Great expectations:
Can the quality of teaching and learning be improved
through academic development programs?

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Abstract: Academic staff at universities now work in a climate where the need for
professional currency in teaching practice is increasingly in evidence. This is
most notable in the shift towards teaching and learning as core activities in the
development of quality assurance guidelines that emphasise the centrality of the
student experience and good teaching practice. Many Australian universities now
offer professional development opportunities for staff and accredited programs
that lead to a recognised teaching qualification. This article reports on the
evaluation of a tertiary teaching program that provides staff with a tertiary
teaching qualification. Findings generally support the efficacy of the program as
a means of improving the reflective practice and reconceptualising of teaching by
university lecturers. On a broader level, the paper indicates directions and
strategies that enable such programs to become more fully supportive of quality
assurance processes.

Keywords: Tertiary improvement, educational development, scholarship of
teaching, quality assurance

Introduction: Teaching quality
An important focus of higher education in the 90s has been the quality of teaching, partly
due to demands from both employers and from government stating that graduates are
deficient in communication and interpersonal skills, and lack vision and commitment
(Addison, 1999). Teachers at universities are working harder and in a context of reduced
working conditions (more students and fewer resources), the imperative for flexible delivery
and use of ICT has meant the need for reskilling and reconceptualising academic work
(Coaldrake, 2000). Addison (1999) states “this leaves little time for working on teaching
improvement” (p. 5). As noted by educational researchers such as Biggs (1989) and Ramsden
(1992), many staff development programs work on the assumption that providing teachers
with prescribed skills and teaching recipes will produce better teachers. Perhaps not
surprisingly, this has not been supported by the experience of many staff developers, (Gibbs,
1995; Trigwell, 1995).
Many argue that providing teaching recipes to tertiary educators is inadequate to assist their development into independent and flexible decision makers about teaching matters (Bowden, 1989; Ramsden, 1992). In response to this perceived need there is a growing body of literature and research in the USA, UK and Australia which draws on a particular set of concepts and approaches to address the issue of how to improve the quality of teaching in higher education.

The discourse of improvement: Four elements

The discourse about improving the quality of tertiary teaching is distinguished by a number of features and concerns. First, a great deal of research activity in educational development is based on the notion of reflective practice, which involves critical examination of current practice, and becoming a reflective practitioner through self-evaluation of one’s teaching skills, attitudes and conceptions of teaching and learning (Bell, 2001; Kuit & Reay, 2001). A second feature of the discourse of improvement is its commitment to the notion that teaching and research are interdependent and that research findings should inform and improve practice (Brew, 1999). This is part of a more general movement in educational research that seeks to make research both accessible and meaningful to practitioners, especially to those outside the discipline, and to bridge the gap between teaching and research (Hattie & Marsh, 2000). A third characteristic of educational development, especially since the early 1990s, is the discourse around the improvement of teaching and learning, largely driven by inquiries into student learning. Most influential in this regard has been work in phenomenography by Marton et al., 1997, and Prosser & Trigwell, 2000. More recently, the discourse has evolved further to focus not only on improvement of teaching, but on teaching as scholarship (Trigwell et al., 2000). Originating in the work of Boyer (1990) the scholarship of teaching means that a tertiary teacher must be well-informed about the literature on teaching and learning, be critically reflective of their own teaching and committed to improving student learning through investigation and communication of relevant outcomes.

Other approaches to improving teaching quality

Rust (2000) reported on initial training courses for teachers in higher educational settings in the U.K. and concluded that this type of educational development has some effective outcomes. Leathwood and Phillips (2000) noted that current pressure on tertiary educational systems (greater accountability, global competition, concern about standards) has led to increasing interest in evaluation within the university context, and also point out that pedagogic research and teacher development are assuming a higher degree of prominence. In the U.S.A. at the University of Cincinnati, Camblin and Steger (2000) reported on a Faculty Development Program that provided 1.5 million U.S. dollars (for University staff development grants) for each of three years to university teachers, in an effort to improve university teaching. Programs to assist the development of teacher competence (and confidence) are clearly gaining more widespread application in university settings worldwide.

The idea that effective learning involves conceptual change on the part of teachers has gained acceptance in the context of school teaching (Ramsden, 1988; Thijs, 1992) however according to Ho (2000), “in the field of staff development in higher education, it is only very recently that this idea has been taken up with some degree of seriousness” (p. 31). As stated above, the scholarship of teaching has proven to be a very powerful lever for change and underpins the
courses offered by several Australian universities for improvement of tertiary teaching (Trigwell, Martin et al, 2000). This philosophy and framework has underpinned the teaching development program that is the centre of this study.

