



Hanrahan, Mary U. and Tayler, Collette P. and Duncan, Margot E. and Ryan, Michael and Aspland, Tania L. (2001) Exploring four faces of learning in courses for beginning teachers. In *Proceedings Conference of the Australian Association for Research in Education 2001*, Fremantle, Western Australia.

© Copyright 2001 AARE and (The authors)

## **Exploring four faces of learning in courses for beginning teachers \***

Mary Hanrahan, Collette Tayler, Margot Duncan, Michael Ryan & Tania Aspland  
Faculty of Education, QUT, Brisbane

*Prepared for the Conference of the Australian Association for Research in Education,  
Fremantle, Western Australia, December 2001*

Paper Code: **TAY01682**

### **ABSTRACT**

In an environment where QUT promotes alignment of courses with desired professional outcomes in terms of graduate attributes, and prompted by critical reviews of Bachelor of Education courses, a new project team responded with a pilot action research project. With contributions from a range of stakeholders we drew up a list of the attributes, called "teacher practitioner attributes" that attempted to describe what an ideal teacher should possess at the start of their professional life. Significantly, this list was re-worked into a four-part structure describing the attributes in terms of beginning teacher's relationships with their peers, their 'clients' (eg. students and surrounding communities), their core discipline (Education) and, most importantly, themselves (as continuous, reflective learners). We then used this framework for involving students and core subject coordinators in identifying the attributes currently being addressed and how well courses as a whole covered the full range. We found firstly that there was a real need for students to have opportunities for dialogue with mentors, and secondly that a lack of communication and coordination between subject coordinators in different discipline areas meant that each was not making sufficient allowance for the contribution of others. We also found that holistic practitioner attributes were more workable as a framework for dialogue than atomistic skill groupings. Nine practical recommendations came out of the project.

\* Thus study was funded by the QUT Teaching & Learning Innovations Fund

## ***Background to the project***

Several influences converged to create the circumstances in which this project was born. Locally the university, in concert with other four Australian Technology Network (ATN) universities, was urging faculties across the board to ensure their professional courses were producing graduates who would be highly employable because they had developed a wide range of generic skills as well as academic qualifications (see Bowden, Hart, Kelly, Trigwell & Watts, 1999). Queensland University of Technology (QUT, 2000), had produced a set of generic attributes to be adapted by Faculties and used as a guide for reviewing and renewing undergraduate courses, and had previously awarded two other Faculties large grants for work on integrate the generic attributes into the curriculum.

At the same time, the professional bodies in education at both state and national levels were engaged in dialogue about the need to review standards for teachers, especially in relation to similar moves in the United States of America, Canada and Europe (e.g., National Board of the Professional Teaching Standards, 1999; Organisation for Economic Cooperation and Development (OECD), 1994; Ontario College of Teachers, 1999). This had been taking place across a range of discipline areas within education as well as more generally, and over various stages of career development from preservice education students to advanced or highly accomplished teachers (The Australian College of Education, 2001a,b; Ingvarson & Wright, 2000; National Project on the Quality of Teaching and Learning, 1996). More locally, Education Queensland (1999) had produced a draft document of “Professional Standards for Teachers”, and had completed a review of beginning teachers in Queensland. Within the Faculty of Education at QUT, reviews had begun of both the Bachelor of Education degree (cf, Grieshaber, Healy, Hoepper, Irving, Stokes & Hobart, 2000) and of the practicum component (cf Groundwater-Smith, 2000).

•This then was the context in which this study was undertaken. The goals of the project were as follows:

- to define Faculty-specific graduate attributes which in this Faculty came to be called *Teacher Practitioner Attributes* or *TPAs*
- to get student feedback on courses in relation to the development of these capabilities,
- to develop the capacity of staff to identify and enhance such capabilities for Bachelor of Education students in a range of undergraduate courses, and
- to develop a map of the courses in terms of such capabilities across units and over sequences of units.

## ***The Project***

### **1 Participants**

As well as the core project team (listed as the authors of this paper), there were many other participants and partners who made substantial contributions, including members of the BEd Review Working Party, the Library, the Project Reference Group, unit coordinators of both practicum and core units, course coordinators and student response groups. The project reference group which participated actively via regular meetings consisted of a range of stakeholders, including Education Queensland, a representative of the QUT Teaching and Learning Committee, the Dean of the Faculty, a BEd coordinator, the Practicum coordinator, representatives of the Library, and the B.Ed Review team. Library Faculty liaison personnel participated in the environmental scan, provided a review of the relevant literature in relation to generic attributes (particularly in regard to surveys), and participated in student response

group meetings, and where appropriate, weekly core team meetings. The assistant to the Dean (Undergraduate programs), and a web developer also attended meetings at various stages of the project to provide input.

## **2 Project management: Action research**

A cyclical process of action and reflection was used to plan, carry out and critically reflect on the process. Weekly core team meetings were held to plan, report, and reflect on the ongoing action and findings. In addition, other collaborative meetings were held when needed, to get input and feedback from various groups of staff and students (see below).

Reference group meetings were held every two to three months once the project was underway for the duration of the 12-month project. Progressive reports on action taken and on plans for the following stage were considered, with a written report and draft documents to be discussed being sent out in advance of each meeting. Resulting recommendations were accommodated into plans for the following stage.

