



National Standards for Psychological Literacy and Global Citizenship: Outcomes of Undergraduate Psychology Education



2012 FINAL REPORT
National Teaching Fellowship
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www.psychologicalliteracy.com

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Support for the production of this report has been provided by the Australian Government Office for Learning and Teaching. The views expressed in this report do not necessarily reflect the views of the Australian Government Office for Learning and Teaching.



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2012

ISBN 978-1-922125-98-9

Acknowledgements

This Initiative would not have progressed without the quality input and dedication of the Fellowship Team, including Jun Mo Jeong and Craig Baker. We would like to thank the members of APS PDAC, APS PsyEd/APEN, HODSPA, APS NPETRG, APS PIFOPS, the delegates to the 2010 APEN State Meetings and the April 2012 UG Psychology Education Summit (UNSW), and all of our psychology educator colleagues and UG students, for contributing to this Fellowship Initiative. The patience and engagement of UNSW PSYC3011 students in the first offering of the capstone course is greatly appreciated. We would also like to thank the members of the Fellowship Advisory Group (Iain Montgomery, Trevor Carlyon, Leigh Mellish, Mick Hunter, Steve Provost, Frances Martin, Nicholas Voudouris, Joanne Earl, Fiona White and Brin Grenyer) for their welcome advice. Moreover, the support of the UNSW School of Psychology, particularly Simon Killcross and Branka Spehar, and the members of the UNSW Learning and Teaching Unit, particularly Stephen Marshall and Helen Dalton, is very much appreciated.

We would also like to thank the staff, committee members, associates and Fellows of ALTC and OLT for their enduring support, particularly Siobhan Lenihan, Neridah Baker, Peter Hutchings, Carol Nicoll, Suzi Hewlett, Ron Oliver, Sally Kift, Adrian Lee, Judyth Sachs and Margaret Gardner. Your dedication to improving learning and teaching in HE is a constant source of inspiration. We also thank the evaluators for their invaluable formative advice: Stephen Marshall, Regan Gurung, Annie Trapp and Dana Dunn.

Jacquelyn Cranney, Lorayne Botwood and Sue Morris

List of Acronyms and Abbreviations Used

ALTC = Australian Learning and Teaching Council
ALTF = Australian Learning and Teaching Fellows
AOU = Academic Organisational Unit
APA = American Psychological Association
APAC = Australian Psychology Accreditation Council
APEN = Australian Psychology Educators Network
APS = Australian Psychological Society
BPS = British Psychological Society
CBT = Cognitive Behavioural Therapy
CDU = Charles Darwin University
GA = Graduate Attribute
GC = Global Citizenship
HE = Higher Education
HEA = Higher Education Academy (UK)
HODSPA = Heads of Departments and Schools of Psychology Association
ICOPE = International Conference on Psychology Education
JCU = James Cook University
L&T = Learning and Teaching
LTA = Learning, Teaching and Assessment
LTAS = Learning and Teaching Academic Standards Project, ALTC
NPETRG = National Psychology Education and Training Reference Group
PDAC = Program Development Advisory Committee of APS
PFA = Psychology Foundation of Australia
PG = Postgraduate
PIFOPS = APS Presidential Initiative on the Future of Psychological Science (2011-2012)
PL = Psychological Literacy
PsyBA = Psychology Board of Australia
PsyEd = Psychology Education Interest Group of the APS
QA&I = Quality Assurance and Improvement
SARAG = Science, Academia and Research Advisory Group of APS
TEQSA = Tertiary Education Quality and Standards Agency
TLO = Threshold learning outcome
UG = Undergraduate
USQ = University of Southern Queensland
WIL = Work-integrated learning

Some Key Terms

Global citizenship (GC) = the understanding of global interrelatedness, and the capacity to live, work and contribute positively as a member of global communities.

Psychological literacy (PL) = the general capacity to adaptively and intentionally apply psychology to meet personal, professional and societal needs.

Unit = a module or course that is the basic component of a degree program [usually four per semester; eight per year; 24 per three-year degree program].

Executive Summary

The primary aim of this Fellowship was to engage stakeholders in psychology education in a review of the aims of the undergraduate (UG) degree program, and subsequently the expected learning outcomes and curriculum content. There has been unprecedented national and international change in psychology education and training, as well as higher education (HE) more generally. The key issues are: (a) large numbers of graduates of psychology major programs in Australia do not go on to further professional training in psychology, and (b) there is an increasingly recognised need for professionals and citizens with high levels of psychological literacy and global citizenship.



This Fellowship built on the outcomes of Cranney's previous ALTC Associate Fellowship, in particular the delineation of six graduate attributes (GAs) for the Australian UG psychology program (knowledge, research, critical thinking, values, communication, application). The current initiative undertook further scholarly development of the concepts of psychological literacy and global citizenship, as well as the identification and implementation of strategies for translating these concepts into practice within the classroom. Psychological literacy can be conceptualised as the general capacity to adaptively and intentionally apply psychology to meet personal, professional and societal needs. Global citizenship is the understanding of global interrelatedness, and the capacity to live, work and contribute positively as a member of global communities. These concepts were central to developing the pedagogy underlying the creation and revision of the standards for psychological literacy and global citizenship. This work was undertaken within the context of (a) building, supporting and collaborating with networks of students, graduates, employers, and educators (national, international and transdisciplinary), as well as (b) contributing and responding to peak national disciplinary and professional bodies. Specifically, the aims of this Fellowship were to:

1. Further develop academic standards for psychological literacy and global citizenship;
2. Further develop a forward-looking, responsible, and evidence-based pedagogy for UG psychology, to guide curriculum renewal and the achievement of Aim 1;
3. Further develop networks of psychology educators and other stakeholders, to facilitate input to and engagement with the academic standards and pedagogy aims of this initiative;
4. Couch these activities in continued two-way interaction with relevant international and interdisciplinary bodies.

These aims were largely met, and a comprehensive list of outcomes can be found in this report, as well as at www.psychological literacy.com. Key overall outcomes include:

1. Substantial contributions to national and international meetings/forums and educator networks, with a focus on the operationalization, adoption and implementation of psychological literacy, GAs, associated student learning outcomes (SLOs), and Standards.
2. Further network-based development, revision and implementation of:
(a) psychological literacy as the primary outcome of UG education, (b) the GAs and SLOs as the basis for standards (threshold learning outcomes [TLOs]) of accreditation

and quality assurance, and (c) global citizenship as a desirable transdisciplinary outcome of HE.

It is recommended that:

1. **Psychological literacy** be the primary outcome of the psychology major.
2. The development of **global citizenship** be encouraged for all university students, regardless of their program of study.
3. Core accredited three-year psychology programs focus on achieving the **scientific literacy** threshold learning outcomes (TLOs) of knowledge (GA1), research training (GA2), and critical thinking (GA3) (theory *and* application) to a high level.
4. Schools and departments of psychology focus on supporting the career development needs of students, including those who are unlikely to progress to professional psychology training. In addition to the scientific literacy TLOs, there should be adequate emphasis on the development of communication skills (GA5), values and ethics relevant to the workplace (GA4), and on application of psychological science to general employment contexts (GA6)—that is, the **employability** TLOs.
5. Psychology major units that specifically address **global citizenship** be offered (i.e., on cultural awareness and competence; moral literacy; decision-making and interventions regarding global issues such as climate change; behaviour-based leadership; community-based volunteering experiences). This is an aspirational outcome, rather than a TLO, and taps into all GAs, particularly GA4 and GA6.
6. A **capstone** experience is included during the third year of the UG psychology sequence as an accreditation requirement (the aspirational strategy would be a full unit including work-integrated learning). This strategy should facilitate students' appreciation of what they have gained from their psychology major—that is, psychological literacy.
7. **Alternative professional psychology-relevant options** for three-year graduates are developed by APS in collaboration with HODSPA, APAC, and in particular, employers (e.g., *Applied Behavioural Practitioner* units could be offered in partnership with interested universities as a minor).
8. Peak disciplinary bodies **encourage and support quality learning outcomes** by:
 - (a) sharing expertise and resources,
 - (b) supporting explicit program-based staff development to facilitate changes in program outcomes for students, and
 - (c) supporting consensual/partnered policy and strategy development.
9. Peak disciplinary and professional bodies in Australian psychology actively lobby for increased **funding** of psychology programs to address the subsidisation of postgraduate psychology programs by undergraduate psychology income.
10. **Accreditation standards** are formally reviewed to (a) include the development of quality principles, as well as benchmarking of TLO assessments across universities, (b) emphasise psychological literacy as the primary outcome of UG psychology education, and (c) accommodate the above recommendations.

In this report, strategies are suggested for the implementation of these recommendations, and with the support of stakeholders, this is already in process. Reflecting her increased leadership capacity, the Fellow will continue to advance these initiatives in her ongoing activities. Three websites document the Fellowship outcomes:

www.psychologicaliteracy.com

www.groups.psychology.org.au/PsyEd/resources/

<http://www2.psy.unsw.edu.au/Users/JCranney/>

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Chapter 1: Introduction

“The discipline is at a juncture and we should consider where we are and where we are going.” (Participant @ April 2012 UG Psychology Summit)

Higher education (HE) initiatives have the potential to positively impact the health and wellbeing of local and global communities now and into the future. It is this premise that led to the key question of this initiative: Do the curriculum content, learning outcomes and aims of UG psychology program meet the needs of graduates and other stakeholders? For example, there are large numbers of graduates of psychology major programs who do not go on to further professional psychology training, and at the same time, there is an increasingly recognised need for professionals and citizens with high levels of psychological literacy and global citizenship. It is therefore timely to re-assess the aims and outcomes of UG psychology education in Australia. In doing so, it is critical to engage all relevant stakeholders.

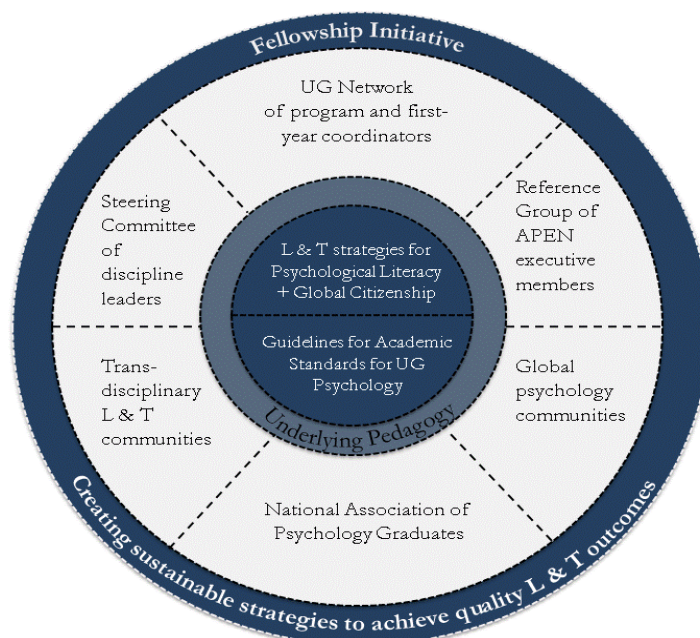


Figure 1: Original Fellowship Conceptualisation

This Fellowship built on the outcomes of Cranney’s (2008) Australian Learning and Teaching Council (ALTC) Associate Fellowship, in particular the delineation of six graduate attributes (GAs) for the Australian UG psychology program. The current initiative involved the further scholarly development of the concepts of psychological literacy and global citizenship, as well as the identification and implementation of strategies for translating these concepts into practice within the classroom. These concepts were central to the developing pedagogy underlying the creation and revision of the standards. This work was undertaken within the context of (a) building, supporting and collaborating with networks of students, graduates, employers, and educators (national, international and transdisciplinary), as well as

(b) contributing and responding to peak national disciplinary and professional bodies. All these groups are considered to be key stakeholders in this initiative.

The aims and intended outcomes of the Fellowship were as follows:

Aim 1: Further develop academic standards for psychological literacy and global citizenship.

Intended outcomes:

- Achieve greater appreciation of international issues with respect to the aims, learning outcomes and standards for UG psychology;
- Contribute and respond to national issues regarding the aims, learning outcomes and standards for UG psychology;
- Achieve greater appreciation of transdisciplinary issues regarding program aims, learning outcomes and standards in general;
- Acceptance of GAs and associated SLOs as TLOs.

Aim 2: Further develop a forward-looking, responsible, and evidence-based pedagogy for UG psychology, to guide curriculum design as well as the achievement of Aim 1.

Intended outcomes:

- Theoretical development of the concept of psychological literacy and its translation into practice through scholarly contributions;
- Promotion and acceptance of psychological literacy as the key outcome of UG psychology education; and,
- Collation/development of innovative learning, teaching and assessment resources relevant to psychological literacy and graduate attributes.

Aim 3: Further develop networks of psychology educators and other stakeholders, to facilitate input to and engagement with the academic standards and pedagogy aims of this initiative.

Intended outcomes:

- Further support of the existing APEN/PsyEd educations network;
- Development and support of alumni organisations, and focus on employers;
- Support of local and national student organisations; and,
- Support of local and national transdisciplinary networks with a general or specific focus on academic standards and quality.

Aim 4: Couch these activities in continued two-way interaction with relevant international and interdisciplinary bodies.

Intended outcomes:

- International and transdisciplinary benchmarking regarding UG psychology education; and,
- Development and support of local and national transdisciplinary networks whereby the focus is on global education and/or global citizenship education.

The outcomes of this fellowship were facilitated through involvement with key international bodies, which included contributions to international psychology organisations/conferences (e.g., the UK UG psychology review—see Chapter 2), as well as contributions to or comment on international publications (e.g., editorial board membership).