A tertiary teacher education program

At the University of New England, a graduate-level program has been developed which is designed to assist, support and educate tertiary educators in their efforts to improve their teaching skills, and develop professional competencies. The core elements of the program are designed to foster reflective teaching through an action research framework, and emphasise theory-in-use, the building a professional portfolio and peer review of teaching. The intention was to shift conceptions of teaching and learning from transmissive to active modes, and to foster self-awareness among participants of their own preconceptions of learning and teaching. Gow and Kember (1993) found that educators who tended to view teaching predominantly as ‘transmission of knowledge’ appeared to encourage students to adopt a surface approach to learning, while conceptions of teaching as the ‘facilitation of learning’ was more likely to induce deep learning approaches in students. These findings illustrate that teachers’ personal conceptions of teaching are related (presumably to teaching practices) and student learning.

The graduate teaching program is designed to effect conceptual change in its participants, foster the scholarship of teaching and enable participants to develop a personal portfolio of teaching. It was expected that the program would prove an effective intervention to facilitate conceptual change for tertiary educators, such that more emphasis on learning-centered (rather than concept-centered) approaches and deep learning rather than surface learning approaches would be fostered. Participation in the program was predicted to facilitate improvements in a number of aspects of pedagogy and educational research. Key outcomes are the following skills:

- becoming a critical reader of the literature related to tertiary educational theory;
- becoming conversant and critical of the theory(s) and frameworks in the area of tertiary education;
- acquiring new sorts of understanding related to assessment of learning in tertiary educational settings;
- acquiring new understandings related to the design of curriculum in tertiary educational settings;
- becoming a better teacher as a product of researching one’s own teaching;
- becoming a better academic colleague/peer as a product of one’s involvement in the program;
- understanding one’s students better as a product of one’s involvement with peers and in action research;
- gaining an increased understanding of tertiary administration as a product of one’s involvement in the program;
- holding a significantly longer-term view related to educational policy as a product of one’s involvement in the course;
- being a better researcher as a product of one’s engagement in action research;
- being a better curriculum designer/developer as a product of one’s involvement in the course.
This project was designed to assess the efficacy of the teaching program in changing conceptions of teaching and understandings of pedagogy among participants. Self-report data was collected using a newly designed survey instrument (see appendix 1).

**Method of evaluation**

A total of fifteen participants in the teaching program completed the survey materials. All ten participants in the year 2000 cohort were participants, and five of the year 1999 cohort (out of a group of 12) also completed the questionnaire. Five men and five women completed the instrument from the 2000 cohort, and gender information was not collected from the 1999 group. A “Questionnaire for the tertiary teaching program 2000” (the same items were used with the 1999 cohort) was developed to assess various aspects related to their self-assessment of their understandings related to educational theory and literature, assessment, and curriculum, as well as a direct self-evaluation of the contribution of participation in the program upon: being a better teacher, being a better colleague, understanding of one's students, understanding of tertiary administration, holding a long-term view related to educational policy, being a better researcher, and being a better curriculum designer/developer. A six item Likert scale was employed for self evaluations. For example:

*Please decide how much each of these statements fits your own unique experience and show your agreement or disagreement in the following manner: "This is my feeling and experience”

Sample questions:
I designed, developed and completed the research project with the assistance of my learning group
I have learned to be a critical reader of the literature related to tertiary educational theory.

**Procedure**

Participants were mailed a copy of the survey instrument in the internal mail, and asked to volunteer in the research project. If they were agreeable, they completed the two measures (a total of three pages), and returned them via the internal mail system to the researchers. The survey required approximately ten to fifteen minutes to complete, including the open-ended comments about “where you feel you have ‘improved’ in any way whatsoever, as a product of your involvement in the tertiary teaching program”.

**Results**

Overall, the results from the “Questionnaire for Teaching Program” participants yielded consistent support for the efficacy of the course components. The two cohorts generally provided an independent replication of the efficacy of the course, with few significant differences between the two cohorts. As can be seen from the data presented in Table 1, the participants in the program generally indicate agreement with the items that pertained to positive conceptual change and increased understandings. Lower mean values indicate higher levels of agreement with the item (1 = strongly agree, 2 = agree, 3 = mildly agree, 4 = mildly disagree, 5 = disagree, and 6 = strongly disagree).

To assess group-wise differences (by cohort and separately by gender), independent sample t-tests were conducted. There were very few differences (i.e. statistically significant differences with an alpha criterion of $p < .05$) between the two cohorts: ‘approving of action research’ (not shown in the table above) 1999>2000 ($t (13) = 3.48, p < .005$); ‘use of the learning group’ 1999>2000 ($t (12.97) = 2.37, p < .05$) (not shown in the table above); ‘being familiar with
theories and frameworks in the area of tertiary education’, 1999>2000 \((t (13) = 2.60, p < .025)\); and ‘understanding university administration’, 2000>1999 \((t (13) = 6.13, p < .001)\).