Communication between these meetings was via email and an Intranet website containing the developing sequence of documents and events. Two types of websites were created for the project, a working site for accounting purposes for the project team (with timelines, responsibilities, meeting agendas and reports, etc.), and a site open to the Faculty (<http://education.qut.edu.au/tpa>). Available on the latter were such items as a project description, unit exemplars, frameworks for exemplar write-ups, profiles of units, an audit trail, end of stage reports, and other project-related documents.

At the level of project management, the action research was informal. Nevertheless, we were continually engaged in reflection on the action and modifying plans in the light of our emerging data, relevant literature, and critical comments from staff and other stakeholders, either via meetings or email, in response to requests for feedback. At one level, weekly meetings were concerned with administrative, with technical answers often being decided by one or other of team members with little discussion. However, discussions about progress in relation to long-term goals frequently occurred, and the variety of perspectives and roles brought to the meetings by the different project team members (early childhood, primary, secondary; information technology, creative arts, science, literacy; management, academic, researcher), facilitated critically constructive discussion, especially since a supportive environment was provided for creativity and risk-taking.

## **3 Stages**

There were four broad sub-projects involved in the implementation:

- **Defining the graduate attributes for the BEd, subsequently called the Teacher Practitioner Attributes (TPAs)**

- The most difficult and time-consuming task was to achieve consensus about a list of attributes appropriate for our graduates, and about a way of assessing the extent to which our courses helped students to acquire them. This task involved a thorough environmental scan, ongoing dialogue between various stakeholders, and the writing of numerous drafts of sets of graduate attributes and pilot surveys.

- **Accessing student feedback on the BEd in relation to the TPAs**

- Students from a range of courses and at both first and final year levels were randomly selected to form Response Groups. Each student selected was sent an invitation to participate in a meeting of the students from their respective cohort. At the meeting, the

students were introduced to the TPAs and were asked to complete a short survey and participate in discussion about i) their respective courses in relation to the TPAs and ii) about the wording of the TPAs themselves.

#### •Applying the TPAs

- 16 core units were targeted for an enhanced focus on Teacher-Practitioner Attributes. This involved the identification and/or development of resources/activities that sought to address TPA's within the existing curriculum. Academic staff were supported to engage in the discovery and abstraction of exemplary professional practice that demonstrated the successful infusion of TPAs. Eight units were selected from core non-practicum units and eight units (plus four closely related units) were selected from practicum units.

#### •Profiling TPA development across units and over sequences of units

- When TPAs had been identified in units, we were able to begin mapping out some development sequences within course programs for the growth of teacher-practitioner attributes.

#### •Communicating the project findings

- The project should be seen as the pilot phase for a larger initiative and for this purpose both an online "Reportfolio" about the project and its findings (URL: <http://education.qut.edu.au/tpa>), and a corresponding Word document, were written to serve as a resource for stakeholders who would take up where the project left off.

## 4 *Teacher Practitioner Attributes Defined*

- This was the most time-consuming stage. To arrive at a set of Provisional TPAs as ratified by the Reference Group Meeting on 10 May, 2001, involved a nine-step process, during which a raft of difficulties had to be addressed, including resolving a number of tensions (see Table 1).

1. An **environmental scan** was carried out beginning with an email survey about existing generic attribute surveys at QUT an invitation to partners to join the project. We followed-up with specific projects, including meetings involving coordinators of teaching and learning projects in Faculties of Law, Build Environment and Engineering and the Library, and meetings of the Bachelor of Education Review Team. A Faculty liaison librarian conducted a review of the literature on surveys of graduate attributes, particularly with reference to the teaching profession (Ryan, 2000).
2. **Initial drafts** of the Teacher Professional Attributes (TPAs) and corresponding surveys were an uneasy compromise between four elements of the QUT "generic" skills list and the 12 "profession specific" standards of Education Queensland (EQ). This revealed a conflict between an holistic and an atomistic approach to skill development. Faculty staff found the latter too fragmented to be useful to work with; those who saw themselves as representing QUT policy objected that if the TPAs were too behaviourally specific they were no longer "generic" attributes and were not suitable in preparing students for multiple work settings and situations.
3. At this stage a reference group meeting was held to review progress. The meeting determined that maintaining 16 main attributes was too unwieldy and that the draft survey prepared using the mix of twelve EQ and four QUT elements was not a productive method to progress.
4. An intermediate draft adapted the model of the Law Faculty, defining six holistic Teacher Professional Attributes, but then using four sub-groupings of capabilities (Attitudinal/Dispositional. Cognitive, Communicative and Relational) which would need to be developed to attain these attributes. A simplified survey addressing the six graduate attributes was developed.
- 5 A survey was administered to a sample of BEd final year students. The results were useful in identifying the fact that students did not count practica, where they thought they had gained most

on all six of the attributes, as part of QUT's contribution.