Rigorous consultation at the national level was also conducted via committee presence, working parties, keynote addresses, educational summits, program review invitations, advisory group meetings, and informal networking. In addition, a total of 332 graduates, employers and students participated in a survey on the outcomes of psychology UG programs. The figure below depicts a (conservative) estimate of national-level involvement.

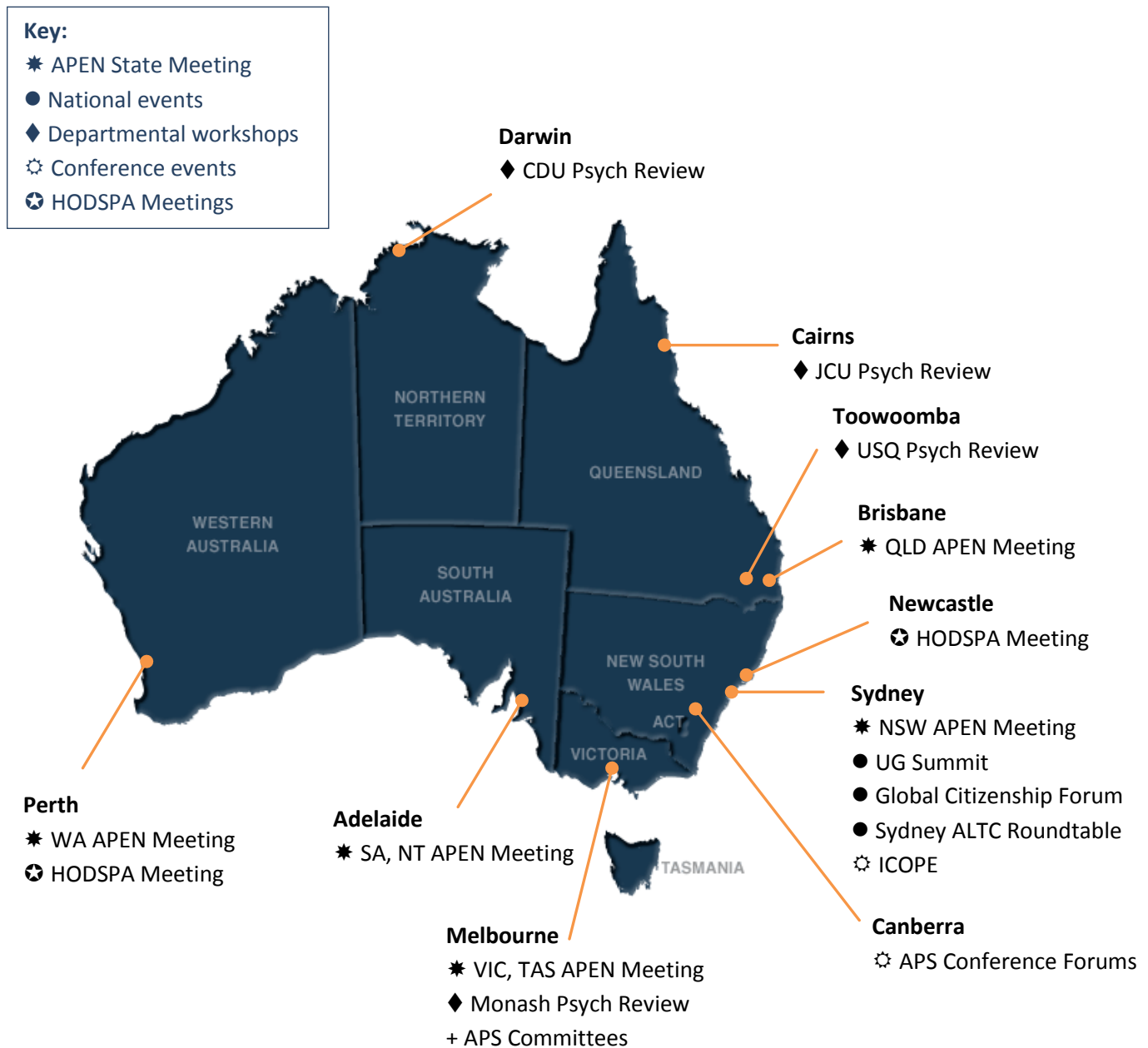


Figure 2: National Fellowship Activities and Involvement

To assist with report navigation, the aims, methods and outcomes are discussed respectively in the following chapters:

- Aims of UG psychology education and standards for psychological literacy (Aim 1)
- Pedagogy for undergraduate psychology (Aim 2)
- Networks and the making of good practice (Aim 3)
- Going global (Aim 4)
- Looking forward, looking back (fellowship recommendations)

Chapter 2: Aims of UG Psychology Education and Standards for Psychological Literacy

“It forced us to think about the current delivery method + seriously consider options--I think we need more of this.” (Participant @ April 2012 UG Psychology Summit)

2.1 Context and Strategies

Australian national psychology standards are being influenced by the international HE movement toward accountability in terms of student learning outcomes (e.g., The National Centre for Public Policy and Higher Education, 2006), the re-examination of HE degree structures more generally (e.g., Bologna Model—see Lunt et al., 2011), and by national health initiatives regarding allied health training (www.nhwt.gov.au/training.asp). With regard to the national health initiatives, the Federal Government has streamlined training, accreditation, and registration of health professionals by implementing a national system for accreditation and registration of health professions and is also calling for the training of more health professionals (www.nhwt.gov.au/natreg.asp).

Moreover, concurrent with this Fellowship, there has been ongoing (a) re-examination of the aims of UG psychology education in Europe, England and the USA, and (b) re-examination of models of psychology education and training in Australia following the disestablishment of the State Registration Boards of Psychology and the establishment of the Psychology Board of Australia (PsyBA).

The APS has been actively responding to these issues by, for example, creating the National Psychology Education and Training Reference Group (NPETRG), whose task has been to review models of education and training (e.g., Littlefield et al., 2007, 2009). NPETRG is now in the process of developing a model with more flexible PG programs for training professional psychologists. In terms of UG education, the primary suggestions of NPETRG have been to increase the volume of learning, as well as increase the general emphasis on the application of psychological principles to one’s personal and professional life (Littlefield et al., 2009). Overall, it can be stated that the primary focus of the Australian psychology peak discipline and professional bodies (i.e., APS, APAC, PsyBA) has been on PG professional training. Thus this Fellowship sought to address the ‘UG gap’ through review and curriculum renewal, which was also timely given that the USA (Halpern, 2010), UK (Trapp et al., 2011) and Europe (Lunt et al., 2011) were also undertaking similar UG reviews.

Graduate attributes (GAs) with associated student learning outcomes (SLOs) were delineated during Cranney’s (2008) ALTC Associate Fellowship, with most of this content being integrated into the Australian Psychology Accreditation Council (APAC) Standards in 2008 (see APAC, 2010; Voudouris, 2009). These GAs are currently evaluated during the APAC site-visit peer review process. It was originally proposed that the next step was to develop guidelines for minimum levels of attainment of these SLOs, and strategies for assessing and evaluating learning outcomes at student, departmental, and national levels. However, a number of factors led to the modification of this intent. One of the most important factors was the growing evidence that there were increasing numbers of

psychology major graduates who did not go on to undertake further PG professional psychology training (Lipp et al., 2007), which raised the question of whether we were preparing such students adequately for their career destinations.

Another factor was the evolving understanding of the nature of *standards*. ALTC (2009) defined academic standards as learning outcomes described in terms of core discipline knowledge and core discipline-specific skills. This definition is similar to that for GAs, but without the attitudes component (Bowden et al., 2000). The *standards* that were being developed by the Discipline Scholars in the ALTC Learning and Teaching Academic Standards (LTAS) project were in line with this definition, with most including broad statements such as *discipline knowledge*, *thinking skills*, and *self-management*. It was the general understanding that these statements were standards in the sense that they constituted the categories of knowledge, skills and attitudes (KSAs) that needed to be developed within that discipline domain. Another approach to *standards*, however, borrowed from specific assessment approaches, is that a broad category such as *thinking skills* then needed to be broken down into *criteria* or specific learning outcomes (e.g., capacity to integrate knowledge across sub-areas). Moreover, each criterion was to have *performance achievement statements* relevant to certain levels such as a pass, which defines the acceptable minimal or *threshold* level of achievement of that *criterion*, and preferably also, a high or *aspirational* level (e.g., high distinction). This degree of specification was generally resisted by stakeholders within this initiative. Indeed, the final April 2012 UG Psychology Summit exercise highlighted to educators the difficulty of obtaining consensus on standards and respective assessment approaches. Nevertheless, we clarify here, that from a *standards* perspective, we distinguished between minimal or threshold learning outcomes (TLOs), and desired or aspirational learning outcomes.



Figure 3: April 2012 Undergraduate Psychology Education Summit, UNSW

An additional factor was the volatility of the national academic standards agenda. In the midst of this Fellowship and the LTAS project, the disestablishment of ALTC was announced. There was further development of the national academic standards agenda through the establishment of the Tertiary Education Quality and Standards Agency (TEQSA) and the HE Standards Panel in 2012. Concurrently, assessment policy changes at the institutional level

were being implemented (e.g., emphasis on standards-based assessment). These factors, in combination with the need to re-examine the graduate *outcomes* of UG psychology, led to the decision to re-examine the *aims* of UG psychology education. At the same time, stakeholders were consulted on the evolving concept of psychological literacy (whereby the initial emphasis was on GAs). Thus, we needed to determine what are the actual and desired graduate destinations, and related aims, of the program—and thereafter the learning outcomes, as reflected in the graduate attributes and associated learning outcomes, and consequent learning, teaching and assessment (LTA) strategies of UG psychology education.

2.2 Progress toward achieving aims and intended outcomes

The GAs were integrated into the APAC Standards in 2008, and thus could already be considered to be TLOs in the LTAS sense. This Fellowship sought to promote integration of the GAs into the curriculum and re-examine the aims of UG psychology concurrently, particularly considering that fewer than 25 per cent of psychology majors in Australia go on to university-based professional psychology training (Cranney et al., in prep). We asked the following questions: What good is a psychology major to those graduates who do not go on to further psychology training? What are the implications for learning outcomes and associated standards? Progress against the pre-defined intended outcomes and associated indicative evidence is listed below.

2.2.1 Achievement of greater appreciation of international issues with respect to the aims, learning outcomes and standards for UG psychology

There has been a two-way interaction between national and international organisations and individuals throughout this Fellowship. A continuing awareness of changing international standards and issues, such as the Bologna EuroPsy Tunings work (through contact with Remo Job of Italy: Lunt et al., 2011), has influenced the evolving work on standards and pedagogy (e.g., a consideration of the nature of desired outcomes/competencies at the UG level). The international contributions to the International Conference on Psychology Education (ICOPE, chaired by the Fellow) also contributed perspectives from diverse countries such as Germany, Russia and Indonesia. This benchmarking information has been conveyed to psychology educators to give some perspective on how the Australian model of education and training compares globally. On the flipside, the Fellowship has had some impact on international educators. For example, the Fellow's facilitation of the UK Higher Education Academy (HEA) Psychology Network UG Retreat (2010) influenced the high psychological literacy content of the recommendations in the ensuing report (Trapp et al., 2011). Moreover, some educators may be more open to learning about these issues than others. For example, at the April



Figure 4: ICOPE guests Sarlito Sarwono (Indonesia), Simon Crowe (APS President), and Iain Montgomery (PDAC Chair)

2012 UG Psychology Summit, one young academic expressed her appreciation for the background contextual information conveyed regarding UG education. The evidence listed below is a mix of outputs and process elements (and, sometimes, both).

Evidence of outcome attainment:

- ICOPE international content;
- International chapters of edited book (Cranney & Dunn, 2011a) on psychological literacy;
- International comparative last chapter in the edited book (Cranney & Dunn, 2011c);
- Facilitation of the UK HEA Psychology Network UG Retreat (Trapp et al., 2011);
- Dissemination of this information through meetings, conference forums/symposia, departmental workshops (see www.psychologicalliteracy.com/fellowships for a substantive list).

2.2.2 Contribute and respond to national issues regarding the aims, learning outcomes and standards for UG psychology

Since 2007 the Fellow has been a member of the APS Program Development and Advisory Committee (PDAC), which has, and continues to be, a rich source of knowledge regarding both national issues and the variation in conditions experienced by departments of psychology. The Fellow's capacity to change the curriculum resides largely in her membership of this committee, and so at approximately half the meetings during the Fellowship, she ensured discussion of UG issues. In addition, the APS National Psychology Education and Training Reference Group (NPETRG) reconvened last year, and the Fellow again raised targeted discussion of UG issues in a context where PG training issues dominate. The Fellow was invited to join Simon Crowe's APS Presidential Initiative (PIFOPS) in 2011, and recommendations relevant to embedding psychological literacy in the UG curriculum, including staff development, were drafted. Members of the Heads of Schools and Departments of Psychology Association (HODSPA) are key to curriculum change at the coal-face, which is why the Fellow accepted invitations to discuss UG issues. As a member of the APS Science, Academia, Research Advisory Group (SARAG), one of the national custodians of psychological science, the Fellow also gave updates on the Fellowship when appropriate. In all these committees, there has been a two-way interaction, whereby the Fellow learnt from members' varying perspectives, and made decisions regarding whether and how the Fellowship aims/activities needed to be modified to meet these stakeholders' needs/concerns. There has been significant success in terms of outcome achievement at the policy level (e.g., PDAC). At the implementation level (e.g., HODSPA), however, it is a work in progress.

