

# Evidence for good practice principles of teaching and learning foundation programs in higher education

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## *Teaching@UQ Project*

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### **Research and documentation:**

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## Good practice principles for the design and delivery of foundation teaching and learning programs in higher education

This document summarises the evidence supporting the good practice principles for the design and delivery of foundation teaching and learning programs in higher education. These principles have been compiled from peer-reviewed literature, reports commissioned by the Office of Learning and Teaching (OLT) to enhance teaching development in higher education, and from evaluation reports of existing programs. Key good practice principles have been identified and are listed below:

1. **Develop an evidence based curriculum that has clear objectives. Effective programmes have had as their objectives:**
  - 1.1. **Development of academic professional activity, knowledge, and values** that have been shown to enhance student engagement, encourage learning and improve student outcomes
  - 1.2. **Raising academic's awareness of their conceptions of student learning, teaching and assessment practices**
  - 1.3. **Employing effective evidence-based approaches to learning, teaching and assessment**, for example those that encourage a 'student centred (SC)' and 'learning focussed' approach
  - 1.4. **Engaging participants in experiential activities** that model student-centred teaching practices and provide 'real' contexts in which participants implement new teaching and learning knowledge and practise and review new skills
  - 1.5. **Employing cycles of training, observation and review** over the course of a year
2. **Accommodate the diverse and discipline specific learning needs and work demands** of participants
3. **Identify and align generic and discipline specific program components to school and discipline-based knowledge and practices** by integrating faculty in the development and implementation of program components
4. **Deliberately build and use networks of contacts within and across schools and faculties to share best practice approaches and support peer review processes**
5. **Embed and resource the program within institutional culture, administrative and HR policies and institutional budgets**, and ensure it is suitably recognised through promotional pathways and appointments
6. **Utilise an effective evaluative framework**

## 1. Evidence base for Principle 1.

**Develop a curriculum that has clear objectives. Effective teaching and learning programmes have had as their objectives:**

- 1.1. **Development of academic professional activity, knowledge, and values that have been shown to enhance student engagement, encourage learning and improve student outcome** (Bamber, Walsh, Juwah, & Ross, 2006; The Higher Education Academy et al., 2011). Guidelines and evidence include:
  - 1.1.1. ALTC's five key guiding criteria for determining excellence in university teaching for the purposes of recognition and reward are (Devlin & Samarawickrema, 2010):
    - 1.1.1.1. Approaches to teaching that influence, motivate and inspire students to learn;
    - 1.1.1.2. Development of curricula and resources that reflect a command of the field;
    - 1.1.1.3. Approaches to assessment and feedback that foster independent learning;
    - 1.1.1.4. Respect and support for the development of students as individuals; and
    - 1.1.1.5. Scholarly activities that have influenced and enhanced learning and teaching
    - 1.1.1.6. (Appendix 1 equates ALTC criteria to Students' Evaluations of Educational Quality (SEQ) instrument )
  - 1.1.2. **Embedding a student-centred approach to teaching** including an emphasis on engagement and interactive teaching and learning. This can be achieved through modelling, introduction of best practice methodologies, and enabling connections to be made with academic's own context. (Gibbs & Coffey, 2000; Hicks, Smigiel, Wilson, & Luzecky, 2010; Trowler & Bamber, 2005)
  - 1.1.3. **Five key ideas or concepts about higher education teaching and learning** (Kandlbinder & Peseta, 2009) taught by post-graduate certificates taught across 46 institutions in Australia (22 responses), New Zealand (3 responses) and UK (19 responses) and problems experience by program participants:
    - 1.1.3.1. **Reflective practice** of teachers as espoused by Schoen (1983). Key task of professional is to **manage complexity** through 'reflection in action' (p.49). Responding to unique situations by reframing the problematic situation in the context of what practitioner already knows, discovering consequences that can follow from it, adapting knowledge and activities to the reframed situation and giving the situation new meaning. Practitioner draws on pre-existing elements of their repertoire as a metaphor/exemplar for the new situation. Key tools are problem setting, evaluation through enquiry, and reflective conversation 'with' the teaching situation that forms the 'reflective contract' (p.130).
    - 1.1.3.2. **Constructive alignment** as espoused by Biggs (1996) and Cohen (1987). Curriculum plan aligned with high 'cognitive-level' goals requiring teachers be clear about what they want students to learn and how this knowledge can be translated into performative notion of understanding constructed by the student. Biggs proposed performance objectives arranged hierarchically and placing students in learning situations within which required learning is developed by student. Thus teaching and learning activities had to be aligned so students engaging with them met the objectives. Assessments tasks need to reflect the objectives and have the capacity to evaluate student's individual performances. Constructive alignment is applicable to course validation and quality enhancement.
    - 1.1.3.3. **Approaches to learning by students**
      - 1.1.3.3.1. *Surface* and *deep-level* processing described by Marton and SÄljÖ (1976) and developed by others including Biggs (1987) *shallow, deep and strategic approaches* (TOOL: *Study Process Questionnaire*). Entwistle and Wilson (1977) approach (TOOL: *Approaches & Study Skills Inventory for Students ASSIST* survey). Research evidence implies a form of meta-cognition called meta-learning, the awareness of students of their own learning processes and their increasing control over them. The