- 6. The fact that there was no direct correspondence between the six graduate attributes and the four sub-groupings of capabilities raised several questions. Which would be define as TPAs and why? What was the difference between attributes and capabilities? This conflict led to considering other models such as that of the Graduate School of Education, JCU (2000), where there was a direct correspondence between their four holistic graduate qualities and the sub-components. In addition the Code of Ethics prepared by the Australian Early Childhood Association (1992) was considered for the way in which it constructed EC professional action in relation to the child, family, community, profession and individual professional. This led to a reconciliation between the graduate attributes and the graduate capabilities.
- 7 The conceptual framework of the project was modified to make extant our view that the emerging TPAs were not construed as a somewhat atomistic list of particular skills to be developed in isolation but that a more holistic view of graduate attributes was necessary. The graduate capabilities were rearranged in a four-part structure aligning key attributes with beginning teacher relationships with their peers, their 'clients' (e.g., students and surrounding communities), their core discipline (Education)) and with themselves as continuous reflective learners, dimensions highlighted in the AECA Code of Ethics. This work made the graduate attributes more appropriate for practitioners (cf. the Professional Standards for Teachers) but still included a more generic set of capabilities covering the range of QUT defined Generic Attributes of QUT graduates.
- 8. After reconciling all the above factors the TPAs remained unduly complicated for quick access by academics and others who needed to read them. Our next step was to simplify the language of each attribute as much as possible while retaining the essential meaning.
- 9 Usefulness to those who were to work with the TPAs was not to be sacrificed to easy readability, so meetings were held with unit coordinators from both the Professional Experience Unit (27/11/00) and the core units, with the project reference group (11/12/00) and finally with students representing a range of courses and stages of course progress (beginning and finishing). This process helped us define the TPAs and resulted in the list recommended by the project team (see Table 2). (Note: The *Program Standards* listed in Appendix 1 were developed by the BEd Working Party, which took up the recommended TPAs and made several adjustments in the course of their BEd review work between May and November 2001.)

## **5 Accessing student feedback on the BEd in relation to TPAs**

A series of Student Response Group meetings was held during the second week of Semester One, 2001, to gain insight into student perceptions of the provisional TPAs. Letters of invitation to be part of the Response Groups were sent to a random sample of 25% of the first and final year student cohorts from Early Childhood (EC), Primary, Secondary and Adult and Workplace Education (AWE) courses.

A total of 56 students gave feedback through an informal questionnaire completed during the meetings asking participants to indicate the two attributes in each TPA category they felt most confident about and the two they most wanted to develop. Discussion was encouraged following completion of the questionnaire and any comments and criticisms were noted.

A summary of the TPAs they students already felt most confident about and those they most wanted to develop, as well as the incidental feedback, was created for each cohort. This tended to be course specific and a separate report was forwarded to each of the course coordinators. Attendance rates at the meetings were not high so no firm generalisations could be made about the responses. However, some trends which may be worthy of further investigation were noted in relation to comments about course satisfaction and expectations, and comments about the wording of the TPA items were taken into account when reviewing

the penultimate draft.

Further data were provided by another, more intensive survey conducted independently by the Early Childhood Course Coordinator with all EC first year students during Orientation Week. IN this survey, the students rated each attribute from 1 to 3 (1 beginning to learn about, 2 practising, and 3 able to demonstrate). Students made a copy of their own survey responses to use as a self-development tool in follow-up workshops.

Overall the response group results alerted us to the following:

- The participants commented that they valued the opportunity to be heard and gave a range of feedback about the potential utility of the TPAs and their wording, as well as comments about their experiences and expectations in their courses thusfar.
- In general, students believed their were not enough opportunities like the Response Group trial for students to give feedback to inform university initiatives.
- Attendance rates at the response group meetings were not high because of tutorial timetable conflicts in Week 2 of Semester 1 that were difficult to foresee at the time of mailing invitations. As well, of those who did attend, several were mature age students with prior workplace experiences which may have made the responses atypical.
- Responses highlighted the different nature of cohorts. For example, Many EC students had previous work experience in child-care settings whereas AWE students commented that they felt it was wrong to assume that they had pervious experiences related to teaching.

Overall, the results of the Response Group meetings provided some useful feedback and highlighted local practical problems of such response gathering activities. For example, we realised that timetable conflicts could be avoided by asking unit coordinators to schedule response exercises within tutorials. We also learnt that students, especially first year students, could be suffering information overload in Weeks 1 & 2 of the semester, and that it may be wiser to hold such meetings later in the semester. As well, first years would have liked greater explanation of the terminology of the TPAs before completing the survey.

## 6 *Applying the Teacher Practitioner Attributes*

At the same time, we were conducting initial meetings with the core unit coordinators where it soon became apparent that the same process would not be appropriate for both practicum and non-practicum units. The practicum unit coordinators were primarily interested in identifying the range of TPAs covered by the practicum units and profiling their development as a group, whereas non-practicum unit coordinators were focusing on the development of particular TPAs between specific units and pairs of units. However, once it became apparent that there were many ways in which a particular TPA could be addressed in a unit, these coordinators were encouraged to identify characteristics of the TPAs. This activity enabled us to create a profile of development of the TPAs across a group of non-practicum core units. The characteristics included the **level** at which the TPA item was being addressed in a unit (introductory, dependent or finishing), that nature of the **focus** on the TPA (whether implicit or explicit), the **treatment** (whether theoretical, "constructive" or applied), and the **scope** (whether full or partial).