"It was most helpful that Jacky put it all in perspective; what is most important in UG training." (Participant @ APEN Summit, 2010)

Evidence of outcome attainment:

- PDAC: Established the UG Subcommittee;
- PIFOPS: Key member of the psychological literacy working group;
- NPETRG: Key member of the UG Subcommittee;
- HODSPA: Two invited presentations at their meetings;
- SARAG: Annual updates/discussion of Fellowship initiative;
- Dissemination of this information through APEN Meetings, conference forums, symposia, the April 2012 Summit, departmental workshops, UG Green Paper (Cranney & Botwood, 2012).



Figure 5: Australian Learning and Teaching Fellows at the 2nd National ALTF Forum

2.2.3 Greater appreciation of transdisciplinary issues regarding aims, learning outcomes and standards in general

Through roles that range from temporary national reference group membership (e.g., Health LTAS) to more sustained local service/administrative positions (e.g., Academic Board Committee on Education [CoE]), the Fellow gained a greater appreciation of the commonalities and differences amongst disciplines and professions regarding standards. As the Vice-President of ALTF, the Fellow has also been closely involved in organising the forum agendas, with the first three (2011-2012) focussing on standards and assessment. All of these situations were opportunities for learning. The Fellowship activities as well as the psychology accreditation role allowed the Fellow to contribute constructively to the debates and to the work.

Evidence of outcome attainment:

- APAC representative, Health LTAS Team (2010-2011);
- Invited participant, Professor Beverly Oliver's workshop on Standards (July 2011);
- ALTF Forums on standards (which the Fellow helped to organise, as Vice-President);
- Conferences (e.g., AUQA) and other learning opportunities;
- Membership of UNSW Academic Board, and its Committee on Education (CoE) and UG Studies Committee; and,
- Dissemination of this information through meetings, conference forums/symposia, April 2012 Summit, departmental workshops (see www.psychologicalliteracy.com).

2.2.4 Acceptance of Graduate Attributes as Threshold Learning Outcomes

Although the GAs are already TLOs because they are included in the APAC standards as minimal outcomes (and now assessment information is required in the application process),

three issues remain: (a) there is less than full acceptance of the GAs other than knowledge and research, given that the remaining GAs, if assessed appropriately, may have significant resource implications; (b) a reconsideration is required of the specifics of these GAs/SLOs in light of the re-examination of the aims of UG psychology education, and (c) the determination of TLOs is required, particularly given the role that APAC may play in the relationships amongst TEQSA, the HE Standards Panel, and the discipline and profession of psychology.

(a) Barriers to Full Acceptance of the GAs

Although some heads of psychology see the value of ensuring that all graduates have, for example, good communication skills (beyond report-writing), others appear to take the stand that a teacher-centred focus on knowledge and research is the core, and anything else is an unnecessary threat to the success of the department. In the current HE environment with its emphasis on research reputation, this stand is not unrealistic, and this needs to be taken into consideration as Australian psychology education moves forward. In particular, it may be that the push toward psychological literacy must first focus on developing the scientific literacy component, to fit best with the current focus of most departmental programs. Most heads of psychology will find that they need to focus on the employability component, given the demands of students and education accountability bodies. The global citizenship component will be viewed as aspirational by most heads; however, again it will be students, and the more globally oriented accountability bodies, that will eventually encourage heads of psychology to integrate that component into their programs.

(b) Reconsideration of the GAs/SLOs and the Structure of the UG Curriculum

During the 2010 APEN Meeting discussions of the GAs and associated SLOs, it became clear that some educators thought that some of the SLOs that were not included in the APAC Standards should be (e.g., interpersonal communication). Others, however, thought that the APAC listing was already too prescriptive. In the original delineation of the GAs, it was stated that these should be revised periodically. Given this, one activity undertaken at the April 2012 Summit was the revision of the SLOs. Since then, a new conceptualisation of the central role of application in the UG curriculum has been created and presented in a *Green Paper* (Cranney & Botwood, 2012), including the revised standards document that has been separately submitted to the APAC Standards Review (see Appendix F). Depending on the feedback, the paper may be revised and resubmitted to the APAC Review.

(c) Minimal Levels of Attainment of the GAs

During the April 2012 Summit, a further activity undertaken by delegates was to attempt to create *standards based assessment* statements for each edited GA, with reference to the SLOs. This met with varying success, such that further work is needed before it can be determined if this outcome is possible and useful. Indeed, the delineation of levels of achievement may be required by the HE Standards Panel and TEQSA, and thus may need to be a central concern of APAC and HODSPA. It should be noted that capstone experiences are considered key instruments for allowing students and the accountability agencies (engaged in cross-university benchmarking exercises) to realise the level of attainment of GAs.

Evidence of outcome attainment:

- Positive ratings of the existing GAs by the 2010 APEN Meeting participants (see Table 1);
- Consensual revision of the TLO specifics at the April 2012 Summit, developed further in terms of ideal and realistic models of UG education (Cranney & Botwood, 2012; see Appendix F for a copy of the submission to the APAC Standards Review); and,
- Integration of GA/SLO assessment reporting into the APAC application.

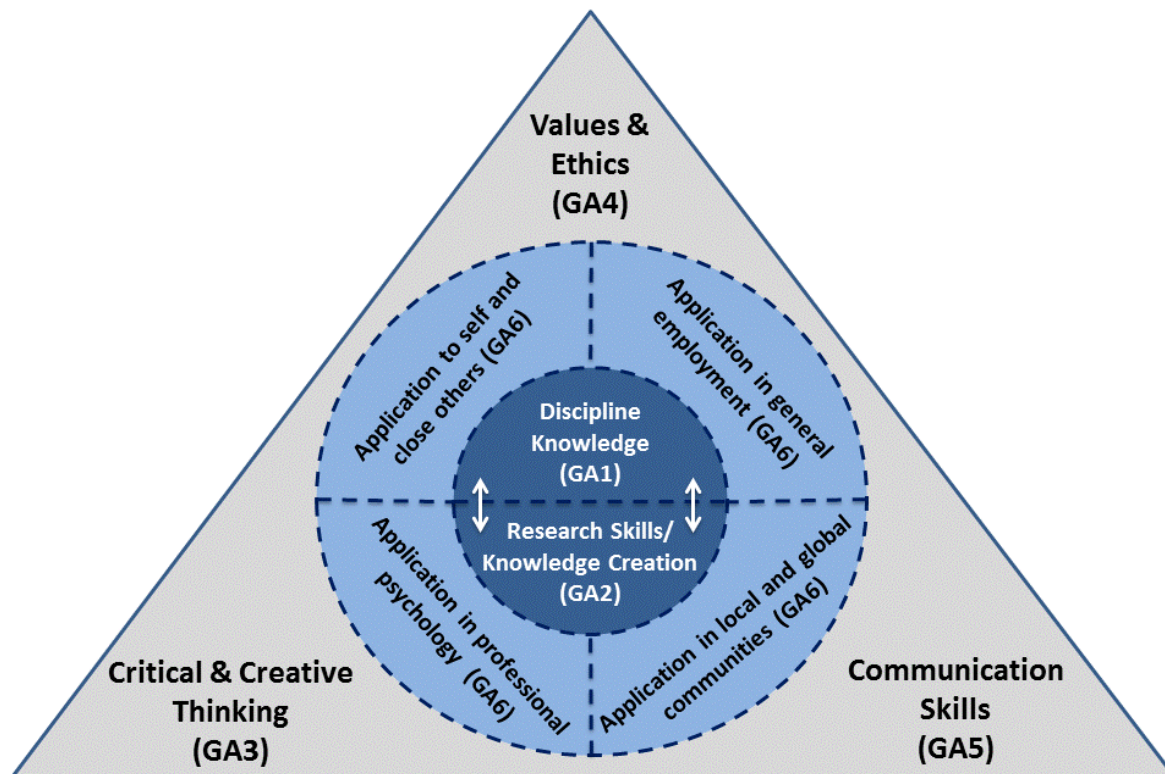


Figure 6: Psychological Knowledge, Skills and Attitudes within the UG Psychology Major Domain

The central circle represents the core of the proposed ‘realistic model’ of UG education, that is, scientific literacy (primarily revised GAs 1, 2), which also includes application of some kind (GA6). The top two partial quadrants are the highly recommended domains of application, with the bottom two being aspirational (e.g., ‘applied behavioural practitioner’, and ‘global citizen’, L-R respectively). Underlying all are critical and creative thinking (revised GA3) and communication skills (revised GA5), and above all is the explicit acknowledgement that values and attitudes are key to our motivation to learn, research and practice (i.e., why we engage with the science and practice of psychology)(GA4). Adapted from Cranney & Botwood (2012) (www.psychologicalliteracy.com).

Table 1: Average Ratings of Graduate Attributes by APEN National Summit Participants.

Graduate Attributes “To what extent do you endorse the following draft threshold learning outcomes?”	Brisbane	Adelaide	Perth	Melbourne	TOTAL (SD)
1: Knowledge and Understanding of Psychology. Demonstrate understanding of the major concepts, theoretical perspectives, empirical findings, and historical trends in the core topics of psychology (as defined by the peak disciplinary bodies).	8.73 (0.47)	8.25 (1.04)	8.57 (0.79)	8.11 (0.78)	8.43 (0.78)
2: Research Methods in Psychology Demonstrate a capacity to understand, apply and evaluate basic research methods in psychology, including research design, data analysis and interpretation, and the appropriate use of technologies.	8.45 (0.82)	8.13 (1.13)	8.63 (0.74)	7.44 (1.59)	8.17 (1.16)
3: Critical Thinking Skills in Psychology Display a capacity to respect and use evaluative and creative thinking, sceptical inquiry, and the scientific approach to solve problems related to behaviour and mental processes, along with an appreciation of the limitations and potential of the human mind.	8.82 (0.40)	8.13 (1.25)	8.50 (1.07)	8.00 (1.50)	8.39 (1.10)
4: Values in Psychology Demonstrate the capacity to: value empirical evidence; tolerate ambiguity during the search for greater understanding of behaviour and knowledge structures; act ethically and professionally; understand the complexity of sociocultural and international diversity; and reflect other values that are the underpinnings of psychology as a discipline.	8.55 (1.21)	8.13 (1.13)	8.13 (1.13)	7.22 (1.79)	8.03 (1.38)
5: Communication Skills in Psychology Demonstrate a capacity to communicate effectively and with intercultural awareness, in a variety of formats and in a variety of contexts, including within teams.	8.55 (1.21)	8.38 (0.74)	8.13 (1.13)	8.11 (0.78)	8.31 (0.98)
6: Learning and the Application of Psychology Demonstrate a capacity to understand and apply psychological principles to personal, social, organisational and global issues.	8.55 (0.93)	8.50 (0.53)	7.71 (1.60)	7.78 (1.20)	8.17 (1.12)

Note: (N = 56), nine-point Likert scale where 1 = Not at all, and 9 = Extremely.

In summary, this Fellowship has made substantial progress toward reviewing the aims of UG psychology education, revising GAs and SLOs, and specifying both threshold and aspirational standards (see Appendix F).

Chapter 3: Pedagogy for Undergraduate Psychology

“Great practical ideas – it was good to know that other educators have similar experiences.” (Participant @ APEN Summit, 2010)

3.1 Context and strategies

The second aim of the Fellowship was to further develop a forward-looking, responsible, and evidence-based pedagogy for UG psychology, partly to guide the achievement of the first aim relating to standards. This process began during the final stage of the Associate Fellowship (Cranney, 2008, Appendix E), and draws on the concepts of psychological literacy (McGovern et al., 2010) and global citizenship. Psychological literacy can be conceived of as encapsulating the common GAs that students should acquire while undertaking a psychology major, as exemplified by guidelines and lists of SLOs delineated by many national psychology organisations (e.g., USA: APA, 2006; Australia: Cranney, 2008; Europe: Lunt et al., 2011). These attributes include discipline knowledge, research skills, critical thinking, ethics, communication, and application of psychology. That is, the APAC GAs constitute psychological literacy. Global citizenship involves understanding of global relatedness, and the capacity to live, work and contribute positively as a member of global communities. In the context of UG psychology, global citizenship can be viewed as integral to GA4 (emphasising professional ethics and awareness of personal biases) and GA6 (emphasising application of psychology to understanding self and others), and relates to what McGovern et al. (2010) have called the *psychologically literate citizen*. Thus, from a student’s perspective, global citizenship can be construed as a responsibility and an intentionality to apply their psychological literacy to their local and global environments.

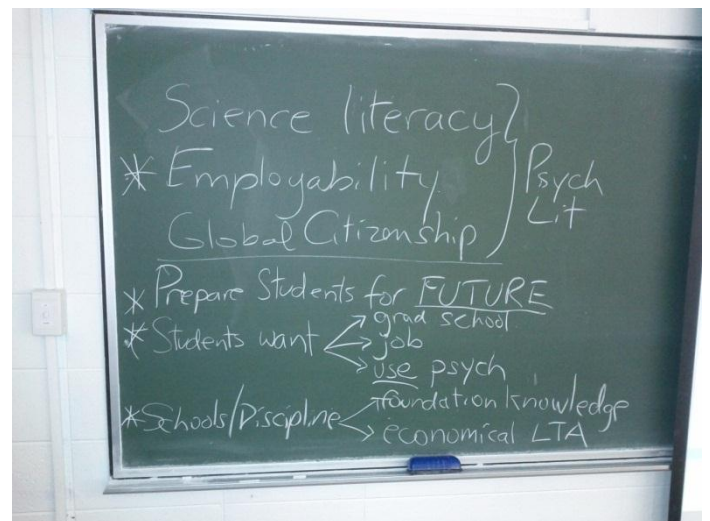


Figure 7: Activity at the April 2012 Summit

During this Fellowship, we have argued that psychological literacy should be the primary outcome of UG psychology education, and that curriculum renewal is needed to facilitate achievement of that outcome. Critical to the success of curriculum renewal are the educators, and Bernstein et al. (2010) argued that psychology academics should be *scientist-educators*; that is, they should be taking an evidence-based approach to their teaching. At a minimum, this means that psychology educators should engage in reflective scholarly practice, which includes the employment of teaching practices that are known to be effective in promoting student learning (Worrell et al., 2010).

