Transition in, Transition out: a sustainable model to engage first year students in learning

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Abstract

Peer mentoring, presented as an inclusive teaching approach, embedded in the curriculum, has been successfully implemented to support first year student learning. Developing sustainable and scalable models for large first year cohorts, however, provides a challenge. The Transition in, Transition out model is a sustainable peer mentoring model supporting the transition of both first and final year students. The model has been implemented in two Australian psychology programs, one face-to-face and one delivered online. The focus in this presentation will be on the outcome data for on-campus first year student at one university. Participants were 231 first year students (166 females and 65 males). Results suggest positive changes in academic performance and learning approaches as well as positive endorsement of the model.

Background

Peer mentoring is a well-established approach to support first year transition, with a range of benefits. As Husband and Jacobs (2009) note, peer mentoring can orient students to learning at university, helping them “adapt to a new study environment, course related problems, and general study issues and concerns” (p. 230). Peer mentoring can also support the psychosocial transition of students, helping to ameliorate the relatively high levels of depression, anxiety and stress often noted amongst first year cohorts (Chester, Xenos, Ryan, Carmichael, & Saunders, 2009; Cooke, Bewick, Barkham, Bradley, & Audin, 2006). Additionally, peer mentoring can facilitate cohort experiences for students, encouraging meaningful connection across year levels (Martin, Collier, & Carlon, 2010). Finally, the low cost of implementing peer mentoring programs makes them an attractive option (Heirdsfield, Walker, & Walsh,
2008). However, when the first year group is large, recruiting enough mentors can be a challenge. The Transition in, Transition Out (TiTo) model described in this Nuts and Bolts session provides a scalable and sustainable solution.

**The TiTo model**

TiTo was designed as an inclusive teaching approach, embedded in the first and third year curriculum in the discipline of psychology to support both first year students as they transition into the program and third year students as they transition out. The TiTo model supported both academic and psychosocial adjustment to university. Following early feedback from students, emphasis was on engaging commencing students in the learning tasks in the first year curriculum, in particular developing deep and strategic approaches and minimising surface learning. Psychosocial support played an implicit role in the model.

TiTo is different to existing supplemental instruction models such as those instituted widely in US colleges like Peer Assisted Study Sessions (PASS; Dawson, Lockyer, & Ferry, 2007) and Peer Assisted Learning (PAL; Longfellow, May, Burke, & Marks-Maran, 2008). While often associated with good success rates for those students who attend, supplemental models have been limited by infrequent and inconsistent participation (Hill & Reddy, 2006; Longfellow et al., 2008). In response to the criticisms of opt in mentoring models, TiTo was embedded into the curriculum.

Early work to develop the model used a randomised control trial design to evaluate its efficacy. Positive outcomes included improvements in academic performance, self-efficacy and retention, as well as psychosocial aspects and wellbeing (Chester, Xenos, & Burton, 2012; Ryan, Chester, Carmichael, Xenos, Saunders, & Keogh, 2009). In the early iterations of the model, mentors were recruited from third year students with a distinction average. Mentors were high performing student volunteers, who took on the additional mentoring commitment in the final year of their program. This approach had several limitations. First, recruiting from a select group of final year students did not provide the large number of mentors needed for scalable implementation across all first year tutorials. Second, mentoring provides the development of work-ready skills and this opportunity should not be restricted to only the highest performing students. Indeed it could be argued that the graduating students with weaker academic records should be targeted for additional skill development.

In the most recent revision of the TiTo model third year students were trained to be mentors as part of a final year capstone course. These mentors undertook four hours of training prior to the commencement of the program and then attended one hour of first year tutorials each week, working with small groups of first year students for 8 of the 12-week semester. Two-hour briefing sessions for mentors, held weekly, provided ongoing support as these students prepared for their mentoring responsibilities as well as offered opportunities to debrief and share strategies. Mentoring focused on engaging first year students in learning, encouraging them to take an active and reflective approach, enhancing skills in both individual and group-based learning. Specific mentoring activities were designed to support assessment tasks,
which included students’ reflections on their own learning approaches and the development of a learning contract.

**Evaluating TiTo**

This Nuts and Bolts paper presents outcomes of the TiTo model for first year students in terms of learning approaches and academic performance. In addition, student evaluations of TiTo will be summarised.