The main task of the non-practicum core unit coordinators was to identify the key TPAs being addressed in their units, or to develop the curriculum to address a particular TPA more explicitly. The unit coordinators were encouraged to do this in whatever way suited their current needs and interests in relation to that unit. To assist, we prepared examples of

possible ways to write up what they were doing.. This resulted in a variety of products, which could be grouped under six headings (more details is available in Reportfolio 2001 on the website). The six examples of ways to write up TPA related activity are listed below:

- Student-focused document:** A document prepared by the lecturer for students to clarify how TPAs would be addressed in the unit and how students would have to opportunity to practice and experience the TPAs.
- Identifying Teacher Practitioner Attributes in course unit outlines:** The course units outlines (the official information available to students about units) may be used to identify the TPAs being addressed within a unit. The "aims" and "assessment" items were generally most amenable to this task, but "content": and "approaches to teaching and learning" could also be used to reveal key attributes being addressed in the unit.
- Rewriting a course unit outline to make explicit the key TPAs being addressed:** After identifying all TPAs being addressed and selecting up to six for focus specifically within the unit, the course unit outline is re-written to make it clear that students would have opportunities to gain experience in these Tas they progressed through the unit and completed the assessment items.
- Developing curriculum resources for a TPA:** A unit coordinator may develop a curriculum resource to give emphasis to a particular TPA, for example the ethical dimensions of classroom observation.
- Student evaluation tool:** This was the tool used by a course coordinator (see previous section on student response groups) with new students to self-assess capability on the TPAs. It could be adapted by a particular unit coordinator by removing all but the relevant TPAs and using on commencement of the unit to sensitise the students to the TPAs they could develop through the unit activities and assessment items, or after the unit to self-asses, or before and after to assess their progress.
- Profiling:** Because profiling was a major stage of the project, this example will be dealt with in the following section, even tough this work began as a exercise for unit coordinators.

## **7      *Profiling Teacher Practitioner Attribute development across units and over sequences of units***

As explained above, the TPAs being addressed in a unit were defined in terms of level, focus, treatment and scope. When TPAs had been identified in units, we were able to begin mapping out some development sequences within course programs for the growth of teacher professional attributes. IN this way, later units in BEd programs might assume foundation skills and build relevant higher-level skills. Hence, as well as contributing to a course profile of TPAs, such information from one unit coordinator could be used by another unit coordinator whose unit dealt with the same TPA but in a proceeding or following unit (if we presume a typical QUT BEd path).

We also asked non-practicum unit coordinators to nominate related units in terms of "dependencies and expectations" for the same TPAs. In brief, coordinators were asked to nominate units they thought dealt with the same TPAs at a more introductory or advanced level. As will be discussed in the following section the results of this exercise were very revealing of the isolation of different schools or units within the Faculty.



## Findings

There were several outcomes which were directly related to the aims of the project. Such direct outcomes of the projects included:

- the creation of a structured working set of Faculty-specific graduate attributes (derived from the QUT generic attributes and industry standards), which we have called the provisional Teacher Practitioner Attributes or TPAs;
- the development of response groups as a useful way of accessing feedback from students about how our courses are addressing such attributes;
- the development of a range of practically-orientated processes for identifying and developing TPAs in a range of units;
- exemplars of unit coordinator work in identifying and/or developing TPAs within units;
- a profile of TPA development in sequences of core units.
- However, there were also several indirect outcomes:
  - the development of a tool for course and unit analysis which revealed gaps and overlaps between the units conducted by different schools and units within the Faculty;
  - evidence that staff were often unaware of what was going on elsewhere in the Faculty in relation to the TPAs that their units were addressing;
  - the development of a tool for internal and external dialogue about units and courses;
  - infrastructure to support innovation not planned by the project team;
  - an audit trail of the process by which we achieved our goals;
  - awareness of the difficulties and limitations of using a student questionnaire at the beginning and end of a course and realisation that face-to-face, ongoing dialogue with students would be more useful for feedback and course planning purposes;
  - recognition that the process of defining graduate outcomes is an ongoing, dynamic process of which the project was only the first stage;
  - evidence that democratic processes enhance broad participation by academic staff in organisational change; and
  - recognition of the necessity of such a project to be a cyclical process of collaborative action and reflection, allowing it to be responsive to powerful ideas already in existence.
- 
- Finally there were nine recommendations resulting from the project. These will be detailed in the following section.

## Recommendations

•Nine practical recommendations came out of the project. These included the four-part structure, including strategic processes for raising the status of the attribute goals and sustaining the innovation, and methods of identifying the attributes in course unit outlines and profiling their development across units within courses.

### **1. The wording and selection of TPAs and their item list.**

It was recommended that the four-part structure describing the attributes in terms of beginning teachers' relationships with their peers, their 'clients' (e.g., students and surrounding communities), their core discipline (Education), and with themselves (as continuous reflective learners) be carried forward. However, it was noted that there should be a consulting phase for getting further feedback from the Faculty, and a mechanism by which the TPAs be updated and maintained through dialogue with relevant client groups (staff, students, professional bodies, other ATN universities) and Faculty Strategic processes. It was also noted that there would be utility in having different language sensitive sets of TPAs for unit coordinators and lecturers, employers, beginning students and advanced students, and so on.

### **2. TPA Status, visibility and staff ownership**

It was recommended that strategic processes be used to enhance TPA status and visibility and staff ownership of the TPAs, for example by continuing staff negotiation of the TPAs supported by progressive statements from the Dean as restructuring the BEd developed. For example, as units were re-written for a re-structured BEd., it could be mandated that they be aligned with the TPA set by:

- unit level alignment with current and subsequent units;
- alignment within relevant groups of units;
- special treatment for practicum (e.g., all TPAs included).

