

Old lessons relearned: effective mentorship of students from disadvantaged backgrounds

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Abstract

Mentorship has a long history in a range of educational environments, and is now used widely in current undergraduate programs, often in the form of 'peer' mentorship programs. This paper explores the development, implementation and outcomes of an academic-student mentorship program aimed specifically at first year students from defined disadvantaged groups. Based on participant feedback and results, the program enhanced their transition experience and demonstrably improved their retention and progress. Despite the value, in terms of both economies of scale and the effects on student outcomes, of an appropriately structured, multidimensional academic mentorship program for such students, this form of mentorship appears to be considerably undervalued in higher education programs. A small initial investment in easing the transition and orientation to higher education has enormous potential to generate better learning outcomes and longer term student retention in tertiary education.

Background and rationale for the program

As participation in higher education increases worldwide (Altbach, 2010), the need for programs that support the transition and retention of students from defined disadvantaged groups becomes more critical (Cuseo, 2005). In an Australian context, this requirement has received particular urgency given the Australian Government's recent endorsement of the Bradley Review's (2008) recommendation to considerably increase the participation of students from low socio-economic status (SES) in higher education. A comprehensive body of research into academic success indicates that such students, as well as those with a disability or with poor levels of English proficiency, are considerably more likely than fellow students to become disenfranchised from their studies (Nelson, Kift, Humphreys & Harper, 2006; James, Baldwin, Coates, Krause & McInnes, 2004; O'Dowd 1996). Establishing effective and suitable mentorship is thus an important element of the targeted support required to increase the likelihood of such students completing their studies (Transforming Australia's Higher Education System, 2009).

Over the last decade, a growing awareness of the value of mentorship in Australian universities has resulted in the introduction of a range of peer mentoring programs across many institutions (Weisz & Kemlo 2004; Heirdsfield, Walker & Walsh, 2008). Popular contemporary mentorship models generally conform to one of two types: (i) broad-scale campus orientation programs (e.g. student buddy systems); or (ii) unit focused peer-assisted course-work tuition, commonly implemented as peer-assisted study sessions (PASS) or peer-assisted learning (PAL) programs. Considerable research supports the capacity of upper undergraduate mentors to enhance the discipline learning of commencing students (Topping 1996). However, such mentors are unlikely to have the life experience and emotional maturity, and thus may perhaps lack the skills or patience required to deal effectively with

disabled students or those with particularly demanding needs. Indeed, it may be unethical to expect such qualities in peer mentors. Unsuccessful peer matching, due to issues associated with perceptions about ability, superiority, affluence and resultant power imbalances can irrevocably undermine mentorship programs (Haring, 1999). Additionally, student criticisms of the scholarly ability and interest of their peer mentors demonstrates the importance of using academically skilled, accomplished and engaged mentors for such programs (Heirdsfield et al., 2008).

Here we outline a model that revisits the traditional role of University academics as mentors for students from disadvantaged backgrounds. The 'Science Access Monash Mentorship Program (SAMMP)' was established in 2009 with the following aims for commencing students in identified disadvantaged groups:

1. To enhance their overall transition experience;
2. To strengthen academic skills such as effective task and time management, incorporating problem solving and independent study;
3. To provide individualised attention, support and advice about suitable student services;
4. To improve their overall progress and likely retention in their chosen program of study.

Development of a suitable mentorship model

A range of factors contributed to development of the mentorship model adopted for this program. These included the limited lead time available for program development, funding constraints, perceived deficiencies with other models (see Haring, 1999 for a review) and the relatively small number of students likely to be involved. Based on two perspectives, the final mentorship model was multidimensional. Firstly, it aimed to address the range of academic, professional, personal and financial issues that confront transitioning students. Secondly, mentorship involved two forms of interaction: one-on-one weekly meetings with the mentor; and networked mentorship (e.g. Swoboda & Millar, 1986), with participants meeting collectively in weeks 4, 8 and 12 of semester. The mentor provided additional support via email, phone or on a drop-in basis. Similar multidimensional programs have been identified by Scott (2008) as being a key to likely transition success, and this type of approach was thought to best provide for the particular needs of students in the identified groups. One-on-one mentorship enabled advice and support to be tailored specifically to each student's situation and needs. The group gatherings encouraged social networking and gave students an opportunity to share their orientation and transition experiences with their peers.

Effectiveness of the program

Summary information regarding student enquiries and concerns was recorded by the mentor throughout the program. In order to assess its overall relevance and usefulness, during week 12, participants provided anonymous feedback about their perceptions of, and level of engagement in the program. The perceived value of the program, based on anonymous student ratings of their overall experience, was 8.9 out of 10 ($n = 10$). According to participant feedback, the program not only had considerable value in assisting their transition to University and engagement with their studies, but also increased the likelihood that they would complete their course.