concept of meta-learning leads to a model of student learning in which relationships among personal factors, the situational context, approaches to learning and quality of outcome are mediated by the student's meta-learning capability (Biggs 1987). General agreement that students engage with learning in **surface, deep and strategic** ways that are directly related to different **personal learning styles** and which, to some extent, are selected **in response to educational contexts**, rather than individual preference or style. These styles are, respectively:

- 1.1.3.3.1.1. (shallow) knowledge reproduction with narrow concentrated rote learning, memorisation, reproduction without distinguishing principles from examples adopted in response to pragmatic/utilitarian personal contexts, motivated to get a degree and avoid failure and in learning contexts that are typically teacher focussed/ assessment focussed/short term goal contexts;
- 1.1.3.3.1.2. (deep) knowledge transformation with intention to understand material/the subject, vigorous interaction with material, use of enquiry and evaluation, relating new knowledge to existing and every day concepts, reading beyond requirements adopted in response to learning environment characterised by student focused/learning focussed/long term goal approaches and in self-actualising personal contexts.
  - 1.1.3.3.1.2.1. Different learning processes have been developed to promote deeper levels of learning e.g. instructional scaffolding (Reiser, Tabak, Reiser, & Tabak., 2014); conceptual change (diSessa in Sawyer, 2014);
- 1.1.3.3.1.3. (strategic) intentionally working for high grades, time and effort organised and distributed for greatest effect, alert to cues and predict questions and marking schemes, respectively adopted in response to competitive contexts.

1.1.4. **Scholarship of teaching** as proposed by Boyer (1990) a creative framework for academic work of a mix of discovery (research and advancement of knowledge), integration (connection of ideas and synthesis across discipline boundaries), application (interaction between knowledge and practice), and teaching (bridging gap between academic's understanding and student's learning). Teaching starts with what teacher knows (requiring deep expert knowledge) and is a dynamic endeavour involving carefully planned pedagogy, continuously examined and related to subjects taught. Implying teachers are also learners who transmit, transform and extend knowledge.

1.1.5. **Assessment driven learning** as proposed by Gibbs and Simpson (2004/5). Ten conditions under which assessment drives learning. The conditions focus on study time and orienting student's efforts to the most important aspects of the subject by engaging them in productive learning activity. The conditions also focus on the influence of feedback, particularly timeliness and level of detail that contribute to improved performance.

## 1.2. Raising academic's awareness of their conceptions of student learning, teaching and assessment practices

- 1.2.1. **University lecturers' conceptions of teaching are seemingly related to their teaching practices and consequently to their students' learning outcomes.** This has led to the acknowledgement that genuine improvements in lecturers' practices have to begin with a change in their thinking about teaching. Measurement tools ATI ((Kember & Kwan, 2002)) ((Bowden, 1988); Gibbs, 1995; (Gow & Kember, 1993); Ramsden, 1992; Trigwell, 1995) cited by. But debate about how to measure (Meyer & Eley, 2006) and pathways (Devlin, 2006).
- 1.2.2. **Help teachers to identify their current approach to teaching** and recognise the attitudes they bring to their teaching (Ho, Watkins, & Kelly, 2001; Kember & Kwan, 2002; Trigwell, Prosser, & Waterhouse, 1999)

1.2.3. **Conceptual change program approach** for new but experienced staff (Ho, Watkins & Kelly, 2001) that included a staged process: self-reflection, exposure to alternatives, critical reflection (confrontation); exposure to good teaching practice examples, putting into practice good practice (commitment building process) – based on three theories of change: Argyris & Schoen (1974) transition between theories of action, Posner et al (1982) theory of conceptual change, Lewin (1974) theory of social change; and on Shaw et al's (1990) psychological commitment to teaching.