3.2 Progress toward achieving aims and intended outcomes

During the course of this Fellowship, (a) the scholarly development of the concept of psychological literacy was progressed, (b) psychological literacy as the primary outcome of the psychology major has been promoted and accepted by others, and (c) the creation of teaching and assessment strategies for the development of psychological literacy has been encouraged. The development of pedagogy (particularly in relation to the re-examination of aims and thus outcomes) to guide curriculum renewal in UG psychology has been discussed at almost all national and international meetings, in particular ICOPE 2010, 2010 APEN Meetings, APS Annual conferences, the April 2012 Summit, and the UK HEA Psychology Network Retreat 2011. The discussion continues (e.g., at national committee meetings such as PIFOPS). Moreover, there is now evidence that others are taking up the notion of psychological literacy and purposefully reshaping their curriculum around this outcome.

3.2.1: Scholarly development of the concept of psychological literacy

Evidence of outcome attainment:

- Positively reviewed (UK, USA) edited book (Cranney & Dunn, 2011a) on psychological literacy;
- Contributions to that book by Bernstein and McGovern on the scientist educator and on developing psychologically literate educators; subsequent book on the latter topic by McGovern (2012);
- Invited chapters for other books (e.g., Cranney et al., 2012); and,
- Invitations to talk on the pedagogy (e.g., invited address at the International Conference on Teaching Psychology [ICTP]).

Please see www.psychologicalliteracy.com for a full listing of publications relevant to psychological literacy. In summary, the second aim, to develop future-oriented pedagogy for UG psychology education, based on psychological literacy as the primary outcome, has certainly progressed within the theoretical domain, however there remains the need for further development in terms of practice.

3.2.2 Promotion and acceptance of psychological literacy as the key outcome of UG psychology education

Along with 2.2.4 above, this represents the central work of this Fellowship. It should first be noted that one way in which to conceptualise psychological literacy is in terms of GAs. Thus one might wonder why it is a separate outcome. There are two reasons. First, the creation of the intended paradigm shift in UG psychology education should be facilitated by the utilisation of some key terms about which stakeholders have a shared understanding. Psychological literacy is intended to be one of those terms. This is one reason why we created www.psychologicalliteracy.com: to create a global presence and common understanding of the term. Second, further developments of the concept include the pragmatic taxonomy (Cranney et al., in press), which takes the UG psychology student's perspective, and includes scientific literacy, employability, and global citizenship. As indicated in 2.2.4, psychology educators may be more comfortable with starting their paradigm shift with scientific literacy: such educators are now focussed on knowledge

(derived from the science of psychology) and research (the methods of science)—thus, to push psychological knowledge and research-related skills up to the level of application (i.e., scientific literacy), should not be too large a step to take. This more cautious approach should not take away from the goodwill conveyed by psychology educators to integrate psychological literacy and global citizenship into their curricula, and of course, some are doing just that (e.g., Griffith University, UNSW). Moreover, other disciplines (e.g., law) and transdisciplinary programs (e.g., the UNSW Diploma of Professional Practice [DPP]) are utilising the concept of psychological literacy. Finally, it should be noted that well-developed psychological literacy naturally includes global citizenship (Cranney & Dunn, 2011a), and this is how the concept of global citizenship is being used in this outcome. Global citizenship is discussed further in Chapter 5.

It should be noted in this section that both an aim and a strategy of this Fellowship was to allow psychology educators the opportunity to re-examine the aims of UG psychology education. In the first APEN meeting, our assertion that ‘a large number of psychology major students do not go on to become professional psychologists and psychological scientists’ was challenged, so we started to collect data, which indicated that on average, fewer than half of psychology majors are admitted to Honours/Year Four (the requisite step to further PG professional psychology training). Moreover, less than half of Year Four graduates gain entry to the restricted number of PG professional psychology training places (a high proportion would be eligible). Some of those who do not gain entry to PG programs take the supervision/apprenticeship route; however, this pathway has become increasingly difficult with the recent changes enacted by PsyBA. Thus, our situation is similar to that in Britain and the USA, where there is an increasingly louder cry from graduates and the public, “What use is a psychology major?”, which also includes concerns regarding employability (e.g., Trapp et al., 2011). One answer is the liberal arts and sciences argument (McGovern et al., 2010), but the employability outcomes need to be made more explicit. Another answer is to explicitly allow the students to tie the psychology major to other minors or majors (e.g., marketing, counselling) which increase employability (e.g., Bryan et al., 2012). Still another, more controversial, answer is to consider the potential for the development of a lower-level professional role, such as the psychology assistant/associate (e.g., as is implemented now in the Australian Armed Forces). Such an outcome may also allow psychology major graduates to compete with graduates of the Vocational Education and Training (VET) sector mental health programs. A proposal that takes these ideas into account is presented in the recent Green Paper by Cranney and Botwood (2012; see Figure 6), which was distributed widely in mid-June 2012, and will be discussed in upcoming national meetings.

Evidence for outcome attainment:

- Positive ratings of intention to integrate psychological literacy into the curriculum (see Table 2);
- Creation of a website (www.psychologicalalliteracy.com) to promote psychological literacy more generally and globally;
- Serious uptake of the concept of psychological literacy and curriculum innovation in psychology at Australian universities (e.g., Griffith, Monash, UniSA, USQ), internationally (e.g., Trapp et al., 2011) and in transdisciplinary contexts (e.g., DPP, law)
- Contributions to four departmental reviews where psychological literacy has been

recognised as the key outcome.

“Psychological literacy means being aware of the psychological knowledge one possesses and what one still needs to acquire, being able to apply this knowledge appropriately and adaptively to all areas of life and acknowledging that one is and should be continually learning and integrating this into one’s current aggregation of knowledge. Psychological literacy also involves thinking beyond oneself through global awareness and future-thinking.” (Eva Bowman-Wall, 2012 UNSW PSYC3011 student)

Table 2: Curriculum reference to PL and GC currently, and intentions for inclusion.

Item “To what extent do you <u>agree</u> with the following statements (where -4 is ‘strongly disagree’ and 4 is ‘strongly agree’”	APEN Late 2010 Mean(SD) N = 62	UG Summit Early 2012 Mean(SD) N = 35
1. “ Psychological literacy” is an explicit and significant component of our current UG curriculum.	1.15 (2.01)	1.03 (1.90)
2. I intend to make “Psychological literacy” an explicit and significant component of our UG curriculum*.	2.21 (1.18)	2.72 (1.14)
3. “Global citizenship” and the related concept “psychologically literate citizen” are explicit and significant components of our current UG curriculum.	0.53 (2.11)	0.30 (2.02)
4. I intend to make “Global citizenship” an explicit and significant component of our UG curriculum.	2.06 (1.33)	2.33 (1.55)

* Statistical analyses of APEN and Summit ratings indicated a non-significant trend towards greater intention to include PL in curriculum design at the UG Summit than at APEN Meetings.

3.2.3 Innovative learning, teaching and assessment resources relevant to psychological literacy and graduate attributes

One aim of the Fellowship was to initiate a sustainable process whereby educators would share existing good practice, particularly that relevant to GAs and psychological literacy. The Associate Fellowship had initiated this process and had placed some resources on the ALTC Exchange website, which was subsequently closed. We considered that if we wanted the site to last, then the best site could be that of the national professional association, APS. However there were some barriers that needed to be overcome, including the view that only members should have access. Using the American Psychological Association (APA) Division 2 (Society for Teaching Psychology [STP]) website as a model, and with the support of the Executive Director, the APS Board was persuaded to make the resources publicly accessible. The next barrier was to have suitable intellectual property agreements with potential contributors. In collaboration with APS, we constructed a system whereby educators contributed entire resources or just a description (with the capacity to contact them for further information).

The next step was to find high quality resources, and so a competition was run through APS and funded by this Fellowship, in the sense that winners were supported to present their

work at the APS annual conference. This exercise, although extremely time-consuming, attracted about 30 entries, of which many are now represented on the site, which was developed soon afterwards. The role of the APS Psychology Education Interest Group (PsyEd) office-bearers was key to this process. PsyEd, with the support of this Fellowship, has formulated a proposal to APS to support future annual competitions, both to boost the number of resources on the website, and to promote quality LTA strategies for GA and psychological literacy development. It was also determined that this strategy superseded the planned evaluation of all the resources on the website that was to be undertaken in May 2012.

As mentioned previously, capstone experiences/courses are key to student and quality agency documentation and evaluation of learning outcomes, and this is recognised internationally (e.g., APA-STP Capstone Project) and across disciplines (e.g., ALTC/OLT projects). Only a few psychology departments in Australia appear to have psychology major capstone courses, sometimes including work-integrated learning (WIL), and even then, these may not be core (which usually reflects resourcing of a WIL coordinator). As an unanticipated Fellowship activity, we had the opportunity to develop a new capstone course, which was offered for the first time in early 2012. The course was designed to meet diverse needs, including APAC Standards “gaps”; no WIL support was available, so that was not attempted. Two activities that in theory provide students with the opportunity to integrate, build upon or document their GA achievements, are a group research proposal project, and a GA log/portfolio. These resources are available on the Resource website: http://www.groups.psychology.org.au/tlpig/education_resources/

“This capstone course helped me integrate and reflect on my learning throughout my psychology program by helping me discover the purpose of my psychological major in university. I was surprised to discover that the course aims of each psychology course were much broader and well-rounded than I had perceived them to be. Before taking this course, I believed that [the] main purpose of my psychology major was to acquire an adequate knowledge and understanding [of] psychology. The benefit of this course is that it revealed that the purpose of university is not just to acquire head knowledge, but to train me in the attributes of a successful psychologist such as good communication, research, and critical thinking skills. Therefore this course has re-defined why I am attending university.” (Amy Pratten, 2012 UNSW PSYC3011 student)

Evidence for outcome attainment:

- APEN Innovative Resource Competition and APS Conference Showcase;
- Website resources <http://www.groups.psychology.org.au/tlpig/>; and,
- Development and delivery of 3rd year capstone course and associated resources.

Chapter 4: Networks and the Making of Good Practice

*“The interchange with colleagues from outside my university was particularly useful.”
(Participant @ APEN Summit, 2010)*

4.1 Context and strategies

The development of and iterative consultation with networks of educators, psychology leaders, students, graduates and employers was the primary strategy of this Fellowship for helping to ensure that the complexities of the HE environment, and stakeholders’ views, were considered, and that there would be broad ownership, uptake and dissemination of the outcomes and recommendations of this Fellowship.



Figure 8: PsyEd members Fiona White, Nida Denson, Frances Martin and Steve Provost at ICOPE

During the previous Associate Fellowship, the Australian Psychology Educators Network (APEN) established during the AUTC project (Lipp et al, 2007), was transformed into an APS interest group (Teaching, Learning and Psychology). During the current Fellowship, it was supported further, and engaged to collaboratively work to achieve the standards and pedagogy aims of the Fellowship. During the ICOPE, APEN and Summit events, key members of this group were invited to participate. The fact that others were also invited--particularly UG program coordinators, first-year coordinators, Heads of Psychology--provided the opportunity for awareness raising about this network, and the opportunity for mutual influence and exchange of good practice.

All these educators are critical to the process of curriculum renewal for three reasons: (a) they can identify strengths and weaknesses in the current L&T environment, as well as estimate the strengths, weaknesses, and potential barriers to proposed changes, (b) they can share successful strategies and resources, and (c) their involvement in the process of curriculum and pedagogical renewal should engender a sense of ownership, leading to a greater likelihood of successful embedding across Australian UG programs. This kind of engagement was encouraged, for example, by having a section in each of the State APEN Meetings dedicated to sharing good practice on a topic chosen by the local PsyEd members.

The State APEN Meetings had several purposes relevant to achieving the aims of this Fellowship: (a) updating, discussion, and input to ongoing curriculum renewal processes

4.2 Progress toward achieving aims and intended outcomes

The engagement, and sometimes development, of a number of networks was a key aspect of the methodology of this Fellowship, as outlined below (see Chapter 2 regarding national peak disciplinary bodies).

4.2.1 Further support of the existing APEN/PsyEd educator network

During the previous Associate Fellowship, the Australian Psychology Educators Network (APEN) established during the AUTC project (Lipp et al, 2007), was transformed

(i.e., the development, assessment and evaluation of psychological literacy and global citizenship, Aims 1 and 2), (b) sharing of effective strategies and resources relevant to Aims 1 and 2, (c) updates and sharing of research findings on effective university student learning and performance (Aim 2), (d) introduction to various L&T resources and networks (e.g., APEN; Aims 1-3), and (e) the development of an informal network amongst these L&T leaders, which potentially will provide an impetus to sustain collaboration through APEN/PsyEd membership (Aim 3).

Evidence for outcome attainment:

- Most meetings and conference forums/symposia were run under the APEN/PsyEd banner, thus increasing the visibility of the network to other academics and educators (e.g., the five 2010 APEN meetings; APS conference forums and symposia; almost all Australian departments were represented at the Summit);
- State representatives for APEN/PsyEd in NSW, Queensland, Victoria and South Australia were identified, with some initial social events, and a commitment to stage annual meetings of interested psychology educators;
- The resource repository was constructed within the website of this network, with the strong support of the PsyEd co-convenors;
- The PsyEd website was maintained and updated during this Fellowship;
- PsyEd office bearers contributed to the management of the Resource Competition, as well as contributing resources themselves; and,
- The majority of the Fellowship Advisory Group (AG) members were PsyEd members, with a co-convenor representing the network.