A comparison of the final grade distributions of mentored and non-mentored students illustrates the success of the program (Fig. 1). Even allowing for disparities in sample sizes,

mentored students did as well or better, in terms of both overall success (i.e. pass / fail) and grade distributions (proportion of credits and distinctions).

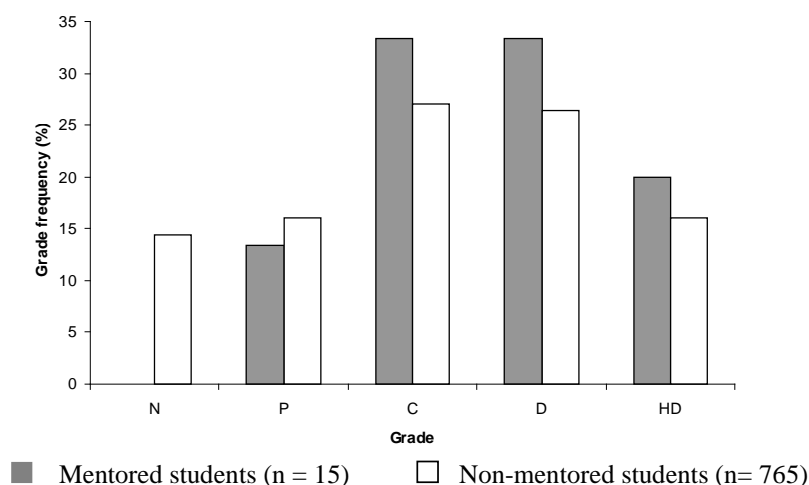


Figure 1. Final grade distributions of mentored vs. non-mentored students.

By weeks 4-6, some participants expressed doubts about their academic ability and identified a range of factors, including large amounts of coursework and approaching assignment deadlines, as contributing to this. During this period, approximately 20% of participants considered withdrawing from University. In one-on-one meetings, these students expressed feelings of isolation and nominated a sense of disappointment in their overall transition experience and initial results as the primary reasons for their considering withdrawal. The mentor outlined a number of alternative strategies, including; (i) reduced course load or partial course deferral; (ii) applying for assignment extensions; (iii) employing methods of study and preparation to enhance completion of work; (iv) persisting, and looking ahead to an easing of the work load. While students greatly appreciated these discussions, it was evident, somewhat alarmingly, that many students based their decision to either persevere or withdraw on an “all or nothing” basis, due to the misguided perception that these were the only possible alternatives. Of the four participants considering withdrawal, three continued with a reduced unit load and one persisted with all units. By the second half of semester one, all participants, with the exception of one disabled student and two from rural environments, had become considerably more independent and less reliant on weekly contact with the mentor.

The success of this program for engaging and retaining students from disadvantaged backgrounds may be due to a particular set of variables as well as the intrinsic characteristics of the program, such as its close affiliation with each student’s academic program, the relatively small group size and the consistent availability of the mentor, particularly in the early transition stage. Basing the program from within the faculty, rather than more remotely in administration or student services, promoted the perception that participants were valued members of the ‘Science cohort’. The sense of *belonging* has been identified as an important component in enhancing overall student satisfaction and learning (Christie, Tett, Cree, Hounsell & McCune, 2008).

Take home messages

The rationale for using an ‘academic’ mentor, rather than a student peer, was to facilitate mentorship for a range of contexts, including learning as well as pastoral needs. The results

of this program, which are consistent with other programs coordinated by an academic staff mentor (Gardner 1981), reinforce the importance of mentor selection, particularly for students with specific academic and/or pastoral needs. Indeed, Gardner (1981) considers that the likelihood of success of a mentorship program depends primarily on the mentor's life skills and experience. The persistence and eventual success of students who were on the cusp of withdrawal suggests that provision of a mentor involved in the actual teaching and delivery of unit, and who thus has an appreciation for the peaks and troughs of coursework submission requirements, may have been instrumental in facilitating their retention. As of 2011, all original program participants continue in their undergraduate studies, with two successfully transferring to other institutions.

With regard to the development of graduate attributes and general positive consequences for faculty, it is worth noting that in an evaluation of >100 studies of mentorship programs as a business investment, Megginson, Clutterbuck, Garvey, Stokes and Garrett-Harris (2006) apportioned benefits in terms of improved motivation, performance and skills development as approximately 40% to the mentee, 27% to the mentor and 33% to the employing body. Our program also generated a 'pay it forward' response, with a high proportion of mentored students expressing a desire to share their positive experience with future students. The practise of mentees returning to mentor commencing students is considered to be a powerful tool in higher education (Vega 2009).