**1.3. Employing effective evidence-based approaches to learning, teaching and assessment, for example** those that encourage a 'student centred (SC)' and 'learning focussed' approach

1.3.1. **Student centred learning approach emphasises on engagement and interactive teaching and learning with a focus on learners' characteristics, experiences and efforts to make sense of what they encounter in educational settings** (Barr & Tagg, 1995; Gibbs, 2013; Ho et al., 2001; Ramsden, 1992; Trigwell & Prosser, 1996) , rather than teacher-centred learning. This can be achieved through modelling, introduction of best practice methodologies, and enabling connections to be made with academic's own context. (Hicks, Smigiel, Wilson, & Luzecky, 2010)

1.3.1.1. **Experiential learning (Kolb & Kolb, 2005)**: learning is a process, all learning is relearning, learning requires resolution of conflicts (conflict, difference and disagreement drive learning), learning requires adaptation to the world of the whole person's thoughts feelings, perceptions and behaviour; learning involves assimilation and adaptation, it requires the process of creating knowledge → **constructivist theory** = social knowledge is created and recreated in the personal knowledge of the learner – it is not transmitted as fixed ideas.--> two modes **Concrete experience and Abstract conceptualisation grasp experience and Reflective observation and Active experimentation transform experience** -- > connected to neurological research

1.3.1.2. **Vygotsky's Zone of proximal development and problem based learning** (Harland, 2003). Through collaborative action-research, a reflexive critique of experiences in a Zoology program was systematically documented over 3 years and the present account focuses on three areas of practice influenced by the ZPD. These were a new emphasis on diagnostic teaching and learning, creating and maintaining instructional environments centred on authentic activities and supporting students as peer-teachers to help develop student autonomy in the context of collaborative learning.

1.3.2. **Support teachers to adopt a student centred mind-set** (Gow & Kember, 1993; Kember, 1997; Kember & Kwan, 2002) by presenting examples of student centred teaching practice, providing feedback on practice, followed by cycles of review and practice to link the knowledge learnt to the enhancement of teaching practices

1.3.3. **Cognitive and educational psychology** provide a short list of what the best ways to study may be (Gurung and McCann (2012) citing E. L. Bjork & Bjork, 2011; Matlin, 2002).

1.3.3.1. For example, the **unified learning model (ULM)**; Gurung and McCann (2012) citing Shell et al., 2010) suggests how motivational, cognitive, and neurobiological sciences can inform teaching and learning. The ULM stresses that **new learning requires attention, effort, repetition, and making connections**. The ULM also nicely reminds us that although "all neurons learn the same way" (p. 15), no instructional method or studying technique will lead to the same learning result for all students.

1.3.3.2. **Gurung and McCann (2012)** citing E. L. Bjork and Bjork (2011) pointed out that **optimal learning may be best brought about by instructors creating a desirable level of difficulty**. Desirable difficulties, that is, conditions of learning that require effort for the student and create difficulty, are said to actually **lead to more durable and flexible learning** (R. A. Bjork, 1994). The major suggestions for how to do this include: varying conditions of practice (e.g., studying in different rooms), spacing study or practice

sessions, interleaving versus blocking instruction (i.e., two sets of information are blended instead of presented in isolation) on separate to-be-learned tasks, and fostering generation of answers and self-tests.

- 1.4. **Engaging participants in experiential activities** (Boud, 1999; Felder, Brent, & Prince, 2011; Hicks, Smigiel, Wilson, & Luzeckyj, 2010) that model student-centred teaching practices and provide 'real' contexts in which participants implement new T&L knowledge and practise and review new skills
  - 1.4.1. **Including opportunities for interactive and inclusive teaching to be modelled** to participants, and for participants to engage in this through micro-teaching or through sharing and discussing teaching activities thus demonstrating a focus on the learning experience rather than solely on the performance of the teacher. (Hicks, Smigiel, Wilson, & Luzeckyj, 2010); (Sword, 2013), Green TEDI Pamphlet)
- 1.5. **Employing cycles of training, observation and review over the course of a year**
  - 1.5.1. Allow a year for changed approaches to teaching to be adopted and teacher self-efficacy to increase (Postareff, Lindblom-Ylänne, & Nevgi, 2007, 2008).
  - 1.5.2. Extended over time show more positive results of transfer of learning than one-time interventions. (Parsons, Hill, Holland, & Willis, 2012)
  - 1.5.3. Program length is sufficient to address key learning and teaching issues. (Hicks, Smigiel, Wilson, & Luzeckyj, 2010) Evidence points to a year of academic training activities yielding best results (higher self-efficacy, more student centred).
  - 1.5.4. Longer length of programmes and/or duration of activities positively affect the quality of learning and transfer potential, but the extent of this for different programme modalities is uncertain. (Parsons et al., 2012)
  - 1.5.5. Short one-off courses can be detrimental lowering 'teaching' self-efficacy and increase uncertainty (Postareff, Lindblom-Ylänne, & Nevgi, 2007). Short 'one-off' courses presenting discrete, skill-based topics have limited impact on changing teacher behaviour as there is limited opportunity to change teachers' conceptions of teaching and little or no opportunity for teachers to apply the new techniques within their discipline-specific context but can stimulate a deeper interest in teaching ((Chalmers, Stoney, Goody, Goerke, & Gardiner, 2012a) citing (Prebble, Margraves, Leach, Naidoo, Suddaby & Zepke, 2004; Southwell & Morgan, 2010). Continuing (+1 year) professional development yields even stronger benefits. (Postareff, Lindblom-Ylänne, & Nevgi, 2008)