A key question was the extent to which later year mentors, some of whom had only just passed the course themselves, could provide a quality mentoring experience for first year students. A repeated-measures pre post-test design was used to evaluate the effectiveness of the program, with first year students completing self-report measures (described below) at the beginning and end of semester.

**Learning approaches**

Learning approaches were measured using the Approaches and Study Skills Inventory for Students (ASSIST; Entwistle, 2000). The ASSIST measures three learning approaches: deep, strategic and surface. The scale includes 52 items, each of which is answered on a 5-point Likert scale (1=disagree to 5=agree). The deep approach comprises 4 sub-scales (seeking meaning, relating ideas, use of evidence and interest in ideas), the strategic approach comprises 5 sub-scales (organized studying, time management, alertness to assessment demands, achieving and monitoring effectiveness) and the surface approach comprises 4 sub-scales (lack of purpose, unrelated memorizing, syllabus-boundness and fear of failure). The internal consistencies of the three learning approaches scales in the present study were all acceptable - deep (α = .85), strategic (α = .86) and surface (α = .79).

**Academic performance**

Academic performance was measured by marks achieved in the first year course in which peer mentoring took place. Marks were recorded as a percentage and compared with grades achieved in a previous year when no mentoring was provided.

**Peer mentoring evaluation**

Three forced-choice questions were used to evaluate first year perceptions of the peer mentoring program: peer mentoring helped the quality of my work, peer mentoring helped me feel like I belong, and I enjoyed peer mentoring. Each question was answered on a 5-point Likert scale (1=strongly disagree to 5=strongly agree).

**TiTo outcomes**
Table 1 compares learning approach (ASSIST) scores. Compared to the beginning of semester, ASSIST scores at the end of semester were significantly higher on deep and strategic learning (with moderate effect sizes) and significantly lower on surface learning (with a small effect size).

<table>
<thead>
<tr>
<th>Learning approach</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>t(230)</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deep</td>
<td>2.11 (.57)</td>
<td>3.99 (.58)</td>
<td>-27.23</td>
<td>&lt;.001</td>
<td>-4.49</td>
</tr>
<tr>
<td>Strategic</td>
<td>2.23 (.61)</td>
<td>3.64 (.68)</td>
<td>-16.80</td>
<td>&lt;.001</td>
<td>-2.02</td>
</tr>
<tr>
<td>Surface</td>
<td>3.15 (.61)</td>
<td>2.79 (.64)</td>
<td>4.81</td>
<td>&lt;.001</td>
<td>.58</td>
</tr>
</tbody>
</table>

**Table 1. Repeated measures t-test ASSIST scores for first year students**

Final marks in the first year course in which mentoring took place were compared with final marks from a previous cohort who completed comparable assessment and had similar teaching but no tutorial-based mentoring. While the proportions of students who both failed the course and achieved high distinctions was comparable over time (approximately 12% and 5% respectively), the proportion of students with pass grades almost halved under TiTo, meaning a higher percentage of students achieved grades over 60%.

<table>
<thead>
<tr>
<th>Percentage of students</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer mentoring helped the quality of my work</td>
<td>19</td>
<td>40</td>
<td>20</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>Peer mentoring helped me feel like I belong</td>
<td>20</td>
<td>41</td>
<td>22</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>I enjoyed peer mentoring</td>
<td>30</td>
<td>40</td>
<td>6</td>
<td>9</td>
<td>6</td>
</tr>
</tbody>
</table>

**Table 2. Evaluation of TiTo by first year students**

Table 2 summarises the percentage agreement with the three statements used to evaluate the TiTo program. The majority of first year students enjoyed the program (70%) and perceived it to positively influence their academic work (59%). Despite the explicit focus on academic learning, the majority of students (61%) agreed that the program improved their sense of belonging.

**Conclusions**

The evidence presented in this session suggests that TiTo can provide a scalable solution to the provision of mentoring for all first year students, even in large cohorts. Data summarised in this session suggests that TiTo is part of a package in this undergraduate curriculum that enhances deep and strategic learning and academic performance. With the exception of a
small group of first year students, TiTo was generally positively perceived. It appears that good training and high quality, ongoing support for mentors can support even those who are not academically strong to make a useful contribution to the transition of first year students.

**Issues for discussion**

- What are the critical features required for the success of TiTo?
- To what extent can these outcomes, described within the discipline of psychology, be generalised to other programs?
- What would be required to embed TiTo in your program?
- Are there any specific aspects that might constrain the implementation of TiTo in your program/School/University?

**References**