Exemplars should continue to be provided on the TPA peer support web-site to model and enable these processes at the unit coordinator level. In addition, identified induction processes may be instigated for new staff and especially tailored for part-time staff, given the high proportion of part-time staff among new-staff in the Faculty.

### **3. Methods of identification of TPAs in Course Unit Outlines**

It was suggested that the six models (explained above in the "Applying the Teacher Practitioner Attributes" section) of ways of identifying and integrating TPAs into the curriculum will be useful for unit coordinators when rewriting new units, with the models provided on the web-site. The model below suggests how the TPAs may inform the curriculum development process and the peer support website (<http://education.qut.edu.au/tpa>) provides examples..

#### **KEY**

1. Student-focused statement
2. TPA mapping on Course Unit Outline
3. Course Unit Outline rewrite
4. Developing a curriculum resource
5. Student TPA self-evaluation tool
6. Profile of development of TPAs

It was recommended that the re-structuring of the

BEd and the

Practicum consider the dependencies and expectations between units with regard to TPA development (no.6 in the model above), and consult with course coordinators and course teams taking into account:

- cross-structural communication necessary during re-structure;
- timing issues related to such communication;
- the increasing flexibility in ordering of units, especially within the Graduate BEd, which might challenge assumptions about "dependencies and expectations".

If, as has been suggested, the sequential nature of the development of TPAs as documented in mappings is an oversimplification we recommend that:

- students be informed about difficulties they may encounter in taking units out of (the usual) order;
- a safety net be there for students to cope with any problems, which might arise as a result of order and sequence.

#### **4. Increasing coverage of TPAs through cross-unit mapping**

It was recommended that the TPA profiling done on a set of core units and a set of practicum units should inform the B.Ed review and ongoing course refinement. The process should also inform refinement of the TPA document for future use.

#### **5. Linking the TPAs to Student Portfolios**

It was recommended that alignment of the TPAs, portfolios and the selection criteria take place, with articulation in practice being detailed as something students would do in the relevant units rather than as options. To this end feedback should be sought from practicum unit lecturers and students currently involved in a pilot trialing the use of the Provisional TPAs in conjunction with preparing an interview portfolio; this could provide an additional model to the six already in existence. This could be further informed by a scan carried out by faculty coordinators of portfolio work currently being done in courses, and a collection be made of suitable practical examples of portfolio items (assignment work, project work, etc.) as models for students. Finally, videoing of practicum classes by students operating in pairs could prove useful not only for feedback and discussion, but also as evidence in a graduate's electronic portfolio.

#### **6. Band classification of online units**

It was recommended that, with regard to the University's band levels for on-line presence of units and courses, alternative criteria be added to Band 3 (the highest level) such that Band 3 requires the unit:

- be a highly interactive unit technologically (original criterion), or
- reveal and label on-line students' expression of a TPA, or
- reveal a significant application of pedagogical principles online.

#### **7. Linking the TPAs with wider university initiatives**

It was recommended that the Faculty play a constructive role in wider university initiatives such as the refinement of the QUT Generic Attributes, and

keep a watching brief on the QUT portfolio project (cf. Heron, 2000).

The problem of double degree students handling different sets of graduate attributes and assembling disparate portfolios should be referred to the University's Teaching and Learning Committee for consideration.

## **8. Scalability and sustainability of the TPA Project**

Even though the project has been a useful exercise in raising problems and potential solutions on a small scale, it should be recognised that sustaining and scaling up what has been begun will require particular structures and processes to be put in place. Consequently it was recommended that

- the maintenance and further development of the process of integrating TPAs into practice be given an official structure, such as being made a continuing part of the role of the Assistant to the Dean (Undergraduate Programs);
- when courses are restructured or new courses are developed, another set of requirements should be related to how the TPAs articulate;
- provision be made to support grass-roots integration of the TPAs into the curriculum by recognising and rewarding such efforts, for example, by resourcing such curriculum development by individuals and groups and supporting ways of exemplifying integration (cf. the Professional Engagement Groups (PEGs) in the Faculty Coordinated On-Line Teaching Project (COLT). (See Ryan, Hanrahan and Duncan, 2000) and
- with regard to scalability, it would not be productive to mandate that all Faculty unit coordinators integrate TPAs into their current units but rather to allow this to evolve as restructuring occurs.

## **9. TPAs and the post-graduate level**

It was recommended that an associated activity needs to be done at the postgraduate Education level, to produce a TPA super-set that takes the undergraduate TPAs as given and adds items related to the attributes being developed in postgraduate courses. It should be noted, however, that this is expected to be a more difficult exercise because:

- outcomes are likely to be varied (pure research, developing leadership, reorientation of professional focus, etc.);
- higher order attributes may be more difficult to specify;
- attributes may not be comprehensive for all students—they may need to select among the attribute outcomes.

Consequently it was recommended that a structure be set up to look into this, such as making it part of the role of the Assistant to the Dean (Postgraduate Programs).