Figure 9: UNSW Psychology Alumni Launch (April, 2012)

4.2.2 Development and support of alumni organisations, and focus on employers

It became apparent that a national organisation would not be successful unless there were strong university-based chapters—thus we focussed on the local level. It should be noted that many graduates become employers of other psychology graduates; both groups are important to informing the aims and outcomes of UG psychology education.

Evidence for outcome attainment and initiation of stakeholder contact:

- The initiation of an alumni organisation at UNSW, with positive ratings and engagement, and evidence of continued activities;
- The development of Guidelines for establishing such an organisation (<http://www.groups.psychology.org.au/tlpig/>);
- A pilot survey of graduates;
- A pilot survey of employers (both these surveys informed discussions of aims, outcomes and curriculum of the psychology major);

- Two UNSW alumni were members of the Fellowship Advisory Group; and,
- Positive engagement with the UNSW Psychology Executive Committee (of employers).

4.2.3 Support of local and national student organisations

Although (surprisingly) not included in the original objectives of the Fellowship, support of the local UNSW Psychological Society allowed the opportunity to link alumni and student organisations, and to increase awareness of psychological literacy. At the national level, the APS has committed to explicitly including students in its new divisional structure, currently being enacted.

Evidence of outcome attainment:

- The inclusion of psychological literacy material on the UNSW Psychology website;
- The prompted establishment of a student section on the APS website (<http://www.psychology.org.au/studentHQ/>);
- The involvement of the President of the UNSW Psychological Society in the APS Membership Advisory Group;
- The development of Guidelines for establishing such local and national student organisations (to be posted on <http://www.groups.psychology.org.au/PsyEd/resources>);
- A UNSW student was a member of the Fellowship AG.

4.2.4 Support of local and national transdisciplinary networks with a general or specific focus on academic standards and quality

Quality improvement in HE is facilitated by the sharing of evidence-based practice, much of which is generic across the disciplines. Key to this process is opportunities for educator interaction, which can be facilitated through networks.

Evidence of outcome attainment:

- Co-organised (with UNSW Promoting Excellence Initiative) the Sydney ALTC Roundtable (September, 2010), which allowed NSW participants to network and learn how to apply for an ALTC grant;
- Support of the continuation of the ALTC tradition and impact through OLT;
- Support of the establishment of the Australian Learning and Teaching Fellows (ALTF) (the Fellow is currently Vice-President), and their Forums, which always have standards and assessment as themes.

“...was a useful event. There was an interesting set of presentations. Thank you.” (Participant @ Sydney ALTC Roundtable)

In summary, a wide range of successful integrated and interactive network activities constituted the primary means for achieving the aims of this Fellowship.



Figure 10: Amit Majumder (guest) and Leigh Mellish (President, UNSW Psychology Alumni) at Alumni Launch

Chapter 5: Going Global

5.1 Context and strategies

The chapter title refers to (a) the original Aim 4 of the Fellowship to couch the standards, pedagogy and network activities in continued two-way interaction with relevant international and interdisciplinary bodies, and (b) an exploration of transdisciplinary aspects of global citizenship. With respect to the former, there is an increasing need to take a global perspective both in HE generally and in psychology specifically, which relates to three factors: (i) the increased demand for transferability of educational and professional qualifications (Littlefield et al., 2007, 2009), (ii) the increased emphasis on cost-effective and sustainable education and training, given both access issues and the increasing demand from developing countries (e.g., Marsella, 2007; Stevens & Gielen, 2007), and (iii) the consequent realisation that the sharing of effective educational practices and resources should benefit everyone, in a similar way to the sharing of scientific knowledge. With reference to global citizenship, there is increasing recognition that universities should play a key role in providing students with the opportunities to develop the capacity to become global citizens (Rhoads & Szelenyi, 2011).



Figure 11: Global Citizenship ALTC Summit, co-chaired by Jacquelyn Cranney and Betty Leask (National Teaching Fellows)

5.2 Progress toward achieving aims and intended outcomes

As indicated in Chapter 2, international and transdisciplinary (global in both senses) benchmarking was an integral aspect of this Fellowship.

5.2.1 International and transdisciplinary benchmarking regarding undergraduate psychology education



Figure 12: ICOPE organiser Shirley Zhang and guest Lorelle Burton

Evidence of outcome attainment:

- ICOPE: benchmarking and networking;
- UK UG Retreat (Aims 1, 2 and 4): presentation and discussion of standards and pedagogy, with the outcomes including: (1) strengthening contacts with UK psychology education leaders, and (2) developing a deeper understanding of UK UG education that informed the Fellowship work;
- Invited international keynote addresses at the 2011 ICTP and the 2012 ISANA conferences; and,
- International engagement, including invitations to join editorial boards.

5.2.2 Development and support of local and national transdisciplinary networks whereby the focus is on global education and global citizenship education

Evidence of outcome attainment:

- The two 2011 UNSW Learning and Teaching Connections Series seminars were successful
- In particular, chairing the session on Global Citizenship and its transdisciplinary application enabled open debate on global citizenship behaviours, assessment and the implications for pedagogy, as well as facilitation of networking across disciplines;
- The initiation in 2012 of a Global Citizenship @ UNSW Community of Practice (four meetings to date);
- Supported UNSW workshop by National Teaching Fellow, Betty Leask, UniSA;
- The National ALTC Global Citizenship Workshop, which brought together future collaborators, and resulted in invitations to contribute further (e.g., Anita Mak, University of Canberra, ALTC/OLT “Internationalisation at Home” project event in November 2012); and,
- Leadership of the UNSW Academic Board Global Education Working Group to develop policy and share good practice.



Figure 13: ICOPE guests Diane Halpern, Scott Plous and Merry Bullock (USA)

Chapter 6: Looking Forward, Looking Back¹

“We need to know what qualities we expect in our graduates... and knowledge of how Indigenous psych is being embedded in our courses.” (Participant @ APEN Summit, 2010)

6.1 Reflections

The singular vision of this Fellowship was the promotion of psychological literacy as the primary outcome of UG psychology education, and the development of changes in curricula, LTA strategies and standards to support that outcome. There are many different means to achieve the same end, and in this changing HE and psychology education environment, it is best that one plans a number of different strategies. Thus, top-down strategies involved engaging national bodies such as HODSPA, APS and APAC, and bottom-up strategies involved engaging educator networks such as APS PsyEd/APEN. This frequent and sustained stakeholder involvement increased the buy-in and impact of this Fellowship.

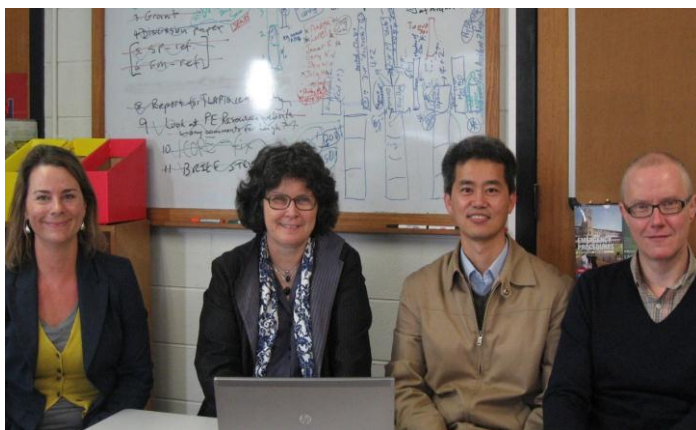


Figure 14: Fellowship team members: Lorayne Botwood, Jacky Cranney, Jun Mo Jeong, Craig Baker

Essentially, without national stakeholder engagement, there would have been no progress with this Fellowship initiative. In developing behaviour-based leadership capacity, the Fellow purposefully built upon and grew the relationships and networks that were critical to the success of previous initiatives. APS PDAC was a key stakeholder, given the capacity to stimulate change in the accreditation standards, which is currently a major driver of

curriculum change in Australia (Lipp et al., 2007). As important was HODSPA, whose members have the challenging responsibility of responding to discipline as well as university line manager demands, at the same time as maintaining/improving the research reputation of their schools/departments and ensuring fiscal sustainability. In many ways, any change to the curriculum is a burden for them, as it requires the resources of change management. Nevertheless, many HODSPA members were responsive to the issues raised during this initiative, primarily because they wanted to find solutions for the large number of psychology major students who may be stranded after graduation. Both APS NPETRG and APS PIFOPS were key stakeholders given the potential to influence national change. APS PsyEd/APEN members were indispensable as a constant reminder of how educators on the ground (and enthusiastic educators at that) were likely to respond to any proposed changes (e.g., if greater program content was required, did that mean increased workloads for them?). Maintaining this network into the future is critical to the ongoing quality of UG psychology education, and so a substantial number of Fellowship activities were focussed on

¹ In memory of Jack Cranney and Slim Dusty.

this group.

The needs and opinions of these different stakeholders were often at variance. Thus, many Fellowship activities (e.g., APEN Meetings, the April 2012 Summit, and APS Conference Forums) were designed to facilitate exchange of information and views, and discussion of the issues together. The aim was to keep stakeholders focussed on finding solutions that did not ignore the fact that most psychology major graduates do not go on to become ‘like them’, that is, psychological scientists/academics or professional psychologists, and that it was to their collective benefit to consider the needs of this group of graduates (in addition to increasing the psychological literacy of those “like them”). That is, our aim was to have stakeholders understand each others’ diverse needs at the same time as encouraging them to collaboratively progress a future-oriented agenda for our students, our discipline and profession, and our world (primarily through drawing on the concept of psychological literacy).

Although peak disciplinary stakeholder involvement was critical to this initiative, the speed at which organisations can react and respond to change has limited the progress on some aspects of this Fellowship. Although some of the stakeholders recognised the need to be proactive in shaping the change, the diverse needs of psychology as a discipline and profession has meant that the consultative process has been slow. In contrast, both national and international factors indicate that an increased responsiveness to change is required at this critical time for the discipline and profession of psychology, and for HE more generally. As an indication of how rapidly the HE context can change, during the course of this Fellowship, the abolition of the ALTC was proposed and enacted, and the Office for Learning and Teaching, TEQSA, and the HE Standards Panel were established.

Nevertheless, there is no doubt that significant progress was achieved during this Fellowship, and this would not have been possible without (a) the funding given, which allowed some time out from normal duties to focus on the Fellowship aims, and (b) the support of the ALTC/OLT infrastructure—both the dedicated personnel and everything else that goes with that unique organisation. Moreover, it should be noted that without (a) a passion for promoting quality education, in the face of competing demands and resistance, as well as (b) the grounding and credibility afforded by still being educators at the coalface, this Fellowship would not have been conceived or progressed.



Figure 15: Sue Morris, co-designer of the psychological literacy capstone course

6.2 Dissemination, Sustainability, Impact and Evaluation

As already indicated, **dissemination** of the outcomes and outputs of this Fellowship was achieved primarily through a cascade model by:

- Engagement with key stakeholders through (a) membership of or invitations to national committees, (b) state and national meetings organised as part of the Fellowship or during conferences, and (c) stakeholder membership of the Fellowship Advisory Group; and,
- Dissemination of key documents through national networks via email and websites (e.g., Cranney & Botwood, 2012) or through normal publication means (e.g., Cranney & Dunn, 2011a).

There is high likelihood of the **sustainability** of the outcomes of this Fellowship given:

- The continuation of key networks such as APEN/PsyEd;
- The Fellow's continued and increased leadership and involvement in national psychology education committees, and willingness to accept invitations to contribute to Departmental UG program reviews; and,
- The sustainability mechanisms for the websites.

The **impact** of this Fellowship is (a) indicated by the evidence presented, such as the number of educational institutions that have adopted or are in the process of adopting recommendations regarding psychological literacy, and (b) judged by the formal **evaluations**.

Listening to the advice and feedback of key stakeholders and experts throughout the Fellowship has been extremely helpful. The Advisory Group members came from diverse backgrounds, and were willing to share their expertise and advice. The Fellow also conferred with the Internal Evaluator, Stephen Marshall, who advised her from the initial stages of the Fellowship. The External USA Evaluator was originally to be Diane Halpern, but with her permission Regan Gurung was asked to play that role instead, because he was able to attend the April 2012 Summit at short notice, and gave valuable feedback then (as well as informing the delegates of trends in the USA). Annie Trapp, leader of the UK UG psychology review, will provide a different evaluative perspective. Dana Dunn will provide additional evaluative commentary on the development of the pedagogy. Every Fellowship event was evaluated by the delegates, and these informed the direction and organisation of future events.

Ultimately, if graduates in ten years' time know that they have acquired psychological literacy during their UG psychology education, then this Fellowship may well have contributed to that outcome.

“To me, Psychological literacy refers to the ability to view the world with a competent understanding of psychological concepts; not only in social aspects (e.g., understanding the bystander effect), but in all aspects, including health, learning, physiological, developmental and many other psychological aspects.” (Corey Polanski, 2012 UNSW PSYC3011 student)

6.3 Recommendations and Considerations for the Future

In reflecting on this Fellowship initiative, the way in which it evolved from initial conceptualisation (Figure 1) to how it is moving into the future is depicted in Figure 16. As indicated in the quote at the beginning of this chapter, much still needs to be done, including the Indigenisation of the psychology curriculum and the support of more Indigenous psychology graduates. Moreover, as Regan Gurung noted at the April 2012 Summit, we still know little about what graduates sustainably acquire during their psychology major. Within the framework of promoting psychological literacy, key strategies include support of networks and department-based program review. These are included in the recommendations below, which are a further development of those in the Cranney and Botwood (2012) *Green Paper*, which can be found at <http://www.groups.psychology.org.au/PsyEd/resources/>.

