Tiered mentoring: Benefits for first year students, upper level students, and professionals

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***Abstract**: This paper presents an overview of a Tiered Mentoring Program (TMP) introduced across three schools at Griffith University. The TMP linked students with peers and professionals via a tiered structure whereby first year students were mentored by upper level students who in turn were mentored by professionals in the students' field of study. Quantitative and qualitative data collection and analysis revealed a wide range of benefits for students and professionals. Practical issues and strategies are outlined for individuals, academic elements, or institutions interested in implementing a similar program.*

***Keywords:** Mentoring; undergraduate mentoring; student mentoring.*

Given the increasing existence and support of student mentoring programs in higher education, it is important that their effectiveness in terms of benefits to students is appropriately investigated. It is also important that reports on programs provide adequate descriptions of their design and implementation, so wider application may occur and so evaluation of a program's success can be interpreted in the context of its design and implementation. Accordingly, the current paper presents an overview of the design, implementation, and evaluation of a student-focused tiered mentoring program.

Typically, student-mentoring programs are developed and implemented as one of two types. The first type involves upper year level students or staff members mentoring first year students with the aim of assisting with their transition to university. Australian and overseas literature (e.g., McInnis, James, & McNaught, 1995; Tinto, 1993) is quite clear in highlighting the importance of assisting students with the academic and social adjustment aspects of their transition to university with a view to improving first year student retention, satisfaction and performance levels. The results of a number of studies (e.g., Borden, Burton, Evenbeck, & Williams, 1997; Carter, 2000; Gardner, Kendall & Kendall, 1999; Goldflam, 1999; Muckert, 2002; Pike, Pooley, Young, Drew, Haunold, & O'Donnell, 2000; Pope & Van Dyke, 1999; Treston, 1999a, 1999b; Twomey, 1991; Tyson, 1997; Webb, 1999) point to the value of student-mentoring programs in assisting students with their adjustment to university, academic performance, and/or persistence decisions.

The second type of program typically involves final year students being mentored by professionals in the field with the aim of assisting those students with the transition from university to employment. It seems that very few, if any, formal evaluations of this second type of student mentoring program have been conducted. Nevertheless, the information included on websites and materials that promote these programs (e.g., www.gu.edu.au/ua/aa/ss/careers/mentoring/mentoring.html, www.eng.mu.oz.au/diversity/mentor-benefits.html, www.rmit.edu.au/departments/fe/mentor/benefits.htm) indicates that the upper year level students gain a range of benefits from their involvement in this relationship, including inside knowledge of organisations, learning experiences, an understanding of relevant career paths, access to professional networks, and increased self-confidence.

The program reported on in the current paper presents a third type of student-mentoring program – a tiered mentoring program – in which first year students were mentored by upper year level students, who were simultaneously mentored by professionals in the students' field of study. It was anticipated that the benefits that result from the former two types of mentoring programs would occur in the tiered relationships. Specifically, that first year students would be assisted with their transition into the University, and upper year level students would feel more prepared for their transition from University into the workplace. Further, tiered mentoring would enhance the mentoring experience for upper level students by providing them the opportunity to transfer learnings from one tier to the other. That is, the knowledge, skills, and abilities learned in their role as mentee of their professional mentor would be transferred to their role as mentor to their first year mentee, and vice versa. Related to the previous point, it was envisaged that first year students especially would benefit from this tiered process of mentoring.

Design and implementation

The broad purpose of the TMP was to link students with peers and professionals. The program was designed to extend the provision of academic and social support to first year students and provide personal and professional development to upper level year students who participated. The TMP was trialled across three schools in the University (School of Human Services, School of Nursing, or School of Applied Psychology) and involved 21 first year students, 19 upper level students, and 19 professionals working in a field relevant to the students' program of study.

Students were recruited during one of their course lectures in the first week of semester. The program coordinators provided information about the program (both verbal and written) and asked potential participants to complete a questionnaire. The coordinators explained that due to the nature of the "trial" program, only a limited number of students would be able to participate. As a result, 40 first year students and 38 upper level undergraduate students volunteered to participate. The students who were not selected to participate in the trial program agreed to act as a comparison group via the use of data collected from the pre-questionnaire and a second questionnaire at the end of semester. It should be noted that, in the main, practical issues determined selection of students into the program. In particular, due to the short notice of the program (i.e., only given approval to go ahead one week prior to commencement of semester and students notified in first week of semester), those students who were easily and immediately contactable and who were available to participate in the compulsory 3-hour orientation and training session in week 4 were selected.