## **Conclusion**

In this paper we have discussed the way the Faculty of Education at Queensland University of technology responded to the issue of graduate attributes or standards for pre-service teachers. IN an environment where QUT promotes alignment of courses with desired professional outcomes in terms of graduate attributes, and prompted by critical review of Bachelor of Education courses, the project team responded with an action research project. With contributions from a range of stakeholders we drew up a list of the attributes, called "teacher practitioner attributes" that attempted to describe the capabilities a typical teacher should possess at the start of her or his professional life. Significantly, this list was re-worked into a four-part structure describing the attributes in terms of beginning teacher's relationships with their peers, their 'clients' (eg. students and surrounding communities), their core discipline (Education) and themselves (as continuous, reflective learners). We then used this framework for involving students and core subject coordinators in identifying the attributes currently being addressed and how well courses as a whole covered the full range. We found firstly that there was a real need for students to have opportunities for dialogue with mentors, and secondly that a lack of communication and coordination between subject coordinators in different discipline areas meant that each was not making sufficient allowance for the contribution of others. We also found that

holistic practitioner attributes were more workable as a framework for dialogue than atomistic skill groupings. Nine practical recommendations came out of the project.

During 2001 a Working Party has been strategically re-conceptualising the Bachelor of Education programs for implementation in 2003. A set of Program Standards (see Appendix 1) have been designed and the TPAs aligned to each standard. Further, a set of design principles and implementation principles complement the Standards and TPAs. Currently the TPAs are being mapped onto the Bachelor of Education models (Early Childhood, Primary and Secondary) and teams are being formed to write new subjects, integral to which are the TPAs. The TPAs are about to be field tested in terms of authenticity, usefulness and capacity to enhance effective student learning outcomes in teacher education. Critiquing this process will form the basis of further reporting in the future.

## References

- Australian Early Childhood Association. (1992). *AECA Code of Ethics*. Canberra: Australian Early Childhood Association.
- The Australian College of Education (2001a). *Outcomes from a National Professional Summit* [http://www.austcolled\\_page12.html](http://www.austcolled_page12.html) (Accessed 15 November, 2001)
- The Australian College of Education (2001b). *Teacher Standards, Quality and Professionalism: Outcomes from a National Professional Summit*. Working Document. Canberra, ACT.
- Bowden, J., Hart, G., Kelly, B., Trigwell, K., & Watts, O. (1999). *Generic capabilities of ATN university graduates*. A paper by Teaching and Learning Committee, Australian Technology Network. <http://www.clt.uts.edu.au/ATN.grad.cap.project.index.html>
- Education Queensland (1999) *The professional standards for teachers (draft)*. [http://education.qld.gov.au/learning\\_ent/ldf/standards/teachers.html](http://education.qld.gov.au/learning_ent/ldf/standards/teachers.html). (Accessed 24/05/01)
- Grieshaber, S., Healy, A., Hoepper, B., Irving, K., Stokes, J. & Hobart, L. (2000). *Bachelor of Education Review*. October, 2000. QUT, Brisbane: Faculty of Education.
- Heron, L. (2000). *Student portfolio project: Final report and recommendations*. [http://education.qut.edu.au/tpaproject/Final\\_report\\_student\\_portfolios\\_LH.doc](http://education.qut.edu.au/tpaproject/Final_report_student_portfolios_LH.doc)
- Ingvarson, L, & Wright, J (2000). *Science teachers are developing their own standards*. <http://www.asta.edu.au/profstand/profstandindex.html>. (Accessed 30/11/01).
- National Board of Professional Teaching Standards. (1999). *The five propositions of accomplished teaching*. URL: [http://www.nbpts.org/standards/five\\_core.html](http://www.nbpts.org/standards/five_core.html) (Accessed 30/11/01).
- Ontario College of Teachers. (1999). *Standards of practice for the teaching profession*. URL: [http://www.oct.on.ca/english/professional\\_affairs/standards.pdf](http://www.oct.on.ca/english/professional_affairs/standards.pdf). (Accessed 30/11/01).
- Organisation for Economic Co-operation and Development (OECD). (1994). *Quality in Teaching*. Centre for Educational Research and Innovation. Paris: OECD.
- National Project on the Quality of Teaching and Learning (1996). National competency framework for beginning teaching. AGPS: Canberra.
- Queensland University of Technology. (2000). *Generic attributes of QUT graduates*. Manual of Policies and Procedures Chapter C - Teaching and learning 1.3. QUT. (2000). [http://www.publications.qut.edu.au/ltd/qut/pubs/mopp/C/C\\_01\\_03.html](http://www.publications.qut.edu.au/ltd/qut/pubs/mopp/C/C_01_03.html)
- Ryan, I. (2000). *Library Report of TPA Project*. [http://education.qut.edu.au/TPAproject/report\\_library\\_jan2001.doc](http://education.qut.edu.au/TPAproject/report_library_jan2001.doc)
- Ryan, M., Hanrahan, M., & Duncan, M. (2000, December). *The professional engagement model of academic induction into on-line teaching*. Paper presented at the Annual Conference of the

Australian Association for Research in Education, Sydney, 4 December - 8 December, 2000.

School of Education, James Cook University. (2000). [Graduate Qualities of BEd Graduates School of Education - JCU](http://www.soe.jcu.edu.au/currentstudents/qualities.html). <http://www.soe.jcu.edu.au/currentstudents/qualities.html>

Teacher Practitioner Attributes Project Team (2001, May). Reportfolio. Online version of final report of the Teacher Practitioner Attributes project.  
<http://education.qut.edu.au/tpaproject/reportfolio/reportcontents.html>.