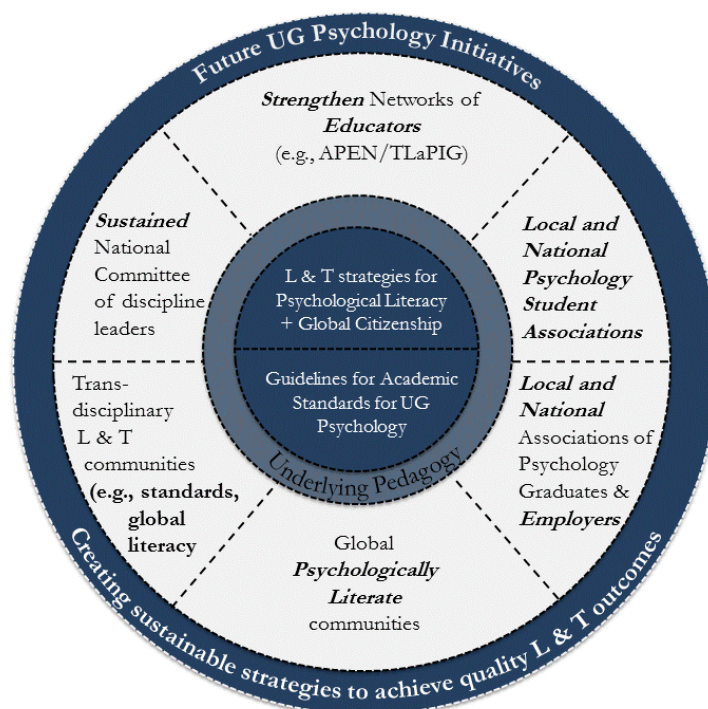


Figure 16: Revised Conceptualisation for Future UG Psychology Initiatives [bold is indicative of revision]

It is recommended that:

1. **Psychological literacy** be the primary outcome of the psychology major. This can continue to be achieved through (a) further review of APAC Standards (in progress), (b) further whole-program review at the departmental level, (c) further sharing of resources and practice through national and international networks, and (d) further development and promotion of the theory and practice relevant to this concept.
2. The development of **global citizenship** be encouraged for all university students, regardless of their program of study. This can continue to be achieved through (a) further university-wide review of global education, (b) further sharing of resources and practice through national and international networks, and (c) further development and promotion of the theory and practice around this concept.

3. Core accredited three-year psychology programs focus on achieving the **scientific literacy** TLOs of knowledge (GA1), research training (GA2), and critical thinking (GA3) (theory *and* application) to a high level. This can be achieved through APAC, HODSPA, the relevant APS committees and networks (PsyEd/APEN, student, alumni and employer) continuing to work together to fully implement this recommendation, utilising program review, innovative LTA strategies and appropriate staff development initiatives.
4. Schools and departments of psychology focus on supporting the career development needs of students, including those who are unlikely to progress to PG professional psychology training. In addition to the scientific literacy TLOs, there should be adequate emphasis on the development of communication skills (GA5), values and ethics relevant to the workplace (GA4), and on application of psychological science to general employment contexts (GA6)—that is, the **employability** TLOs. APAC Standards should be reviewed to ensure adequate emphasis on this requirement, particularly as this is an Australian Qualifications Framework requirement for Level 7 (Bachelor level). This can be achieved in a similar fashion to that for Recommendation 3.
5. Psychology major units that specifically address **global citizenship** be offered (i.e., on cultural awareness and competence; moral literacy; decision-making and interventions regarding global issues such as climate change; behaviourally based leadership; community-based volunteering experiences). This is an aspirational outcome, rather than a TLO, and taps into all GAs, particularly GA4 and GA6. This could be achieved by: (a) sharing existing LTA strategies through networks, such as developing global citizenship as a component of a capstone unit; (b) targeted development grants to produce such strategies; and (c) commitment to this recommendation by HODSPA, APS, and APAC.
6. A **capstone** experience is included during the third year of the UG psychology sequence as an accreditation requirement (the aspirational strategy would be a full unit including work-integrated learning). This strategy should facilitate students' appreciation of what they have gained from their psychology major—that is, psychological literacy. This recommendation can be implemented through (a) inclusion as an APAC Standard, (b) sharing of innovative capstone LTA strategies through networks, and (c) integration through whole-program reviews and staff development.
7. **Alternative professional psychology-relevant options** for three-year graduates are developed by APS in collaboration with HODSPA, APAC, and in particular, employers (e.g., *Applied Behavioural Practitioner* units could be offered in partnership with interested universities as a minor). This aspirational recommendation could be initiated through both (a) national leadership by APS, HODSPA and APAC, and simultaneously (b) the development of units that are relevant to a particular university context (e.g., assessment and intervention in disabilities or corrections), which could later be adapted by other universities.
8. Peak disciplinary bodies **encourage and support quality learning outcomes** by: (a) sharing expertise and resources (e.g., through support of the APS PsyEd resources website), (b) supporting explicit program-based staff development to facilitate changes in program outcomes for students, and (c) supporting consensual/partnered policy and strategy development (e.g., through annual education summits for both UG and PG programs; through structural support within their organisations; through support of education committees and communities).

9. Peak disciplinary and professional bodies in Australian psychology actively lobby for increased **funding** of both UG and PG psychology programs to address the subsidisation of postgraduate psychology programs by undergraduate psychology income.
10. **Accreditation standards** are formally reviewed to (a) include the development of quality principles, as well as benchmarking of TLO assessments across universities, (b) emphasise psychological literacy as the primary outcome of UG psychology education, and (c) accommodate the above recommendations. This recommendation is currently in progress (see Appendix F).

Appendix A: Bibliography

- American Psychological Association. (2006). *APA guidelines for the undergraduate psychology major*. Washington, DC: Author. Retrieved January 30, 2007, from www.apa.org/ed/resources.html.
- American Psychological Association. (2011). Principles for quality undergraduate education in psychology. <http://www.apa.org/education/undergrad/principles.aspx>
- Australian Chamber of Commerce and Industry and the Business Council of Australia (2002). *Employability skills for the future*. Canberra, ACT Australia: Department of Employment Science and Training. Retrieved from <http://www.deewr.gov.au/Schooling/CareersandTransitions/EmployabilitySkills/Documents/EmpSkillsForTheFuture.pdf>.
- Australian Learning and Teaching Council. (2009). Learning and Teaching Academic Standards Project Report. Retrieved June 28, 2012, from <http://www.olt.gov.au/resource-learning-and-teaching-academic-standards-project-report-2011>
- Australian Psychology Accreditation Council (APAC) (2010). *Rules for accreditation and accreditation standards for psychology courses*. Retrieved from http://www.psychologycouncil.org.au/Assets/Files/APAC_Rules_for%20Accreditation_and_Accreditation_Standards_for%20Psychology_Courses_Ver_10_June_2010.pdf
- Barnett, R. (2000). *Realizing the university in an age of supercomplexity*. Buckingham, UK: Open University Press.
- Beins, B. (2007, Spring). Psychology, critical thinking, and scientific literacy. *Psychology Teacher Network*, 17, 3-4.
- Bernstein, D. (2011). A scientist-educator perspective on psychological literacy. In J. Cranney & D. S. Dunn (Eds.), *The psychologically literate citizen: foundations and global perspectives* (pp. 281-295). New York, NY: Oxford University Press.
- Boud, D. & Falchikov, N. (2006). Aligning assessment with long-term learning. *Assessment & Evaluation in Higher Education*, 31, 399-413. doi:10.1080/02602930600679050
- Boud, D. (2000). Sustainable assessment: Rethinking assessment for the learning society. *Studies in Continuing Education*, 22, 151-167. doi:10.1080/713695728
- Bowden, J., Hart, G., King, B., Trigwell, K. and Watts, O. (2000). *Generic Capabilities of ATN University Graduates*. Retrieved August 26, 2007, from http://www.clt.uts.edu.au/ATN.Grad_cap.project.index.html.
- Bernstein, D., Addison, W., Altman, C., Hollister, D., Komaraju, M., Prieto, L., Rocheleau, C.A., & Shore, C. (2010). Toward a scientist-educator model of teaching psychology. In D. F. Halpern (Ed.), *Undergraduate education in psychology: A blueprint for the future of the discipline*. pp.29-46. Washington, DC: American Psychological Association.
- Bradley, D., Noonan, P., Nugent, H., & Scales, B. (2008). *Review of Australian Higher Education: Final Report*. Retrieved from www.deewr.gov.au/he_review_finalreport
- Bryan, J., Ranzijn, R., Balfour, C., Tuckey, M., Hayward, R., Pearson, E., Jackman, G., & Lushington, K (2012). Increasing the Work-Readiness of Australian Psychology Undergraduates by Changing the Curriculum. In S. McCarthy, Dickson, A., J. Cranney, K. L. Trapp and V. Karandashev (Eds.) *Teaching Psychology around the World: Volume 3*. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Carlyon, T. (2012, April). Community service reform—role of psychological literacy. Paper presented at the April 2012 UG Psychology Education Summit, UNSW, Sydney.
- Charlton, S., & Lymburner, J. (2011). Fostering psychologically literate citizens: A Canadian perspective, In J. Cranney and D. S. Dunn (Eds.), *The psychologically literate citizen: Foundations and global perspectives* (pp. 234-248). New York: Oxford University Press. Cranney, J., Botwood, L., Mellish, L., & Baker, C. (in prep.). Student, Graduate and Employer perspectives on psychology undergraduate education in Australia: A pilot study.
- Chesterton, P., & Cummings, R. (2007). *ALTC Grants Scheme: Evaluating Projects*. Sydney: ALTC. <http://www.altc.edu.au/resource-evaluating-projects-murdoch-2007>
- Cranney, J. (2008). Sustainable and evidence-based learning and teaching approaches to the undergraduate psychology curriculum. Strawberry Hills, New South Wales, AU: Australian Learning and Teaching Council Ltd. Retrieved from <http://www.olt.gov.au/resource-sustainable-evidence-based-learning-psychology-uns-2008>
- Cranney, J., & Botwood, L. (2012). *Review of the aims, outcomes and accreditation standards for Australian*

- undergraduate psychology education: Green paper for discussion*. Retrieved from www.psychologicalliteracy.com
- Cranney, J., & Botwood, L. (2012). April 2012 Undergraduate Psychology Education Summit: Report. UNSW. Retrieved from www.psychologicalliteracy.com
- Cranney, J., & Dunn, D. (Eds.) (2011a). *The psychologically literate citizen: foundations and global perspectives*. New York: Oxford University Press. ISBN- 13: 978-0-19-979494-2
- Cranney, J., & Dunn, D.S. (2011b). Psychological literacy and the psychologically literate citizen: New frontiers for a global discipline. In J. Cranney and D. S. Dunn (Eds.), *The psychologically literate citizen: foundations and global perspectives* (pp.3-12). New York: Oxford University Press.
- Cranney, J., & Dunn, D.S. (2011c). What the world needs now is psychological literacy. In J. Cranney and D. S. Dunn (Eds.), *The psychologically literate citizen: Foundations and global perspectives* (pp.322-336). New York: Oxford University Press.
- Cranney, J., Kofod, M., Huon, G., Jensen, L., Levin, K., McAlpine, I., Scoufis, M., & Whitaker, N. (2005b). Portfolio tools: Learning and teaching strategies to facilitate development of graduate attributes. *Proceedings of the Blended Learning in Science Teaching and Learning Symposium, September 30, 2005, University of Sydney*. Sydney: Uniserve Science. Retrieved from http://sydney.edu.au/science/uniserve_science/pubs/procs/wshop10/2005Cranney.pdf
- Cranney, J., & Morris, S. (2011). Adaptive cognition and psychological literacy. In J. Cranney and D. S. Dunn (Eds.), *The psychologically literate citizen: Foundations and global perspectives* (pp.251-268). New York: Oxford University Press.
- Cranney, J., Morris, S., Krochmalik, A., & Botwood, L. (2012) . Assessing psychological literacy. In D. S. Dunn, S.C. Baker, C.M. Mehrotra, R.E. Landrum, & M. A. McCarthy, (Eds.). *Assessing teaching and learning in psychology: Current and future perspectives* (pp.95-106). Belmont, CA:Wadsworth Cengage Learning.
- Cranney, J., Morris, S., Martin, F., Provost, S., Zinkiewicz, L., Reece, J., Milne-Home, J., Burton, L., White, F., Homewood, J., Earl, J., & McCarthy, S. (2011). Psychological Literacy and applied psychology in undergraduate education. In J. Cranney and D. S. Dunn (Eds.), *The psychologically literate citizen: Foundations and global perspectives* (pp. 146-164). New York: Oxford University Press.
- Cranney, J., Morris, S., Spehar, B., & Scoufis, M. (2008). Helping first year students think like psychologists: Supporting information literacy and team-work skill development. *Psychology Learning and Teaching, 7*, 28-36.
- [Cranney, J., Provost, S., Katsikitis, M., Martin, F., White, F., & Cohen, L. \(2008\). *Designing a diverse, future-oriented vision for undergraduate psychology in Australia*. Strawberry Hills, New South Wales, AU: Australian Learning and Teaching Council Ltd.](#) Retrieved from <http://www.olt.gov.au/resource-future-psychology-unsw-2008>
- Cranney, J., Turnbull, C., Provost, S.C., Martin, F., Katsikitis, M., White, F.A., ...Varcin, K.J. (2009). Graduate attributes of the four-year Australian undergraduate psychology program. *Australian Psychologist, 44*, 253-262. doi: 10.1080/00050060903037268
- Cranney, J., & Voudouris, N.J. (2012). Psychology education and training in Australia: Shaping the future. In S. McCarthy, K. L. Dickson, J. Cranney, V. Karandashev & A. Trapp (Eds.), *Teaching psychology around the world: Volume 3*. Pp. 2-14. Newcastle Upon Tyne, UK: Cambridge Scholars Press.
- Davidson, G. R., & Morrissey, S. A. (2011). Enhancing ethical literacy of psychologically literate citizens. In J. Cranney & D. S. Dunn (Eds.), *The psychologically literate citizen: foundations and global perspectives* (pp. 41-55). New York, NY: Oxford University Press.
- Dudgeon, P., Darlaston-Jones, D., & Clark, Y. (2011). In J. Cranney and D. S. Dunn (Eds.), *The psychologically literate citizen: Foundations and global perspectives* (pp. 72-90). New York: Oxford University Press.
- Dunn, D. S., Brewer, C. L., Cautin, R. L., Gurung, R. A., Keith, K. D., McGregor, L. N., ... Voight, M. J. (2010). The undergraduate psychology curriculum: Call for a core. In D. F. Halpern (Ed.), *Undergraduate education in psychology: A blueprint for the future of the discipline* (pp. 47-61). Washington, DC: American Psychological Association. doi:[10.1037/12063-003](https://doi.org/10.1037/12063-003)
- Halpern, D.F. (Ed.) (2010). *Undergraduate education in psychology: A blueprint for the future of the discipline*. Washington, DC: American Psychological Association.
- Kennedy, B., & Innis, M. (2005). The teaching of psychology in the contemporary university: Beyond the accreditation guidelines. *Australian Psychologist, 40*, 159-169. [This article gives an overview of developments within the Australian Higher Education Context regarding the growing emphasis on graduate attributes, and their relevance to psychology.]
- Krathwohl, D. R. (2002). A revision of Bloom's Taxonomy: An overview. *Theory into Practice, 41*, 212-260. Retrieved from http://www.unco.edu/cetl/sir/stating_outcome/documents/Krathwohl.pdf