Each of the first year participants (mentees) was matched with an upper level participant (student mentor) from the same school in which they were enrolled. Two of the student mentors each mentored two first year students. The matching process was based, where possible, on age, gender, major area of study, and responses to open-ended questions that explored participants' reasons for nominating to participate in the program. Each of the upper level participants was also matched with a professional from a relevant field of study. For example, a student majoring in rehabilitation counselling was paired with a rehabilitation worker from WorkCover Queensland and a student interested in forensic psychology was matched with a practicing psychologist from that area. (Students in the School of Nursing undertook a different process. They chose to meet as a group with six different mentors over the course of the semester). Mentors from the field were recruited initially via contact by academic staff with whom they had professional association, and followed up by the program coordinator.

Before commencing their mentoring relationships, all of the student mentors and mentees participated together in a three-hour orientation and training workshop. During the session, participants worked with their mentoring partner on a range of interactive activities that assisted them to embark on their mentoring relationship, including setting goals, negotiating roles, and identifying key knowledge, skills and abilities they could utilise and develop during the program. Participants were provided with information about the importance of organising and structuring their meetings and engaging in ongoing reflection about the effectiveness or otherwise of their relationship. Each participant was provided with a manual that included information addressed during the session and worksheets to assist in planning, conducting, and reflecting on their mentoring relationships. Although particular details were negotiated within each student-to-student mentoring relationship, students were encouraged to meet with their partner for one hour per week during semester. At the completion of the three-hour session for student mentees and mentors, the upper level students undertook a further hour's training in regard to their relationship with their "professional" mentors. During recruitment of the professional mentors, the program coordinators negotiated a commitment of four 1-hour meetings for students to meet with their mentors. Professional mentors did not participate in training, but were advised that students were likely to focus on a range of career issues. Again, specific details were negotiated within each student-to-mentor relationship.

On completion of the workshop, the mentoring process commenced. The TMP was conducted over the course of one semester. It was up to each mentoring dyad to determine their goals and purposes for engaging in the mentoring relationship ("why" they would work together) and to negotiate frequency, format and other details ("how" they would work together). The underlying rationale here is that the main aims of the program (i.e., to enhance the academic and social support of first year participants and the personal and professional development of the upper level students) would be achieved through the process of negotiating, planning, and engaging in the mentoring relationships regardless of the particular goals they set or processes in which they engaged.

The program coordinators conducted two telephone interviews with student participants, two and six weeks after the orientation and training session. The purpose of the interviews was two-fold: first, they provided the opportunity to monitor the mentoring relationships (and thereby deal with any issues that arose during the course of the relationship) and second, to obtain data to evaluate the program. Finally, a closure session comprising a focus group and informal morning tea was

conducted at the end of semester. Professional mentors were also contacted twice during the course of the program for the dual purpose of monitoring and evaluation.

Evaluation

Data collection

Pre and post quantitative data were collected from student participants and non-participants (i.e., students who had volunteered but were not selected for the program). The data were collected via questionnaires that measured a range of variables including social and academic integration (i.e., six scale scores from the Institutional Integration Scales, adapted from Pascarella and Terenzini, 1980). Four measures of students' intention to persist were included for first year students (see Table 2). In addition, qualitative data were collected from participants via the questionnaires, telephone interviews, and at a focus group conducted at the completion of the program. Professional mentors provided evaluative data during telephone interviews mid-way and at the completion of the program. The results presented here are a brief summary of the benefits reported from first year students, upper year level students, and professional mentors and the organisations in which they work. Further details of the systematic data collection, analysis, and results are available from the authors.

