown & Duguid, 1996 cited in Mathieson, 2003, p. 4).

The insights that we have gained from involvement as co-ordinators in this program have

extended into our more specific work as LAS advisers. As we conceptualise our teaching as a process and not as an end product, our shared pedagogical approach is very much focused on facilitation of knowledge rather than knowledge transmission. Consequently, the skills that we have developed as facilitators of students' learning experiences during mentor training are directly transferable to our work in teaching academic skills where actually practising facilitation in one context makes it more practicable to consider its use in the teaching context. As such we are provided with the opportunity to actually reflect on and prepare for innovative or untried methods of teaching. As a LAS adviser stated:

the experience has given me a stronger understanding of facilitation of student learning and the importance of students helping each other to sort through the issues, which has enhanced my own role in the workshop teaching situation.

Another trainer has written:

what we see in peer mentoring is the power of the group in terms of output: intellectual energy, quality of discussion and decision making plus the good will and collaboration among participants This observable result of peer mentoring then gives me confidence to try it in other situations - I have been convinced by the evidence again and again. What is valuable is that in-class group activities allow students to engage with learning and practice articulating it, hearing it and constructing it to suit their purposes.

A counsellor involved in the training has also commented that it has 'provided experience and skills in working with large groups of people which usually is not the norm in my job as a counsellor which is working more on a one on one basis with students'.

Additionally, the peer teaching and peer feedback aspects of our training are a rich opportunity for professional development that is again applicable to the other work that both LAS staff and Counsellors perform. As it is a relatively rare occurrence to spend two intensive days teaching/facilitating with colleagues in our profession, we aim to derive as much benefit as possible from this experience. Training also addresses the issue of isolation that can occur in our work and the team teaching can benefit us by providing opportunities for peer feedback as well as insights into peers' teaching strengths. The new trainers themselves experience the mentoring process by gradually watching other trainers, assisting them and then running their own sessions. Learning from our collaborative engagement with our colleagues in the program, both Counselling as well as LSU staff 'model how knowledge is generated, how it changes and grows' (Bruffee, 1984, p. 635). A trainer reflected that the collaborative mode of training:

provided me with the opportunity to see the power of colleagues' teaching strategies and approaches and adapt them to my own style. I have realised how quickly I had fallen into habitual modes of teaching and now feel inspired to explore my teaching in greater depth.

The pedagogical implications of the program are not confined to the trainers but are also enjoyed by those lecturers who engage in the discourse of mentoring. One of the lecturers involved in the program for some time has reflected that 'my involvement in peer mentoring is one of many influences upon me in my practices as a teacher at university. Peer mentoring has been a positive influence'. Another has commented that:

mentoring has given me insight into first year large group teaching issues. The most useful part of my involvement was to attend the training session for the trainers – this was fantastic.

Contact lecturers who come to meet with their mentors usually attend some sessions on the second day of training. One lecturer commented: 'With the atmosphere of the training room and the synergy emitting from the group it felt as if something magic was happening there'. The dynamic and open nature of PM training is an excellent example of an ideal process of education, as according to Bruffee, 'education is not a process of assimilating the truth, but . . . a process of joining the conversation of mankind (sic)' (1984, p. 635). The basic premise of mutual respect encourages trust building amongst participants; staff and students alike and provides many insightful and informative interactions. As such, trainers are privy to relatively uncensored and open discussions about a wide range of aspects of university life. The insights gained inform our work in a number of ways particularly in being attuned to the actual experiences of students firsthand rather than via research literature. This may manifest in ways such as the selection of areas in which we direct our focus either in terms of collaborative work or more directly with students. Essentially the understanding we gain from the training experience enables us to receive direct student input in to the efficacy of our services and to understand and respond to the needs of our 'client base' rather than imposing our perceptions and assumptions onto them.