## 2. Evidence base for Principle 2

**Effective programmes accommodate the diverse learning needs and work demands of participants:**

- 2.1. **Allocate time for participation** in program activities
- 2.2. Negotiate the **demographic differences** of participants (Bamber (2009) citing Rothwell & Arnold, 2005, p.20; and Prosser, Rickinson, Bence, Hanbury, & Kulej, 2006)
  - 2.2.1. women valued professional development more than men,
  - 2.2.2. long term members were less interested in professional development than newer members
  - 2.2.3. institutional, discipline and gender variations affected the attitudes of new lecturers to initial development programmes in UK universities
- 2.3. Use **flexible assessment choices** enabling participants to pursue interests and aspects of teaching they value (Malfroy & Thomson, 2010).
- 2.4. Providing **career support** (mentoring, career management support, and professional development) that recognises and address challenges facing new academics (Adcroft & Taylor, 2011) being:
  - 2.4.1. Expectations gap between expected career and reality
  - 2.4.2. Tension between research and teaching
  - 2.4.3. Individual demands and individual aspirations
  - 2.4.4. Written and unwritten rules governing/influencing academic life.

### 3. Evidence base for Principle 3

**Identify and align generic and discipline specific program components to school and discipline-based knowledge and practices** by integrating faculty in the development and implementation of program components. In ‘research intensive’ institutions, effective programs:

- 3.1. Socio-cultural approach** enhances new academics capacity to make sense of and negotiate the complex and contradictory environments they find themselves in and to develop ways of aligning their own identities and practices with this environment (Mathieson, 2011).
  - 3.1.1. Work to reduce dissonance between the practices and approaches advocated in training courses and the attitudes, values and practices in departments (P. Trowler & Bamber, 2005)
- 3.2. Build a learning architecture** within universities P. Trowler and Bamber (2005) citing Dill, (1999). It is important to remember that “knowing” in institutions lies not just in people’s heads, but in the tools they use: in assessment proformas, operating procedures, committee structures, policies and codes of practice, and unreflective daily practices (Trowler & Bamber citing Hutchins, 1995). **Institutional mechanisms are needed** for:
  - 3.2.1. Systematic and effective processes of review,
  - 3.2.2. Identifying and spreading preferred practices, for benchmarking, for transferring knowledgeability, and for
  - 3.2.3. Experimentation.
  - 3.2.4. Capturing knowledgeability, expanding it and reflecting on it.
- 3.3. Encouraging reflective approach to teaching to build culture of enhancement that can “close the loop” of review and practice, linking knowing and the enhancement of practices.**: ((Bamber, 2009; Gibbs, 2013; Hicks et al., 2010). This requires workgroups to reflect on their recurrent practices, implicit theories, tacit assumptions and conventions of appropriateness, and to engage in a struggle to change them if necessary. The most effective approach is to focus on solving problems —what they are, how they arose, how they have been tackled so far, and how to reshape practices to address them.
- 3.4. Align learning and teaching enhancement programs to institutional and school/department based practices and processes**
  - 3.4.1. Orienting staff to their institutional (and departmental context) (UQ policy & practice): This is achieved through introducing staff to philosophical approaches of the institution and introducing relevant policies and procedures (including promotion, awards and grants). (Hicks, Smigiel, Wilson, & Luzeckyj, 2010)
  - 3.4.2. Discipline based programs or in-situ training is a more effective setting for TPPs while a number of other studies (Chalmers citing: Warhurst, 2006; Rindermann, Kohler & Meisenberg, 2007; Feger & Arruda, 2008; McCluskey de Swart, 2009; Spronken-Smith & Harland, 2009; Ortlieb , Biddix & Doepker, 2010)
- 3.5. Use flexible delivery modes and activities that fit with the stakeholders and facilitate participation. (Bamber, Walsh, Juwah, & Ross, 2006)**