However, overall, it is worth noting that the two cohorts generally provided an independent replication of the major positive effect of participation in the program.

### Table 1. Means for the whole sample, and by cohort

<table>
<thead>
<tr>
<th>Item description</th>
<th>Sample</th>
<th>1999</th>
<th>2000</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical reader of literature</td>
<td>2.53</td>
<td>2.80</td>
<td>2.40</td>
<td>2.00</td>
<td>2.80</td>
</tr>
<tr>
<td>Familiar with theory/frameworks</td>
<td>2.47</td>
<td>1.80</td>
<td>2.80</td>
<td>2.60</td>
<td>3.00</td>
</tr>
<tr>
<td>Understandings related to assessment</td>
<td>2.20</td>
<td>2.00</td>
<td>2.30</td>
<td>2.20</td>
<td>2.40</td>
</tr>
<tr>
<td>Understandings – curriculum design</td>
<td>2.27</td>
<td>2.20</td>
<td>2.30</td>
<td>2.00</td>
<td>2.60</td>
</tr>
<tr>
<td>Reflective teacher</td>
<td>2.20</td>
<td>2.20</td>
<td>2.20</td>
<td>2.00</td>
<td>2.40</td>
</tr>
<tr>
<td>Better colleague</td>
<td>2.80</td>
<td>2.40</td>
<td>3.00</td>
<td>2.20</td>
<td>3.80</td>
</tr>
<tr>
<td>Understand students better</td>
<td>2.13</td>
<td>2.20</td>
<td>2.10</td>
<td>1.80</td>
<td>2.40</td>
</tr>
<tr>
<td>Understanding of tertiary admin.</td>
<td>2.87</td>
<td>4.40</td>
<td>2.10</td>
<td>2.20</td>
<td>2.00</td>
</tr>
<tr>
<td>Long-term view of educational policy</td>
<td>3.13</td>
<td>3.20</td>
<td>3.10</td>
<td>2.80</td>
<td>3.40</td>
</tr>
<tr>
<td>Better researcher of student learning</td>
<td>4.13</td>
<td>4.00</td>
<td>4.20</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Improved curriculum designer/developer</td>
<td>2.40</td>
<td>2.40</td>
<td>2.40</td>
<td>2.20</td>
<td>2.60</td>
</tr>
</tbody>
</table>

Note: lower numbers are indicative of higher agreement (range 1.00 - 6.00).

Gender differences were also quite few, but interpretable: the women lecturers used the learning groups in the course’ (not reported in table 1) more than men lecturers did \((t (8) = 2.54, p < .05)\); the women lecturers indicated that participation in the course helped them to be ‘a better colleague’ as compared to the men lecturers \((t (8) = 2.31, p = .05)\); and the men indicated that they ‘completed their main (year-long) project on their own’ (not in table 1) more than did the women \((t (8) = 3.28, p < .02)\). Again, overall, it is worth noting that both genders generally provided an independent replication of the major positive effect of participation in the program.

The pattern of intercorrelations (most in the range of .55 -.80 for significant relations) demonstrated that pedagogical variables tend to improve as an ensemble and were related in meaningful ways. Findings generally support the efficacy of the graduate teaching program as a means to improve the understanding and performance of university lecturers.

Some of the interesting correlational results are worth noting. Projects that were seen as providing “productive outcomes” related highly \((r = .781, p = .001)\) with the project being seen as a “useful project”, negatively with the project being seen as a “hollow activity\((r = -.807, p < .001)\). Projects that afforded “important results” related to the project being seen as a “useful project \((r = .808, p < .001)\), and with the project yielding “productive outcomes” \((r = .837, p < .001)\). Importantly, intending to publish the results of the project related with perceiving it as a “useful project” \((r = .665, p < .01)\), and perceiving that the results are important \((r = .636, p < .005)\) was noted. Somewhat surprisingly, being ‘familiar with the theory(s) and frameworks in the area of tertiary education’ related negatively with believing one’s self to have a better understanding of tertiary administration \((r = -.662, \ p < .01)\). The set of relations reported involve changes in conception and theory related to tertiary education and generally show convergent and interpretable cluster of related constructs.

Seeing oneself as ‘a better teacher as a product of involvement in the program’ related with ‘feeling one’s project to be a useful one’ \((r = .557, p < .05)\), negatively with ‘feeling the project to be a “hollow” activity’\((r = -.736, p < .005)\), and importantly having ‘acquired a new
sort of understanding related to assessment in tertiary educational settings’ \( (r = .829, p < .001) \). Seeing oneself as ‘a better colleague’ related negatively with thinking the project as a “hollow” activity \( (r = -.531, p < .05) \), having ‘acquired a new sort of understanding related to assessment in tertiary educational settings’ \( (r = .622, p < .02) \), and thinking one’s self as ‘a better teacher as a product of one’s involvement in the course’ \( (r = .700, p < .005) \).