Significant networking opportunities with discipline academics stemming from involvement in the PM program can bridge 'the professional "social" distance that sometimes exists between LAS advisers and discipline academics' (Chanock, 2003, p. 72). Relationships built upon a foundation of a shared experience can enhance the success of collaborative work. Such work when intensive and embedded can then be a significant factor in both enhancing student engagement with the discipline area and addressing retention issues (James et al., 2003). For instance, connections with other lecturers through peer mentoring have resulted in contextualised literacy support for TAFE articulated students in Early Childhood Education. An example of the web of interconnectedness woven through such interactions is a successful collaboration between the LSU and the School of Engineering and Industrial Design. PM was initially implemented in this school as a retention strategy and it has experienced a series of formats since its inception. In 2005 the involvement peaked with a compulsory timetabled program in a first year unit of 400 students. This feat was accomplished due to the relationships that had been developed through previous years' involvement in the peer mentoring program and some collaborative work with the School. The targeted unit was a core unit which was innovatively redesigned to address the need for a bedrock of understanding for first year students of the professional development and communication needs of engineers and industrial designers. From the beginning, Learning Skills staff had substantial input into the unit and developed an embedded academic literacy resource book, lectured within the unit and trained mentors specifically for the context of this unit. PM complemented the significant teamwork component of the unit and provided a forum for students to develop the skills required for working collaboratively. Such holistic involvement has meant a well integrated and exciting learning and teaching opportunity for all stakeholders.

Case studies from the 2005 program

The aforementioned unit embedded peer mentoring as a compulsory component that was timetabled into the tutorial program. Given the large number of students enrolled in the unit it was a logistical challenge to train enough mentors and match them with sessions that fitted in with their timetables. Initially, a separate training was run for students mentoring in this unit which addressed the specific features of a compulsory program. Later training sessions included students from both voluntary and compulsory program modes. This created a new dimension to the training, as aspects such as recruiting mentees, promotion and content of sessions differed according to which mode students were mentoring in. While trainers and some students found this to be an enriching blend of experiences other students were frustrated by the need to discuss both modes rather than focussing on their own circumstances. A positive outcome of this blended training was the willingness of the 'voluntary mode' mentors to mentor in the compulsory unit when a shortfall of mentors occurred. These students had participated in the blended training and felt they had some understanding of the situation they would be encountering. One of the mentors reported that she really enjoyed the experience and felt she was a better mentor in the unit which was not in her discipline. She explained that this was because she was unavoidably not in the expert role and therefore could only facilitate students' discussion. These factors will be considered and explored further as we move into the planning phase of again integrating peer mentoring into this unit in 2006.

In alignment with the SI principles, PM is usually a voluntary program at UWS. When it is run over a consistent period in a unit it becomes integrated as part of the culture of the unit. For instance, in a certain law unit PM is discussed in the unit outline as well as promoted in weekly lectures. The lecturer is very supportive of the program and assists mentors where necessary. At the same time she respects the confidentiality required of the mentors and it is not until after the students receive their semester grades that she is aware of who participated in the program. This lecturer has completed accredited SI training as a supervisor and has an in-depth understanding of the principles of the program and is a strong advocate of the benefits of participation in PM. She is an active contributor in the steering committee meetings that oversee PM at UWS and she attends training sessions to become acquainted with her mentors. PM tends to attract small but steady numbers in this unit and students' valuations attest to its usefulness in assisting them in both engaging with the subject matter and creating a sense of academic community in the unit. Each unit has an individual quality and subject specific approach to mentoring and consequently we are challenged to address a diverse range of situations in our training program. Our reflective practice ensures that our responses are proactive rather than reactive.

Conclusion

In conclusion we suggest that the approach that we have taken to coordinating this program has inherently encouraged us to reflect on and evaluate our work as LAS advisers, teachers and coordinators which has resulted in substantial and continual professional development. For educators, opportunities for their continuing professional development such as attending workshops and conferences, conducting research and writing reports are important but these formal occasions (Ming, 1999) cannot be organised at the drop

of a hat. However, informal discussions with colleagues which are equally profitable opportunities for such development (Ming, 1999; Weidman, Twale, & Stein, 2001), can be arranged and utilised more often, especially involving colleagues who teach and work on the same programs. The collaborative nature of the peer mentoring program therefore has presented opportunities for us to work together, which otherwise are not available on a daily basis considering the nature of our work as LAS advisers in a multi-campus university. For most of the trainers, as we meet and discuss our reflections on the program quite regularly, it has been a significant learning process. As knowledge is a social construct and learning a social process (Bruffee, 1999), our meetings have been a profound forum in which to learn from each other, share thoughts, develop research ideas and write papers. Writing this paper has been an evolutionary process as it has enabled us to articulate and appreciate the richness of our experience with peer mentoring.

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