Approach	Mode of Delivery
Traditional workshop-based model	Tending to tight/face-to-face
Distance learning model	Tending to loose/distance learning (online learning)
Enquiry-led model	Tending to loose/distance, work-based or independent learning
Hybrid model	Mixture of all modes

- 3.6. Engage departmental faculty to develop and teach components of the program (Bamber et al., 2006)**



- 3.7. Develop and negotiate discipline-specific innovations to teaching that 'fit' with the school/faculty and are balanced with more generic content (Adcroft & Taylor, 2011)

## 4. Evidence base for Principle 4

**Deliberately build and use networks of contacts within and across schools and faculties to share best practice approaches and support peer review processes. This allows best practice teaching approaches to proliferate and extend beyond the program and its participants**

### 4.1. Build and use existing formal and informal networks as platforms to share experiences about teaching and learning and manage academic issues and challenges

- 4.1.1. **Create a coherent support framework** that aims to integrate formal and informal professional learning, probably including institutional and departmental elements. (Boyd, 2010) This framework can be considered to be a **fuzzy learning architecture** that would include collaborative research activity, informal writing or special interest groups, wider networks and informal research-focused mentoring. The professional engagement model, developed by (Hanrahan, Ryan, & Duncan, 2001) for their academic development work focused on online learning, provides an example of such an approach.
- 4.1.2. Tertiary Preparation Programs (TPPs) were more significant when they **involved participation in communities of practice involving mentoring, reflective practice, and action learning**. Chalmers citing: Warhurst, 2006; Rindermann, Kohler & Meisenberg, 2007; Feger & Arruda, 2008; McCluskey de Swart, 2009; Spronken-Smith & Harland, 2009; Ortlieb, Biddix & Doepker, 2010)
- 4.1.3. Adcroft and Taylor (2011) found that where new academics were successful in dealing with dissonance (unmet expectations of role, tensions between teaching and research, written and unwritten rules) was, in the main, where **strong social processes were in place, especially those relationships between the new academic and senior and other colleagues**. In these two schools, at least, the success or otherwise of the professional and personal support offered to new academics was primarily determined by the **human relationships** involved
- 4.1.4. Novice teachers seem to show more response to **collaborative arrangements** in programmes and this positively affects transfer of learning where it involves collaboration with more experienced colleagues. (Parsons et al., 2012)
- 4.1.5. Ferman (2002) study (of UQ academics) revealed that lecturers found a wide range of strategies useful in developing their professional expertise, with a **predominance of those strategies being collaborative** in nature. Six major themes: working with an educational designer, attending workshops and short courses, attending conferences, discussions with peers, presenting at conferences, and being mentored. Ferman (2002) found lecturers at different stages of their career will benefit from varied kinds of support, as indicated by the finding that differentially experienced academics in this study tended to lean towards different kinds of professional development. Newer lecturers valuing workshops and short courses as these tend to be practical and focused on addressing immediate teaching needs.
- 4.1.6. **'Bottom-up' academic development** to support the introduction of an innovative approach to teaching. Clegg, McManus, Smith, and Todd (2006) tracked the interactions of a group of academics charged with changing the way in which a particular program was taught. Using email transcripts and interviews at various intervals during and after the innovation, the study concluded that peer support through email was a very effective form of academic development (p. 98).

- 4.2. **Building institutional networks and relationships to build a culture of enhancement:** This is achieved through developing a sense of collegiality across disciplines and the institution, and building relationships with colleagues in schools and central units that continues beyond the program. (Hicks,

Smigiel, Wilson, & Luzeckyj, 2010; Bamber, Walsh, Juwah, & Ross, 2006, Boyd 2010, Boud, 2001; (Hanrahan et al., 2001))

## 5. Evidence base for Principle 5

**In a research intensive institution embed and resource the program within institutional culture, administrative and HR policies and institutional budgets, and ensure it is suitably recognised through promotional pathways and appointments.**