Lastly, and in purely economic terms, the cost of establishing this type of mentorship program may be considerably outweighed by the income gained from increased student retention. Marrington, Nelson and Clarke (2010, p. 1) estimated that the withdrawal of a QUT undergraduate after completing the first year of a three-year degree would mean a financial loss of at least \$30,000 to the University. Thus, a small initial investment in enhancing the transition and orientation of disadvantaged students may have considerable potential to value-add to the financial bottom lines of already stretched higher education institutions.

Refinements to the program

It became evident during this program that one mode and level of contact did not suit the particular needs of every student. In order to maximise student transition, engagement and academic success, there is a need for mentorship programs to be flexible, with the capacity for tailoring based on the needs of individual students. While it was highly valued, one-on-one mentoring is very time consuming, with the personal and emotive nature of some discussions causing many interviews to run considerably overtime. In 2010, to alleviate time demands on the mentor, the program was modified to include more frequent group sessions, which focussed on the students as individuals. The additional opportunity for social interaction among such students may help to alleviate the isolation many of them feel during the critical initial weeks of transition. Based on student feedback, the program achieved similar outcomes to the 2009 program, with a mean satisfaction rating of 88% (n=12).

Session outline

Brief power point presentation (15 mins): This presentation will provide an overview of the program, and present the key findings, based on student results and feedback in focus groups and surveys. The presenters will take questions throughout the presentation.

Small group discussion (2 x 6 mins): round table discussion in small groups to consider and discuss the following main themes / questions:

- a. Do you see a current / future need for this form of student mentorship? What are the pros and cons of such programs?
- b. Is this type of mentorship employed in your discipline or institution? Could this type of mentorship for disadvantaged students be easily implemented in your discipline / institution?

Brief summation from facilitators (3 mins).

References

- Altbach, P.G. (2010). The Realities of Mass Higher Education in a Globalized World. In D. Bruce Johnstone, M.B. d'Ambrosia & P.J. Yakoboski (Eds.) *Higher Education in a Global Society*. (pp. 25-41). Cheltenham, UK: Edward Elgar Publishing.
- Bradley, D. (2008). *Review of Australian Higher Education Final Report*. Commonwealth of Australia.
- Christie, H., Tett, L., Cree, V., E. Hounsell, J., & McCune, V. (2008). A real rollercoaster of confidence and emotions: learning to be a university student.' *Studies in Higher Education*, 33(5), 567–581.
- Cuseo, J. (2005). The Case for Faculty and Staff Mentoring Programs for College Students, Marymount College.
- Gardner, J. (1981). Developing Faculty as Facilitators and Mentors. In V.A. Harren, M.N. Daniels, & J.N. Buck (Eds.) *Facilitating Students' Career Development* (pp. 67-80). New Directions for Student Services, No. 14, San Francisco: Jossey-Bass.
- Haring, M.J. (1999). The case for a conceptual base for minority mentoring programs. *Peabody Journal of Education*, 74(2): 5-14.
- Heirdsfield, A.M., Walker, S., & Walsh, K.M. (2008). Enhancing the first year experience - Longitudinal perspectives on a peer mentoring scheme. In: *Australian Association for Research in Education. Research impacts: Proving or improving, Fremantle, Australia*.
- James, R., Baldwin, G., Coates, H., Krause, K., & McInnes, C. (2004). *Analysis of Equity Groups in Higher Education 1991-2002*. Canberra: Department of Education, Science and Training.
- Marrington, A., Nelson, K. J., & Clarke, J.A. (2010). An economic case for systematic student monitoring and intervention in the first year in higher education. *13th Pacific Rim First Year in Higher Education Conference. Adelaide, Australia*.
- Meggison D., Clutterbuck, D., Garvey, B., Stokes, P., & Garrett-Harris, R. (2006). *Mentoring in Action: A Practical Guide for Managers*. Kogan Page; London
- Nelson, K., Kift, S., Humphreys, J., & Harper, W. (2006) A blueprint for enhanced transition: taking an holistic approach to managing student transition into a large university. *9th Pacific Rim First Year in Higher Education Conference, Gold Coast, Australia*.
- O'Dowd, M. (1996) Young People at Risk: Empowerment and Perspective. Unpublished PhD Thesis, Monash University.
- Scott, G. (2008). University student engagement and satisfaction with learning and teaching. *Review of Australian Higher Education: Request for Research and Analysis*. Canberra: Australian Government Department of Education, Employment and Workplace Relations.
- Swoboda, M.J., & Millar, S.B. (1986). Networking-mentoring: career strategy of women in academic administration. *Journal of the National Association of Women Deans*, 49, 8-13.
- Vega, C. (2009). Helping those who need it the most: medical education focussed on poor and disenfranchised communities. *Virtual Mentor, American Medical Association Journal of Ethics*, 11(11), 870-873.
- Weisz, M., & Kemlo, L. (2004). Improving student learning through peer support. *8th Pacific Rim First Year Experience in Higher Education Conference, Brisbane, Australia*.