[Teacher Practitioner Attributes Project Website](http://www.fed.qut.edu.au/tpa). Faculty of Education, QUT. (2000).  
<http://www.fed.qut.edu.au/tpa>

**Table 1. Tensions to be resolved in arriving at faculty-specific lists of generic attributes**

- **The "generic-ness" of TPAs:** If the TPAs were too generic staff would not find them useful to work with, if they were too behaviourally specific they seemed no longer to encompass different teaching specialisations (Early Childhood, Primary, Secondary, and Adult and Workplace Education)
- **How to assess student achievement on TPAs?** What do student self-assessment surveys measure and how useful are such measures?
- **How many or how few attributes?** If we had 16 main attributes (as in earlier drafts), how would we set boundaries for what we would achieve in this project?
- **How close should they be to employers' standards?** Should we define our graduate attributes using the Professional Standards for Teachers of Education Queensland, the largest employer of graduates, or should we define them in a way that shows we are preparing students for multiple work situations?
- **Should graduate attributes correlate directly with mutually exclusive skill groups?** Should the capabilities or sub-skills relate directly to the attributes?
- **User-friendly v. technically accurate descriptions?** Should we aim for technically accurate descriptions or easy readability?
- **Atomistic v. holistic approach?** Should the attributes be atomistic skills or holistic capabilities and dispositions?
- **Several (user specific) versions v. one definitive set?** Should there be one set for all possible users, or user-specific sets (for lecturers, final year students, beginning students, employers etc.)?
- **Tension regarding language use.** Given students in a range of courses (EC to AWE), how can we have graduate attribute items that satisfy all situations (e.g., all client groups).?

**Table 2. Provisional Teacher Practitioner Attributes – May, 2001**

<p><b>QUT Faculty of Education Graduates are:</b></p> <ul style="list-style-type: none"> <li>•Individuals who are knowledgeable and insightful learners (Individual: I1-I11);</li> <li>•[Student]*-focused practitioners because they are committed to their [student]s and communities ([Student]-related: S1-S9);</li> <li>•Educators because they are skilled in curriculum design, pedagogy and assessment (Education: E1-E10)</li> <li>•Professionals because they are dedicated to ethical and professional practice (Profession: P1-P6)</li> </ul>	
<b><i>Individuals who are knowledgeable and insightful learners</i></b>	<b>[Student]-focused practitioners because they are committed to their [students] and communities</b>
<p>I 1. Gather, form and <b>critique knowledge</b> from a variety of sources.</p> <p>I 2. Retrieve, evaluate and present information <b>using technologies</b>.</p> <p>I 3. Seek <b>knowledge and research in relevant specialist areas</b>.</p> <p>I 4. <b>Participate in a range of</b> traditional (e.g. print) and new (e.g. multimedia, web) <b>literacies</b>.</p> <p>I 5. Listen and <b>communicate</b> effectively using various forms of communication.</p> <p>I 6. Design and develop plans to <b>solve problems</b> in particular contexts.</p> <p>I 7. Initiate and develop plans to create opportunities.</p> <p>I 8. Question, reflect on and adapt to <b>new information and ideas</b>.</p> <p>I 9. <b>Show acceptance of people from diverse groups</b>.</p> <p>I 10. <b>Manage</b> plans, activities and tasks to achieve goals.</p> <p>I 11. Use <b>self-evaluation</b> of learning style, strengths and weaknesses to improve learning.</p>	<p>S 1. Foster <b>language, literacy, and numeracy</b>.</p> <p>S 2. Foster the social development of their [students].</p> <p>S 3. Understand, care for and <b>relate effectively to [students]</b>.</p> <p>S 4. <b>Manage a learning environment</b> that is emotionally and physically safe and secure.</p> <p>S 5. Practice and promote <b>non-discriminatory ways of relating</b> to others.</p> <p>S 6. Help [students] to <b>develop, monitor and evaluate their own thinking and learning skills</b>.</p> <p>S 7. Diagnose, value and respond to different <b>individual learning needs</b>, taking into account a range of cultural, physical, social and behavioural factors.</p> <p>S 8. <b>Listen to, respect and negotiate</b> with [students]' families, carers and community, as appropriate.</p> <p>S 9. Integrate knowledge of [students'] <b>developmental needs</b> into practice.</p> <p>S 10. Integrate knowledge of the <b>social context of education</b> into practice.</p>
<b>Educators because they are skilled in curriculum design, pedagogy and assessment</b>	<b>Professionals because they are dedicated to professional and ethical practice</b>
<p>E 1. Know about and apply educational policies in their practice.</p> <p>E 2. <b>Integrate information technology</b> effectively into teaching and learning activities.</p> <p>E 3. <b>Apply knowledge and skills</b> in both general and specialist areas of the curriculum.</p> <p>E 4. <b>Plan learning experiences</b> and programs for individuals and groups.</p> <p>E 5. Effectively <b>design, create and manage learning environments</b>.</p> <p>E 6. <b>Model</b> inquiring, co-operative and independent <b>approaches to learning</b>.</p>	<p>P 1. Work cooperatively and effectively as a <b>team member and in leadership of teams</b>.</p> <p>P 2. Develop and work within an <b>ethical framework</b> and commit to responsible work practices.</p> <p>P 3. Promote <b>social justice and inclusivity</b>.</p> <p>P 4. <b>Contribute to professional communities</b> in a range of roles.</p> <p>P 5. Respect and promote <b>professional rights and responsibilities</b>.</p> <p>P 6. <b>Engage in critique and research</b> relevant to practice.</p>



<p>E 7.Proactively <b>monitor and assess</b> [student] understanding and progress.</p> <p>E 8.Reflect on and plan for continuous improvement in teaching.</p> <p>E 9.Understand and apply the best available educational theory to practice.</p> <p>E 10. Provide <b>learning experiences that connect with the world</b> beyond the immediate learning environment.</p>	<hr/> <p><i><b>*Note.</b> The word [student] is used as a placeholder for those individuals that the graduate will be working with and might range from a young child in kindergarten to an adult in a workplace setting.</i></p>
--	---

## APPENDIX 1

### PROGRAM STANDARDS AND ASSOCIATED TEACHER PRACTITIONER ATTRIBUTES

The BEd is informed by four Program Standards and associated teacher Practitioner Attributes which will be pursued through all specialist strands of the program.