- Lantz, C. (2011). *Psychology student employability guide: From university to career*. York, UK: UK Higher Education Psychology Network. Retrieved from http://www.pnarchive.org/docs/pdf/EMPLOYABILITY_GUIDE.pdf
- Lipp, O., Terry, D., Chalmers, D., Bath, D., Hannan, G., Martin, F., ...Provost, S. (2007). *Learning outcomes and curriculum development in psychology*. Sydney, Australia: Carrick Institute for Learning and Teaching in Higher Education. Retrieved from <http://www.olt.gov.au/resource-learning-outcomes-psychology-ug-2006>
- Littlefield, L., Giese, J., & Katsikitis, M. (2007). Professional psychology training under review. *InPsych*, 29(2). Retrieved from <http://www.psychology.org.au/publications/inpsych/training/?ID=1538>.
- Littlefield, L., Giese, J., & Geffen, G. (2009). Future directions for Australian psychology education and training. *InPsych*, 31(3), 9-12.
- Lunt, I., Job, R., Lecuyer, R., Peiro, J. M., & Gorbena, S. (2011). *Tuning educational structures in Europe: reference points for the design and delivery of degree programmes in psychology*. Bilbao, Spain: University of Deusto. Retrieved from http://www.google.com.au/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=6&ved=0CFEQFjAF&url=http%3A%2F%2Ffeuopsy.psychologues-psychologie.net%2Findex.php%3Foption%3Dcom_docman%26task%3Ddoc_download%26gid%3D4%26Itemid%3D&ei=08KDT4fqPMKHiQfk3-3kBw&usq=AFQjCNFGAV_FWk85PyXS46FF7HI8I2gtWQ
- McGovern, T. (2012). *Faculty virtues and character strengths: Reflective exercises for sustained renewal*. J. R. Stowell (Ed.). Retrieved from the Society for the Teaching of Psychology Web site: <http://teachpsych.org/ebooks/fvcs2012/index.php>
- McGovern, T. V., Corey, L., Cranney, J., Dixon, W. E., Jr., Holmes, J. D., Kuebli, J. E., ... Walker, S. (2010). Psychologically literate citizens. In D. F. Halpern (Ed.), *Undergraduate education in psychology: A blueprint for the future of the discipline* (pp. 9-27). Washington, DC: American Psychological Association. doi:10.1037/12063-001
- Marsella, A.J. (2007). Education and training for a global psychology: Foundations, issues, and actions. In M. J. Stevens & U. P. Gielen (Eds.), *Toward a global psychology: Research, intervention, and pedagogy* (pp. 333-361). Mahwah, NJ: Lawrence Erlbaum Associates.
- Mayo, J. A. (2010). *Constructing undergraduate psychology curricula: promoting authentic learning and assessment in the teaching of psychology*. Washington, DC: American Psychological Association. doi:10.1037/12081-000
- National Academy of Sciences. (1996). *National science education standards*. Washington DC: National Academy Press. Retrieved from <http://literacynet.org/science/scientificliteracy.html>
- National Centre for Public Policy and Higher Education (2006). *Measuring up: The national report card on higher education*. Retrieved from <http://measuringup.highereducation.org/>
- National Committee for Psychology, Australian Academy of Science. (1996). *Psychological Science in Australia*. Canberra: Australian Government Publishing Service.
- OECD. (2011). Testing student and university performance globally: OECD's AHELO. Retrieved from http://www.oecd.org/document/22/0,3746,en_2649_35961291_40624662_1_1_1_1,00.html
- O'Gorman, J.G. (2001). The Scientist-Practitioner model and its critics. *Australian Psychologist*, 36, 164-169.
- Pusateri, T., Halonen, J., Hill, B., & McCarthy, M. (2009). *The assessment cyberguide for learning goals and outcomes*. Washington, DC: American Psychological Association. Retrieved from <http://www.apa.org/ed/governance/bea/assessment-cyberguide-v2.pdf>
- Quality Assurance Agency. (2002). *Subject benchmark statement: Psychology*. Retrieved from <http://www.qaa.ac.uk/academicinfrastructure/benchmark/statements/Psychology07.asp>
- Rhoads, R. A. & Szelenyi, K. (2011). *Global citizenship and the university*. California U.S.: Stanford University Press.
- Stevens, M., & Gielen, U.P. (Eds.) (2007). *Toward a global psychology: Theory, research, intervention and pedagogy*. Mahwah: New Jersey: Lawrence Erlbaum Associates.
- Trapp, A., Banister, P., Ellis, J., Latto, R., Miell, D., & Upton, D.(2011). *The future of undergraduate psychology in the United Kingdom*. York, UK: UK Higher Education Academy Psychology Network. Retrieved from http://www.pnarchive.org/docs/pdf/UG_PSYCHOLOGY_WEB.pdf
- Upton, D. & Trapp, A. L. (2010). *Teaching psychology in higher education*. Blackwell, UK: Wiley.
- Voudouris, N. (2009, December). On defining competencies in the training of Australian psychologists. *InPsych*, 31 (6), 32-33.
- Voudouris, N., & Mrowinski, V. (2010, April). Alarming drop in availability of postgraduate psychology training. *InPsych*, 32, 20-23.

- Waring, T. (2008). The regulation of psychology in Australia. In J.E. Hall and E.M. Altmaier, *Global promise: Quality assurance and accountability in professional psychology*. Pp. 164-185.
- Worrell, F. C., Casas, B.J., McDaniel, M., Messer, W.S., Miller, H.L., Prohaska, V., & Zlokovich, M.S. (2010). Promising principles for teaching and learning. In D. F. Halpern (Ed.), *Undergraduate education in psychology: A blueprint for the future of the discipline*. Pp. 129-144. Washington, DC: American Psychological Association.

Appendix B: Events, Description and Representation Details for the Fellowship

Date(s) of the event	Event title, Location (city only)	Brief description of the purpose of the event	Number of participants	Number of higher education institutions represented	Number of other institutions represented
08/07/10-11/07/10	4 th International Conference on Psychology Education (Sydney)	Share research and practice on quality education in psychology, build communities of practice. Introduction of psychological literacy through keynotes and symposium	120	Estimated 95	2 (APS, APA)
11/07/10-16/07/10 Organised by APS	International Conference on Applied Psychology	Panels on UG education and on high-school education; paper in symposium on curriculum renewal	Approx. 260 attended these events	Estimated 100	Min. 1 (APS)
18-20/8/10	CDU UG Psychology Review	Review of curriculum; external facilitator	8	1	
20/9/10	Advisory Group meeting (teleconf.)	Feedback on ALTC progress, innovation survey and APEN network meeting content	9	6	1
28/9/10	Sydney ALTC Roundtable	Dissemination of information about past/current project outcomes (including mine); casual peer review of application ideas	50	Estimated 7	
29/9/10	Sydney APEN Meeting	Build a local network and engage with Standards and pedagogy	26	12	1 (APS)
7/10/10 Organised by IAPA	Indigenous Psychology Education Workshop (Adelaide)	Discuss curriculum and pedagogy (participant)	8	5	2 (health org's)
13-14/10/10 Organised by ALTC	ALTC Fellows Forum (Brisbane)	Presentation on internationalisation and global citizenship	Approx. 30	Estimated 20	1 (ALTC)
15/10/10	Brisbane APEN meeting	Build a local network and engage with Standards and pedagogy	10	7	
28/10/10	Adelaide/NT APEN Meeting	Build a local network and engage with Standards and pedagogy	7	2	
29/10/10	Perth APEN Meeting	Build a local network and engage with Standards and pedagogy	10	5	
8/11/10	Melbourne APEN Meeting	Build a local network and engage with Standards and pedagogy	9	7	
22/11/10	Advisory Group Meeting (Melb.)	Review progress on Fellowship	6	3	1 (APS)
28/11/10-01/12/10	UK UG Review (Milton Keynes,	Role was independent facilitator, and to present	31	27	2 (BPS, AHDP)

Date(s) of the event	Event title, Location (city only)	Brief description of the purpose of the event	Number of participants	Number of higher education institutions represented	Number of other institutions represented
Organised by UK HEA Psyc Net'wk	UK)	international perspectives in their review of UG education			
14/02/11 Organised by ALTC	EU-Tuning Seminar (Sydney)	Presented on Fellowship; discussion of HE issues	Approx. 12	Estimated 10	1 (ALTC)
22-23/02/11 Organised by ALTC	ALTC Fellows Forum (Brisbane)	During this event, response to proposed abolition of ALTC was organised	Approx. 30	Estimated. 20	1 (ALTC)
25/2/11	Advisory Group Meeting Teleconference	Update on progress and review of current activities such as LT&S resource competition, next round of APEN meetings, trans-disciplinary approaches.	5	2	1
24/3/11 Organised by APS	SARAG meeting (Melbourne)	Update and feedback	Approx. 20	Estimated 18	1 (APS)
4/4/11 Organised by APS	PDAC meeting (Melbourne)	Update and feedback	Approx. 25	Estimated 20	3
08-14/04/11 Organised by AERA	American Education Research Association (New Orleans)	Chaired symposium on PL	Approx. 20 attended symposium (last day)	Estimated 18	
6/5/11 Organised by HoDSPA	HoDSPA meeting (Perth)	ALTC Fellowship update. Review of student survey. Discussion of gaps in resources and TLOs	Approx. 40	Estimated 39	1 (APS)
10/5/11	UNSW Learning and Teaching Connections Session	Led discussion with other key invited guests. 'How do we help students become global citizens?'	30	1	0
31/5/11 Organised by APS	APS meeting (Melbourne)	Discussion of innovative LT&A resource competition, website, and national student body	4	2	1 (APS)
2/6/11	Advisory Group meeting (tele-conference)	Update on progress of Fellowship including surveys (students, graduates, employers and web needs analysis), meeting outcomes and upcoming events	4	2	1
29/6/11	PDAC sub-committee meeting (Sydney)	Discussion of aims of UG education – feeding results through to PDAC meeting planned for the 4 th July 2011	3	3	0
23-26/07/11 Organised by IPPA	2nd World Congress on Positive Psychology (Philadelphia)	Presented poster on innovations in curriculum (and attended positive education presentations)	Approx. 100 attended poster	Estimated 80	
29-31/07/11 Organised by Steve	International Conference on Teaching of	Keynote on psychological literacy	Approx. 100	Estimated 90	