- 5.1. Choosing a good, well-developed and appropriate theory of change and put it into practice.** Amend it if outcomes suggest it isn't working as hoped. If the focus is student learning (e.g. as at University of Sydney), then work for policies and practices with that focus. (Barrie & Prosser, 2006; P. Trowler & Bamber, 2005)
- 5.2. Align program to institutional priorities** (P. Trowler & Bamber, 2005). Universities have to play several different games with different goals and rules: the research game, the income-generation game, the quality game, the teaching game. If enhancing teaching is a priority, then (for example) policies regarding appointment and promotion should reflect this. Experience at the University of Sydney suggests that congruence between policies and processes is important (Barrie & Prosser, 2006).
- 5.3. Use effective policy implementation practices (P. Trowler & Bamber, 2005)**
  - 5.3.1. Keep institutional leaders really engaged with the policy, and willing to devote resources: support needs to be more than rhetorical, although genuine moral support is important
  - 5.3.2. Find and work with good practice on the ground. Avoid any hint of a deficit model, including discursively. For example, use the word "enhancement" rather than "development", and avoid the word "competence" altogether.
  - 5.3.3. Don't expect rapid change: there are many forces for inertia, resistance, and reconstruction. These also mean that outcomes will not be exactly as expected, and that they will vary in different locations across the system. Significant change takes three to five years to develop and embed (P. R. Trowler, Saunders, & Knight, 2002).
  - 5.3.4. Remember that the real meaning and picture of compulsory training develops as it is played out in practice—we can try to imagine its size, shape and character, but what it really means will only become evident as it takes shape: 'the path forms itself in being walked' (P. Trowler & Bamber, 2005)(Trowler citing Spanish poet, Machado, 2003).
- 5.4. Approach and models of delivery varied according to contextual factors and institutional mission** (Bamber et al. 2006)
- 5.5. Broad conceptual framework which sits within loosely coupled systems** (Bamber (2009)citing Clark, 1983 and Weick, 1976); loose enough to allow independent decision-making by those with a range of needs, but tight enough to be recognisable as a formal structure with common, identifiable goals (Bamber citing Clark, 1983, p.137) which is aligned to institutional culture (Bamber 2009 Adapting from Blackmore and Castley (2006), and drawing on McNay (1995):
  - 5.5.1. **Tight policy/Loose control = supportive approach**
  - 5.5.2. **Tight policy/Tight control = directive approach**
  - 5.5.3. **Loose policy/Loose control = delegative**
  - 5.5.4. **Tight policy/Loose control = coaching**
- 5.6. Build a learning architecture** within universities P. Trowler and Bamber (2005) citing Dill (1999)). It is important to remember that "knowing" in institutions lies not just in people's heads, but in the tools they use: in assessment proformas, operating procedures, committee structures, policies and codes of practice, and unreflective daily practices (Trowler & Bamber citing Hutchins, 1995). **Institutional mechanisms are needed** for:
  - 5.6.1. Systematic and effective processes of review,

- 5.6.2. Identifying and spreading preferred practices, for benchmarking, for transferring knowledgeability, and for
- 5.6.3. Experimentation.
- 5.6.4. Capturing knowledgeability, expanding it and reflecting on it.
- 5.7. Provide appropriate resources (P. Trowler & Bamber, 2005)
  - 5.7.1. Faculties need **sufficient academic staff** to allow contribution, and these people have to be committed to the teaching and learning agenda and had a shared understanding of the purposes of the Induction course (Hicks et al., 2010)

## 6. Evidence base for Principle 6

### Utilise an effective evaluative framework.

- 6.1. Use and evaluative framework that's relevant to current practice, informed by research, adaptable to a variety of programs and contexts, based on a clear understanding of effectiveness (Chalmers et al., 2012a) **APD Effectiveness Framework**. Evaluation takes place at 2 levels: Program level (formal and informal programs) and Institutional level (P. Trowler & Bamber, 2005): importance of the context and the alignment between institutional architecture (e.g. policy, resourcing, review procedures) and the enhancement culture (e.g. support for the transfer of learning), and TPPs.)(Chalmers, Stoney, Goody, Goerke, & Gardiner, 2012b)