Program Standards	Teacher Practitioner Attributes
Preservice graduates will be:	Preservice graduates will be able to:
1.0 <i>lifelong learners and effective communicators</i> who possess a strong <i>knowledge</i> of the content and discourses of the disciplines from which their projected teaching areas are derived, and who will be able to contribute to the framing of <i>new knowledge communities</i> and areas of inquiry;	1.1 gather, form and <i>critique knowledge</i> (or new configurations of knowledge) from a variety of sources; 1.2 seek <i>knowledge through the practices and inquiry modes of a scholar-teacher-researcher</i> 1.3 retrieve, evaluate and present information <i>using appropriate technologies</i> 1.4 participate in a range of <i>traditional</i> (e.g. print) and <i>new</i> (e.g.) multimedia, web) <i>literacies</i> 1.5 listen and <i>communicate</i> effectively using <i>various media and forms of communication</i> ; 1.6 adopt a <i>problem-solving</i> and <i>inquiry-based approach</i> to their own learning and that of others; 1.7 <i>critically reflect</i> on their own learning and <i>generate new information and ideas</i> ; 1.8 <i>manage</i> their own learning and that of others in <i>purposeful, goal-oriented ways</i> ; 1.9 use <i>self-evaluation</i> to understand and improve the strengths and weaknesses of their own learning style 1.9
2.0 <i>learner-focused and inclusive teachers</i> who understand the positioning of learners in local and global communities, and develop their own inclusive communities of practice which respect diversity and difference;	2.1 understand, care for and <i>relate effectively to a diverse range of students</i> ; 2.2 manage a <i>learning environment</i> that is <i>emotionally and physically safe and secure</i> ; 2.3 foster the <i>social development of all students</i> ; 2.4 practice and promote <i>non-discriminatory ways of relating</i> to others, through the adoption of <i>teaching approaches that promote equity and social justice</i> ; 2.5 diagnose, value and respond to <i>individual learning needs</i> , taking account of a range of cultural, physical, social and behavioural factors; help learners to <i>develop, monitor and evaluate their own</i>

Program Standards	Teacher Practitioner Attributes
	<p><i>thinking and learning skills;</i></p> <p>2.6 integrate knowledge of <i>students' developmental needs</i> into practice;</p> <p>2.7 integrate knowledge of the <i>social and cultural context of education</i> into practice;</p> <p>2.8 <i>listen to, respect and negotiate</i> where appropriate with the learners' families, carers and surrounding community;</p> <p>2.9 continuously develop and foster interculturally appropriate versions of <i>language, literacy and numeracy</i>.</p> <p>2.10</p>
<p>3.0 <i>skilled curriculum developers and reflective practitioners, committed to a range of pedagogies, principles of learning and inquiry, and assessment and reporting practices that promote equity and monitor effective learning practices for a range of learners and programs across a range of sites;</i></p>	<p>3.1 effectively <i>design, create and manage learning environments;</i></p> <p>3.2 plan <i>learning experiences and programs for individuals and groups;</i></p> <p>3.3 apply <i>knowledge and skills</i> in both <i>general and specific areas of the curriculum;</i></p> <p>3.4 model <i>inquiring, cooperative and independent</i> approaches to learning;</p> <p>3.5 <i>integrate information technology</i> effectively into teaching and learning activities;</p> <p>3.6 provide <i>learning experiences that connect with worlds</i> beyond the immediate learning context;</p> <p>3.7 reflect on and plan for <i>continuous improvement in teaching;</i></p> <p>3.8 employ accountable and theoretically grounded processes to <i>monitor and assess</i> student understanding and progress;</p> <p>3.9 translate knowledge of mandatory <i>educational policy</i> to practice;</p> <p>3.10 integrate the best available <i>educational theory</i> with practice.</p>
<p>4.0 <i>professional educators who are dedicated to ethical, legal and</i></p>	<p>4.1 develop and work within an <i>ethical framework</i>, and commit to responsible and <i>legal</i> work practices;</p> <p>promote, within a <i>legal framework</i>, issues of <i>diversity</i>,</p>

Program Standards	Teacher Practitioner Attributes
<p>professional practices which enable them to work as leaders, partners, team members and autonomous individuals in a range of learning communities.</p>	<p>4.2 <i>equity and inclusivity;</i></p> <p>4.3 <i>contribute to the work of professional communities in a range of roles, involving autonomy, team membership and leadership;</i></p> <p><i>respect and promote professional rights and responsibilities;</i></p> <p>4.4 <i>initiate, value and practise collaboration and partnerships with learners, colleagues, carers, community, government, social and workplace agencies;</i></p> <p>4.5</p>