Results

Quantitative

ANCOVAs were conducted to compare pre- and post-data from participants and non-participants. The use of ANCOVA allowed for statistical control of any differences that existed between the two groups on the variables of interest prior to the mentoring program being conducted. Results showed that, with the effects of each variable at Time 1 covaried out, the mean scores on all of the quantitative measures were higher for those upper year level students who participated in the TMP than those who did not (see Table 1), except for students' perceived level of stress, where upper year level students who participated in the TMP reported lower mean perceived stress levels than non-participants. Moreover, after controlling for the effect of each variable at Time 1, the differences between the participants and non-participants on two variables (i.e., Peer Group Interactions & Stress) at Time 2 were significant. More specifically, on average, upper year level students who participated in the TMP rated their Peer Group Interactions significantly higher and their Stress levels significantly lower than those upper year level students who did not participate in the program.

Table 1: ANCOVA results for upper level students

Variable	Participants (N = 19)		Non-Participants (N = 12)		F	p	η^2	Power
	Est. M	SE	Est. M	SE				
Peer Group Interactions	**5.93**	**0.15**	**5.43**	**0.19**	**4.35**	**0.046**	**0.14**	**0.52**
Interactions with Faculty	5.00	0.19	4.51	0.24	2.34	0.137	0.08	0.32
Faculty Concern for Student Development and Teaching	5.14	0.22	4.69	0.27	1.60	0.217	0.05	0.23
Academic and Intellectual Development	5.49	0.17	5.19	0.21	1.14	0.296	0.04	0.18
Institutional Commitment	6.33	0.21	6.03	0.27	0.73	0.402	0.03	0.13
Goal Commitment	6.68	0.16	6.38	0.20	1.32	0.261	0.05	0.20
Satisfaction	4.85	0.13	4.52	0.16	2.75	0.108	0.09	0.36
Self-Esteem	5.90	0.13	5.76	0.17	0.44	0.512	0.02	0.10
Stress	**3.01**	**0.19**	**3.74**	**0.24**	**5.49**	**0.026**	**0.16**	**0.62**
Career Readiness	5.43	0.21	5.23	0.26	0.35	0.557	0.01	0.09

Note. Bold type indicates a statistically significant result.

Similar results were found for first year students, with the exception of participants reporting lower mean scores than non-participants for Faculty Concern for Student Development and Teaching, and Academic and Intellectual Development (see Table 2). In addition, the results in Table 2 show that first year students who participated in the TMP reported that they were more likely than non-participants to intend to stay in their current program of study at Griffith, and less likely than non-participants to intend to transfer to another program of study at Griffith or another university, or to discontinue their study altogether. With the effects of each variable at Time 1 covaried out, the differences between the groups on five variables (i.e., Interactions with Faculty, Institutional Commitment, Self-Esteem, Stress, and Career Readiness) at Time 2 were significant. More specifically, on average, first year students who participated in the TMP rated their interactions with Faculty, Institutional Commitment, Self-Esteem, and Career Readiness higher and their Stress levels lower than those first year students who did not participate in the program.

Table 2: ANCOVA results for first year students

Variable	Participants (N = 17)		Non-participants (N = 16)		F	p	η^2	Power
	Est. M	SD	Est. M	SD				
Peer Group Interactions	5.45	0.19	5.23	0.19	0.69	0.413	0.02	0.13
Interactions With Faculty	**5.25**	**0.18**	**4.63**	**0.19**	**5.50**	**0.026**	**0.16**	**0.62**
Faculty Concern for Student Development and Teaching	4.76	0.21	5.02	0.22	0.74	0.397	0.02	0.13
Academic and Intellectual Development	5.12	0.17	5.20	0.17	0.11	0.748	0.00	0.06
Institutional Commitment	**6.51**	**0.22**	**5.73**	**0.23**	**5.92**	**0.021**	**0.17**	**0.65**
Goal Commitment	6.66	0.14	6.55	0.14	0.30	0.586	0.01	0.08
Satisfaction	4.81	0.16	4.51	0.16	1.76	0.195	0.06	0.25
Self-Esteem	**5.92**	**0.16**	**5.42**	**0.16**	**4.86**	**0.035**	**0.14**	**0.57**
Stress	**3.32**	**0.16**	**3.91**	**0.16**	**6.60**	**0.015**	**0.18**	**0.70**
Career Readiness	**5.32**	**0.17**	**4.78**	**0.18**	**4.71**	**0.038**	**0.14**	**0.56**
Intent to Persist Q1	6.56	0.36	5.65	0.37	3.04	0.092	0.09	0.39
Intent to Persist Q2	1.34	0.27	1.95	0.28	2.26	0.144	0.07	0.31
Intent to Persist Q3	1.14	0.35	2.04	0.36	3.33	0.078	0.10	0.42
Intent to Persist Q4	1.00	0.13	1.25	0.14	1.67	0.207	0.05	0.24