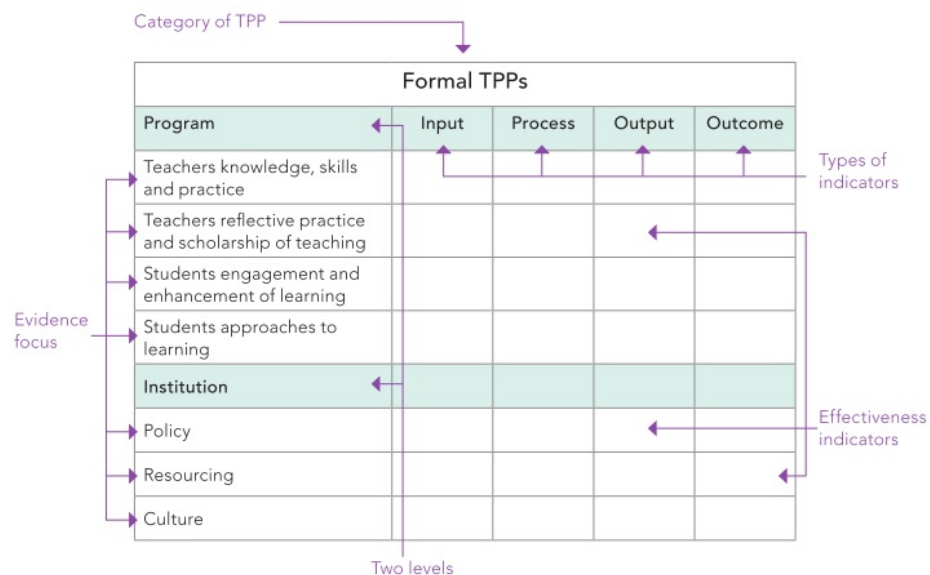


Figure 3 Framework structure

- 6.2. Identified four principles of good practice in approaching evaluation of FUT programs (see Appendix):(Chalmers et al., 2012a)
  - 6.2.1. 1. Design evaluation with deliberate and specific intent.
  - 6.2.2. 2. Gather credible relevant and valuable evidence.
  - 6.2.3. 3. Embed evaluation in learning experiences.
  - 6.2.4. 4. Close the loop: Feedback, feed-forward and feed-into learning from evaluation.
- 6.3. Formal assessment tools used in evaluation (Gibbs & Coffey, 2004) . Used the:
  - 6.3.1. SEEQ measure (Skill and impact measure), (Coffey & Gibbs, 2000);

- 6.3.2. Module Experience Questionnaire MEQ developed from the CEQ (Ramsden, 1992) (surface/deep/good teaching);
- 6.3.3. Approaches to Teaching Inventory (Trigwell unpublished) (Student vs teacher focussed approaches) though the validity underlying this inventory has been challenged (Meyer & Eley, 2006)
- 6.3.4. Sample and control groups (newly appointed at which there was no training for new teachers), N = 235)

**6.4. The design of evaluation appears to determined by the various rationale put forward for the evaluation (Hansen, 2005).** He identified that ‘some recommend evaluations be designed in terms of the *purpose* of the evaluation. Others recommend that evaluations be designed according to what is *possible*, what is *legitimate* and just or *what changes is planned* in the characteristics of the evaluated object. Yet others recommend that evaluations be designed on the *basis of analyses of the problems that the evaluated object is intended to solve*. In other words, recommendations are influenced by a goals-means rationale, by a contingency-based goals-means rationale, by context-based value rationale or by a programme theory rationale.’ Each of these rationales is linked to the use of different types of evaluation models. See Hansen for a full explanation of different rationales and resultant evaluation design approaches. He said the ‘ambiguity leaves room for four different logics behind action to influence design processes. The design process may assume the character:

- 6.4.1. of a process of negotiations
- 6.4.2. of accommodation to that which is regarded as appropriate
- 6.4.3. of establishing routines
- 6.4.4. of the projection of competence’

**6.5.** (Parsons et al., 2012) (EXCELLENT SUMMARY OF EVALUATION METHODS PRECEDES THIS CONCLUSION SEE LIT REVIEW DOCUMENT) ...Whatever focus is taken, this remains a **critical evidence gap**, since, as Trigwell 38 (2012) has recently argued, only by asking ‘why’ will those designing and delivering programmes be able to improve their effectiveness and further raise impacts from what is being provided. To tackle this Trigwell proposes a **fundamental shift in the focus of researchers to emphasise understanding: ... relations between the context, mechanism and outcomes**. For teaching development programmes this means **finding out what actions lead to what outcomes for what people**. (2012, p. 263) Others have suggested different models for **new evaluation methods that can capture appropriate impact evidence** (Parsons et al. (2012) citing Van Note Chism and Szabó, 1997; Guskey, 2000; Kreber and Brook, 2001). Parsons et al. (2012)citing Trigwell (2012) builds on this to suggest that a **stronger emphasis on ‘determinants’ of impact could be addressed by adopting an emphasis on methods of Realistic Evaluation (Pawson and Tilley, 1997)**.

**6.6.** A further suggestion which emerges from the literature on **impact indicators** is that perhaps they should be put at the front end of decision making rather than at the back end (Chalmers, Goody, Goerke, Gardiner, and Stoney (2011) citing Nikols, 2010). If we apply this thinking to Kirkpatrick’s model of evaluation the four stages would be used to prompt design-related questions as indicated in Table 1 below .

**Table 1 Impact evaluation questions to guide programme designe**

Results	What are the institutional goals in teaching and learning?
	How can these be valued/ recognised?
	How can these goals be achieved?
	How are these communicated to teaching staff?
Behaviour change	What teacher behaviours are desirable for teaching staff?
	What are the current behaviours?
	What would be required to support new behaviours?