Believing that one ‘understands one’s students better teacher as a product of one’s involvement in the course’ related negatively with thinking ‘the direction of the project was rather subjective’ \( (r = -.600, p < .02) \), with being ‘a critical reader of the literature related to tertiary educational theory’ \( (r = .513, p < .05) \), with having ‘acquired a new sort of understanding related to assessment in tertiary educational settings’ \( (r = .703, p < .005) \), with thinking one’s self as ‘a better teacher as a product of one’s involvement in the course’ \( (r = .710, p < .005) \), and with being ‘a better colleague’ \( (r = .553, p < .05) \). Having acquired a ‘longer-term view related to educational policy’ related to ‘almost always doing what one says one will do’ \( (r = .650, p < .01) \). Conceiving one’s self to be ‘a better researcher as a product of one’s involvement in the PROGRAM’ related with having ‘acquired a new sort of understanding related to assessment in tertiary educational settings’ \( (r = .592, p < .05) \), with having ‘acquired a new sort of understanding related to the design of curriculum in tertiary educational settings’ \( (r = .786, p < .001) \), and with seeing one’s self as ‘a better colleague’ \( (r = .528, p < .05) \).

Finally, believing one’s self to be ‘a better curriculum designer/developer as a product of one’s involvement in the program’ related (sensibly) to having ‘acquired a new sort of understanding related to the design of curriculum in tertiary educational settings’ \( (r = .569, p < .03) \), to seeing one’s self as ‘a better teacher as a product of one’s involvement in the program’ \( (r = .583, p < .03) \), to seeing one’s self as ‘a better colleague as a product of one’s involvement in the program’ \( (r = .516, p < .05) \), and lastly to believing that one ‘understands one’s students better as a product of one’s involvement in the program’ \( (r = .541, p < .05) \).

Generally, these correlations portray an integrated picture of outcomes, with clusters of qualities seeming to inter-relate in a meaningful and sensible manner.

**Discussion**

The results from this project provide consistent support for the efficacy of the program, and demonstrate that tertiary educators (lecturers) gain important increases in understanding related to many aspects of tertiary education. These increases include: becoming a critical reader of literature related to tertiary educational theory, becoming familiar with the theory(s) and frameworks in the area of tertiary education, acquiring new sorts of understandings related to assessment in tertiary educational settings, and acquiring new sorts of understandings related to the design of curriculum in tertiary educational settings. Additionally, respondents were directly asked to self-evaluate the impact of the course on several aspects of their academic activities and they indicated clear support for the efficacy of the course program with regard to: becoming a better teacher as a product of their involvement, being a better colleague as a product of their involvement in action inquiry, understanding their students better as a product of their involvement in reflective processes, developing an increased understanding of tertiary administration as a product of their reading and research, holding a significantly longer-term view related to educational policy, and being a better curriculum designer/developer as a product of their interaction with peers and learning resources). The only item where participants did not feel the course contributed effectively to their academic
capabilities and awareness was related to becoming ‘a better researcher as a product of their involvement in the course’. This was because the focus was more on developing reflective practice rather than engaging in full-on educational research, though participants did complete an action research project.

Clearly the course in tertiary teaching has been shown to be an effective approach to improving the quality of university teaching and to contributing to the development of academic staff as higher educators. Both practical and theoretical understandings were afforded through active participation on the course, while participants developed essential peer learning skills though the formation of learning groups, in which they exchanged views and shared interpretations of core course readings.

**Implications for teaching improvement**

A program that serves to foster the scholarship of teaching while at the same time providing academics the scope and time to develop professional interests and a portfolio, critical reflection on curriculum design, assessment approaches, and evaluation aspects of higher education seems to be a useful type of intervention to foster better university teaching/learning. In addition, participants’ personal investment of time is rewarded by the visible products of the program – a teaching portfolio, a repertoire of skills and a network of supportive peers. These are personal and human dimensions of quality teaching that serve to balance the bureaucratic demands of quality assurance, while avoiding the ‘compliance model’ of quality that can undermine incentives to teach more effectively.

There is a need for model of quality that is not simply regulatory, and that does not rob academics of responsibly and autonomy for improving learning, and actively engaging in research that enhances their own teaching. One proposal is to create a ‘quality loop’ that links public accountability with academic autonomy, and allows educational developers to foster teaching improvement at individual and systemic level (Gosling, 2001). This can be achieved in programs such as the tertiary teaching program documented here, which has brought about positive changes in teaching approaches, academic scholarship and awareness of pedagogy. A broader perspective on quality teaching ensures that managerial concerns do not stifle academic professional development needs. It remains important to ensure that academic development programs in tertiary teaching bring about personal and institutional debate on teaching issues while giving teachers an opportunity to appraise their own teaching.

**References**