Note. Bold type indicates a statistically significant result. Intent to Persist Q1 = I intend to stay in my current program of study at Griffith University; Intent to Persist Q2 = I intend to transfer to another program of study at Griffith University; Intent to Persist Q3 = I intend to transfer to another university; Intent to Persist Q4 = I intend to leave university study altogether.

Qualitative

In addition to the findings from the quantitative data, a wide range of benefits emerged from analysis of the qualitative data provided by participants. The first year students reported a range of academic and social benefits, with the most commonly reported being increased confidence, getting to know someone at a more advanced level, gaining insight and information about the course, assistance and advice about study, and friendship. For example, one student commented that she "felt a lot more confident about approaching lecturers, writing assignments, and the whole Uni things after meeting with my mentor" and another felt "more comfortable just knowing someone who had experienced all of this before". Other benefits reported were encouragement, feeling supported, and improved communication skills.

The upper year level students also reported a range of positive outcomes as a result of their participation in the program. Students were clear about which benefits related to their role as mentor (to first year students), mentee (to professionals), and to the experience of being in both roles simultaneously. In regard to their role as mentor, students identified four key benefits: a sense of reward through assisting and/or supporting; opportunity to share knowledge and experience; increased self-awareness and learnings about how to work with others; and personal

and/or professional development in particular skills areas. Some comments that describe their experience in the role of mentor were, “I felt that it was really rewarding to be in the mentor role”; “I enjoyed the opportunity to pass on experience learned”; and “I gained insight into my abilities to work with less experienced students and communicate complex ideas in an understanding way”.

In regard to their role as mentee, upper level students reported six main benefits: developed networks and contacts; understanding of employers’ expectations; knowledge about chosen profession; guidance with career choices; seeing issues from another perspective; and psychosocial support. Some of the comments they provided that describe these benefits are “I benefited by gaining exposure to networking and industry developments, which has led me to explore joining committees and employment opportunities”; “I gained insight into what qualities are expected in new graduates looking for work”; and “the relationship enables me to talk about where I want to go in my career, concerns that I might have, and a realisation of what it achievable”.

The upper level students also commented on the transferability of knowledge, skills, and abilities from one relationship to the other. For example, students were aware of modelling many of the behaviours and values that their professional mentors displayed and transferring them to their relationship with their mentee. One student commented that, “I felt that I modelled my mentor when I was with my mentee and I mean by just the way my mentor conducted the relationship, by being helpful, engaging, sharing info willingly and giving affirmations. I felt she demonstrated skills of what I evaluated as an effective mentor and I tried to model that”. Similarly, students reported that they were able to transfer learnings from their experience as a mentor to enhance their experience of being a mentee.

The field professionals who performed the role of mentor to the upper year level students reported a range of benefits from their involvement in the program. Some of the benefits were similar to those reported by the student mentors, for example the sense of reward that comes from mentoring, sharing knowledge and experience, and professional development. Other benefits reported by several mentors were the opportunity for reflection; updating knowledge on what is currently being taught at university in relation to their field; a sense of “rejuvenation”; and an increase in self-confidence about being able to undertake the role of mentor.

In summary, positive outcomes were experienced by all participants – the first year students (mentees), upper year level students (in their roles as mentee and mentor), and the “professional mentors” from the field. The next section of this paper provides some details about aspects of the program that we believe were instrumental in contributing to the success of the program.

Important issues to consider

Here we present some of the key issues and strategies that warrant consideration by individuals, academic elements, or institutions interested in implementing a similar program. We suggest that the extent to which these issues are considered is likely to have an impact on the degree of success of the program.

The *recruitment* process needs to allow students enough time to reflect on the potential benefits and commitments of the program so they can make an informed decision about participation. Although this did not happen in the current program (due to circumstances beyond our control), and was less important in this trial which could only accommodate a small number of participants, we suggest this issue requires careful consideration in future programs. In the interests of fairness and equity, all potential participants should be given the opportunity to arrange university and work schedules in a way that would allow them to participate. A longer decision-making process is also likely to result in increased commitment to the program. Careful consideration should also be given to the *selection* process for student mentors. It might be that every third year student who nominates for the program is not appropriate for the role of mentor.