	What would motivate staff to change their behaviour?
Learning	What knowledge/skills are evident in current teaching practices?
	What new knowledge/skills are implied in the desirable behaviours?
	What conceptions of teaching might have to be unlearned/ challenged?
	What is the most effective way to do this?
	What is likely to create a positive learning environment?
Reaction	How will academic staff respond to this?
	What responses are desirable?
	What can be done to encourage this response?
	What collegial interactions are desirable?
	What do we want them to do as a result of what they have learned?

## Appendices

### Appendix 1

Table 1. Comparison of ALTC criteria and SEEQ dimensions of effective teaching.

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Australian Learning and Teaching Council criteria (2008)	SEEQ dimensions (Marsh & Roche, 1994)
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Criterion 1 – Approaches to teaching that influence, motivate and inspire students to learn.

- Fostering student development by stimulating curiosity and independence in learning;
- Contributing to students' critical thinking skills, analytical skills and scholarly values;
- Encouraging student engagement through enthusiasm shown for learning and teaching;
- Inspiring and motivating students through high-level communication, presentation and interpersonal skills.

Criterion 2 – Development of curricula and resources that reflect a command of the field.

- Developing and presenting coherent and imaginative resources for student learning;
- Implementing research-led approaches to learning and teaching;
- Demonstrating up-to-date knowledge of the field of study in the design of the curriculum and the creation of resources for learning;
- Communicating clear objectives and expectations for student learning.

SEEQ Dimension 1 – Learning/academic value: How well students believe they have understood subject matter; how valuable and worthwhile they consider their learning experience in the subject to have been.

SEEQ Dimension 2 – Lecturer enthusiasm: Lecturer enthusiasm increases student interest and attention and may extend to the subject.

SEEQ Dimension 4 – Group interaction: Verbal interaction in classrooms, questions and answers that facilitates the expression and sharing of ideas and knowledge from and between students. Social interaction to motivate, practice and test ideas and receive helpful feedback.

SEEQ Dimension 9 – Workload/difficulty: Subject difficulty and workload, compared to other subjects, the pace, the actual number of hours per week required outside class time, feelings of motivation and being appropriately challenged.

SEEQ Dimension 1 – Learning/academic value: How well students believe they have understood subject matter; how valuable and worthwhile they consider their learning experience in a subject to have been.

SEEQ Dimension 3 – Organisation/clarity: Structure and clarity, clear objectives and alignment between intended objectives and what is actually taught; clear explanations and thoroughly prepared subject materials, leading to the formation of linkages between new material and material previously learned.

SEEQ Dimension 6 – Breadth of coverage: The extent to which the lecturer provides the background for ideas and concepts, presents different points of view and discusses current developments in the field adding to student knowledge and understanding.

SEEQ Dimension 8 – Assignments/reading: Consideration that the prescribed readings are valuable and meaningful.

Table 1. (Continued).

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Australian Learning and Teaching Council criteria (2008)	SEQ dimensions (Marsh & Roche, 1994)
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Criterion 3 – Approaches to assessment and feedback that foster independent learning.

- Integrating assessment strategies with the specific aims and objectives for student learning;
- Providing timely, worthwhile feedback to students on their learning;
- Using a variety of assessment and feedback strategies;
- Implementing both formative and summative assessment;
- Adapting assessment methods to different contexts and diverse student needs.

Criterion 4 – Respect and support for the development of students as individuals.

- Participating in the effective and empathetic guidance and advising of students;
- Assisting students from equity and other demographic subgroups to participate and achieve success in their courses;
- Influencing the overall academic, social and cultural experience of higher education.

Criterion 5 – Scholarly activities that have influenced and enhanced learning and teaching.

- Showing advanced skills in evaluation and reflective practice;
  - Participating in and contributing to professional activities related to learning and teaching;
  - Coordination, management and leadership of courses and student learning;
  - Conducting and publishing research related to teaching;
  - Demonstrating leadership through activities that have broad influence on the profession.
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SEEQ Dimension 7 – Examinations/grading: Feedback and perceptions of fairness and relevance of assessment tasks.

SEEQ Dimension 8 – Assignments/reading: Consideration that the prescribed readings are valuable and meaningful.

SEEQ Dimension 4 – Group Interaction: Verbal interaction in classrooms, questions and answers that facilitate the expression and sharing of ideas and knowledge from and between students; social interaction to motivate, practice and test ideas and receive helpful feedback.

SEEQ Dimension 5 – Individual Rapport: Perceived lecturer friendliness, approachability, accessibility and helpfulness.

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