There is little doubt that the process of *matching* mentees and mentors can result in a "hit or miss" situation. In this instance we used age, gender, and major field of study. We also examined qualitative data provided by participants about their reasons for joining the program. For example, if an upper level student commented on their desire to share their "writing ability and skills", where possible we matched them with a mentee who reported a desire to develop those skills. If a participant focussed on the psychosocial aspects of involvement, we were less likely to match them with someone that appeared to be completely academically focussed in their reason for becoming involved in the program. Although appropriate matching is not a sure-fire way to success, it can certainly overcome many potential problems. And it is important to remember that, regardless of the perceived success or otherwise of the matching process, appropriate orientation and training should provide participants with the tools to negotiate and develop their relationships.

A well organised *orientation and training* session is vital to the program. In this program, it provided the first opportunity for student mentees and mentors to meet. Over a three-hour period, they worked in dyads to set goals and plan their mentoring processes, and shared ideas and concerns. The upper level students completed a further hour's training in regard to their "professional" relationship. (See earlier section of paper for more detail).

Monitoring the mentoring relationships throughout the course of the program is important for both the individuals concerned and the overall success of the program. (Refer earlier section for details of monitoring and evaluation). This tends to keep participants "on track". On several occasions when students were contacted early in the program they expressed concerns that they did not know "what they should be doing" – and felt more confident after contact by the coordinators. Often it was a case of being more specific about their goals and being assured that each relationship would move at a different pace, etc.

The extent to which the program is *evaluated* will depend on the individual, academic element, or institution implementing the program. As described in the current paper, a range of evaluative quantitative and qualitative measures can be used. Arguably, the program could be introduced either in its current form or in a slightly modified/adapted form without conducting a detailed evaluation. Nevertheless, for both research and practical reasons, appropriate evaluation of any teaching and learning experience is important.

This paper has referred, on several occasions, to the *program coordinators*. In this instance, the coordinators were responsible for all aspects of design, implementation, and evaluation – a time

consuming role. However, given that the design work has been completed (and may require only minor modification dependent on the environment in which it is implemented) and the extent to which evaluation is conducted will vary across situations, the role of the coordinators could be substantially reduced. Indeed, many aspects of the coordination role could be distributed across a number of persons e.g., the distribution of information about the program, recruitment of student and professional participants, contacting and matching participants, the orientation and training session, the design and conduct of the evaluation, the monitoring of the mentoring relationships, and so on – and performed under the direction of a coordinator. Nevertheless, it is vital to the success of the program that one or two persons oversee the conduct of the program.

And finally, we offer the *tiered* structure as one of the major contributors to the success of the program. The tiered nature of the program adds another dimension beyond that afforded by student-student or student-professional mentoring relationships. First, there is an onus on the upper level students to fulfil their role as mentor. Often the "mentor" in a relationship is reluctant to become involved because they are unsure of benefits to them. Students in this program were clear about the benefits that accrued to them as both mentees and mentors. Their dual role appeared to encourage their ongoing commitment, and having a mentor was often perceived as substitute remuneration for being a mentor. Second, upper level students learned much about the role of mentor from their mentor and immediately transferred it to their relationship with their mentees. This strengthened and consolidated their learning about mentoring, thus contributing significantly to their professional development. Third, first year students not only benefited directly from the upper level students, but from the knowledge, skills, and abilities of the professional mentors that were transferred down through the student mentors.

Conclusions

Both academic and general staff in Australian higher education institutions are seeking innovative, economical and effective ways to address issues of high priority in the sector including improving retention rates, enhancing graduate employment rates, and developing students' generic skills. Evaluation of the TMP shows that first year students and upper year level students who participated in the program benefited in a range of ways that contribute to these priority areas. Moreover, we have found that the tiered mentoring system offers university students benefits above and beyond those experienced by the two types of mentoring programs that are more commonly offered in institutions of higher education. The findings presented here support and extend those reported about other student mentoring programs.

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