Date(s) of the event	Event title, Location (city only)	Brief description of the purpose of the event	Number of participants	Number of higher education institutions represented	Number of other institutions represented
Charlton	Psychology				
04-07/08/11 Organised by APA	American Psychological Association Conference	Symposium on psychological literacy (and met with Psy Chi leaders)	Approx. 100	Estimated 90	
11/08/11 Organised by Bev Oliver	Networking in standards-related projects ALTC workshop (Sydney)	Presentations on standards initiatives; discussion of issues	Approx. 12	Estimated 10	1
17/8/11	ALTC Forum: Global Citizenship as an Outcome of HE (Sydney)	Invited guests/presenters only. Presentations on initiatives; discussion of issues	22	18	2
29/08/11 Organised by APAC	PDAC meeting (Melbourne)	Update and feedback	Approx. 25	Estimated 20	2 (APAC, APS)
04-07/10/12	APS Conference	Forum on UG education; Innovative learning and teaching session	Approx. 80	Estimated 20	Min. 1 (APS)
7/10/11	Advisory Group Breakfast Meeting (Canberra)	Update on progress of Fellowship	9	5	1
20/10/11	PIFOPS teleconference	Update of progress	Approx. 10	Estimated 9	1 (APS)
01/11/11	UNSW Connections Seminar Series	“What is ‘Global Citizenship’ and how do we assess it?” Seminar	Approx. 25	1	
11/11/11	NPETRG (Melbourne)	Initial meeting; presented paper on UG issues	Approx. 15	Estimated 13	2 (APS, PsyBA)
14/11/11 Organised by APAC	PDAC meeting (Melbourne)	Update and feedback	Approx. 25	Estimated 20	2
24-25/11/11 Organised by D. Bennett and the Fellows	ALTC Forum (Melbourne)	Formation of the Australian Learning and Teaching Fellows association; rganisation of media release, forum report	Approx. 40	Estimated 25	2 (TEQSA, OLT)
01/12/11	PIFOPS teleconference	Update of progress	Approx. 10	Estimated 9	1 (APS)
08/12/11 Organised by Monash	Monash UG Review (Melbourne); State APEN social evening	Monash: Presentation on current issues and external facilitator; APEN: Identification of state representatives	Monash: Approx. 15 APEN: 6	Monash: 1 APEN: 3	
15/12/11 Organised by JCU	JCU UG Review (Cairns)	Presentation on current issues and external facilitator	Approx. 15	1	

Date(s) of the event	Event title, Location (city only)	Brief description of the purpose of the event	Number of participants	Number of higher education institutions represented	Number of other institutions represented
16/12/11	State APEN social lunch	Identification of state representatives	Approx. 12	3	
21/2/12	Advisory Group meeting (tele-conf.)	Update of Fellowship activities, including surveys, website, upcoming summit	4	3	1
8/2/12	Betty Leask Workshop on IoC	Introduction to IoC for UNSW community	25	2	0
7/3/12	GC@UNSW CoP	Global mobility (Anna Martin and Michelle Kofod)	6	1	
5/4/12	GC@UNSW CoP	Operationalisation of GC (Jacquelyn Cranney)	6	1	
11/4/12	UG Psychology Education Summit	One-day workshop with Department Heads/UG directors to review current trends, the GAs/TLOs, and Standards-based assessment	35	33	2
23-24/04/12 Organised by ALTF and D.Bennett	ALTF Forum	Organisation of HE strategies, letter to Minister, forum report	Approx. 40	Estimated 35	1 (OLT)
2/5/12	GC@UNSW CoP	Exchange of good practice (Ricardo Flores)	7	1	
11/05/12	UNSW L&T Forum	Poster on Fellowship work	Approx. 40 viewed poster	1	
28/05/12 Organised by APAC	PDAC meeting (Melbourne)	Update and feedback	Approx. 25	Estimated 20	2
31/5/12-01/6/12	PsyEd Executive and Mini Advisory Group Meeting	Network activities; uploading resources`	4	3	0
18/06/12	GC@UNSW CoP	Exchange of good practice (Julian Cox)	8	1	
21/06/12 Organised by School of Psychology, UNSW	UNSW School of Psychology Executive Committee Meeting	Presentation to employers regarding issues in UG psychology education; discussion re. professional training units	Approx. 10	1	Approx. 7
25/06/12 Organised by SQU	SQU UG Review (Toowoomba)	Presentation on current issues, and external facilitator	Approx. 20	1	
09/07/12	PIFOPS teleconference	Update of progress	Approx. 10	Estimated 9	1 (APS)
10/07/12 Organised by APS	SARAG teleconference	Update and feedback on "Green Paper"	Approx. 8	Estimated 7	1 (APS)
22-27/07/12 (organised by ICP)	International Congress of Psychology (Cape Town)	Organised double symposium; invited paper in 2 other symposia; International UG education network meeting			

Date(s) of the event	Event title, Location (city only)	Brief description of the purpose of the event	Number of participants	Number of higher education institutions represented	Number of other institutions represented
27-30/09/12	APS Conference	Presentation on innovative capstone LTA; PsyEd AGM and presentation on Fellowship work; APEN meeting, hosted by WA State representative			

From the above table of indicative activities, the estimated total number of individuals who have been exposed to the Fellowship activities is 1648. Although this does not represent 1648 separate individuals, as there was a core group that attended many events, there was broad Australian HE Institutional representation across these events, and many in the UK, USA and approximately 20 other nations were exposed to the work on psychological literacy, global citizenship and UG standards (particularly through the Summit and the conferences). It should also be noted that across various activities, but in particular the ALTF, the Fellow made a significant contribution to discussions and progress on standards in the HE context more generally (at least once a month; total = 24).

Throughout the Fellowship, the Fellow has attended approximately 14 UNSW Academic Board meetings, 10 Undergraduate Studies Committee meetings, six Committee on Education meetings, and chaired five Global Education Working Party Meetings.

Appendix C: List of Participating Higher Education Providers

The following HE providers participated in the Fellowship activities to varying degrees:

Australian Catholic University
 Australian College of Applied Psychology
 Bond University
 Charles Darwin University
 Charles Sturt University
 Deakin University
 Edith Cowan University
 Flinders University
 Griffith University
 James Cook University
 La Trobe University
 Macquarie University
 Monash University
 Murdoch University
 Notre Dame University
 Queensland University of Technology
 RMIT University
 Southern Cross University
 Swinburne University of Technology
 The Australian National University
 The University of Adelaide
 The University of Melbourne
 The University of New South Wales
 The University of Newcastle

The University of Notre Dame
The University of Queensland
The University of Sydney
The University of Western Australia
University of Ballarat
University of Canberra
University of New England
University of South Australia
University of Southern Queensland
University of Sunshine Coast
University of Tasmania
University of Western Sydney
University of Wollongong
Victoria University

Appendix D: List of Stakeholders

ALTC and OLT: Both of these organisations were stakeholders. In particular, the Executive Directors (Carol Nicoll, Suzi Hewlett) and relevant Directors (Peter Hutchings, Siobhan Lenihan) were key stakeholders in this Fellowship, as its success has implications for the psychology discipline in particular, and HE more generally.

APAC and APS PDAC: Nicholas Voudouris (ED, APAC) and Iain Montgomery (Chair, PDAC) were members of the Advisory Group (AG). Graham Tyson, Patrick Heaven, Shirley Morrissey, and Trang Thomas were additional members of the PDAC UG Subcommittee. Nicholas was an invited speaker at the Summit, and Iain was an invited speaker at the 2011 APS Forum on UG education.

APS PsyEd/APEN: Office bearers Frances Martin (Co-convenor), Steve Provost, and Fiona White were members of the AG, and the former two were key in creating the PsyEd site for the resource depository, and in helping to maintain network activities. In addition, the Fellow has attempted to keep this national network informed by ensuring (a) key members were invited to APEN Meetings and to the Summit, (b) continued engagement through APS conference activities, (c) key resources (e.g., the Green Paper) were distributed through this Network.

Employer representatives: Through psychology networks, the Fellow invited Trevor Carlyon, of Carlyon Consultants, to be a member of the AG. Trevor has extensive employer experience in the public sector and in the not-for-profit sector. He also contributed to the Summit event. Toward the end of the Fellowship, the Fellow was invited to present at the UNSW School of Psychology Executive Committee Meeting (21/0612), where potential developments for professional training for UG students was discussed.

APS NPETRG: The Fellow have purposefully engaged Lyn Littlefield, Executive Director of APS, in national education activities, and this was achieved primarily through her membership of PDAC and PIFOPS. She also invited the Fellow to be a member of the previous and current NPETRG. At the first meeting of the renewed NPETRG, the Fellow presented her views regarding UG education from the Fellowship perspective. Lyn Littlefield was an invited speaker at the ICOPE Conference and at the Summit.

APS PIFOPS: Simon Crowe, President of APS, invited the Fellow to be a member of the psychological literacy subcommittee of his initiative. He was an invited speaker at the

Summit, and at the 2011 APS Forum.

HODSPA: Mick Hunter, Chair of HODSPA, was a member of the AG. He was also an invited speaker at the 2011 APS Forum.

School of Psychology, UNSW: Simon Killcross (Head) and Branka Spehar (UG Director) have been consulted informally and regularly, and participated in the Summit. Joanne Earl was a member of the AG, and has been a key player in the Executive Committee (a group of employers) and in the Alumni.

The UNSW (Student) Psychological Society (PsychSoc): Craig Baker, President, has been consulted informally and regularly, and consulted with the 'psychological literacy' subcommittee of PIFOPS. He was supported by this Fellowship in his engagement with APS to increase student representation within the organisation. He has raised awareness of psychological literacy within PsychSoc.

UNSW Psychology Alumni: Leigh Mellish, Founding President, has been consulted informally and regularly (e.g., wrt the 'psychological literacy' subcommittee of PIFOPS), and in addition was a member of the AG.

UNSW: Other educators were engaged in Standards and Innovation activities (e.g., the Sydney ALTC Roundtable event) and in the global citizenship aspect of my Fellowship (e.g., Global Citizenship@UNSW CoP, Academic Board Committee on Education Global Education Working Party, ALTC Symposium on Global Citizenship).

Appendix E: List of Conference Presentations, Invited Talks, and Publications

Websites:

Three websites document the outcomes of this Fellowship:

www.psychologicalliteracy.com

<http://www.groups.psychology.org.au/PsyEd/resources/>

<http://www2.psy.unsw.edu.au/Users/JCranney/>

Books

Cranney, J., & Dunn, D. (Eds.) (2011). *The psychologically literate citizen: Foundations and global perspectives*. New York: Oxford University Press. ISBN- 13: 978-0-19-979494-2

McCarthy, S., Dickson, L., Cranney, J., Karandashev, V. & Trapp, A. (Eds.) (2012). *Teaching psychology around the world: volume 3*. Newcastle on Tyne, UK: Cambridge Scholars Press.

Book Chapters

Cranney, J., Morris, S., Krochmalik, A., & Botwood, L. (in press). Assessing psychological literacy. In D. S. Dunn, S.C. Baker, C.M. Mehrotra, R.E. Landrum, & M. A. McCarthy, (Eds.). *Assessing teaching and learning in psychology: Current and future perspectives* (pp.95-106). Belmont, CA:Wadsworth Cengage Learning.

Cranney, J., & Dalton, H. (2012). Optimising adaptive student behaviors. In Groccia, J., Alsudary, M., & Buskist, B. (Eds.). *Handbook of college and university teaching: Global perspectives*. Pp. 60-76. Los Angeles: Sage.

- Cranney, J., & Voudouris, N.J. (2012). Psychology education and training in Australia: Shaping the future. In S. McCarthy, K. L. Dickson, J. Cranney, V. Karandashev & A. Trapp (Eds.), *Teaching psychology around the world: Volume 3*. Pp. 2-14. Newcastle on Tyne, UK: Cambridge Scholars Press.
- Cranney, J., & McDonald, F. (2012). Evidence-based learning. In N. Seel (Ed.), *Encyclopedia of the sciences of learning* (pp.1185-1188). New York: Springer.
- Cranney, J., & Dunn, D.S. (2011). Psychological literacy and the psychologically literate citizen: New frontiers for a global discipline. In J. Cranney and D. S. Dunn (Eds.), *The psychologically literate citizen: Foundations and global perspectives* (pp.3-12). New York: Oxford University Press.
- Cranney, J., Morris, S., Martin, F., Provost, S., Zinkiewicz, L., Reece, J., Milne-Home, J., Burton, L., White, F., Homewood, J., Earl, J., & McCarthy, S. (2011). Psychological literacy and applied psychology in undergraduate education. In J. Cranney and D. S. Dunn (Eds.), *The psychologically literate citizen: Foundations and global perspectives* (pp. 146-164). New York: Oxford University Press.
- Cranney, J., & Morris, S. (2011). Adaptive cognition and psychological literacy. In J. Cranney and D. S. Dunn (Eds.), *The psychologically literate citizen: Foundations and global perspectives* (pp.251-268). New York: Oxford University Press.
- Cranney, J., & Dunn, D.S. (2011). What the world needs now is psychological literacy. In J. Cranney and D. S. Dunn (Eds.), *The psychologically literate citizen: Foundations and global perspectives* (pp.322-336). New York: Oxford University Press.

Conference Papers

- Cranney, J., Morris, S., & Spehar, B. (2012, September). *The role of capstone experiences in scientific literacy, employability and global citizenship*. Paper to be presented at the 47th Annual Conference of the Australian Psychological Society, Perth, September 27-30, 2012.
- Cranney, J. & Morris, S. (2012, July). New developments in psychological literacy. In J. Cranney (Chair), *Psychological literacy as a global outcome of undergraduate psychology education*. Symposium to be conducted at the International Congress of Psychology, Cape Town South Africa.
- Cranney, J., Morris, S., & Spehar, B. (2012, July). The role of capstone experiences in scientific literacy, employability and global citizenship. In J. Bryan & R. Ranzijn (Chairs), *Innovations in developing graduate work-readiness capabilities*. Symposium to be conducted at the International Congress of Psychology, Cape Town South Africa.
- Cranney, J., & Morris, S. (2012, July). Psychological literacy and global citizenship. In V. Karandashev (Chair), *Globalization of Psychology Education: Challenges and Promises*. Symposium to be conducted at the International Congress of Psychology, Cape Town South Africa.
- Cranney, J., Morris, S., Spehar, B., & Botwood, L. (2012, May). *From National Standards to Capstone Courses: Challenges in Designing Standards-Based Assessment*. Poster presented at the Learning and Teaching Forum, UNSW, May 11, 2012.
- Cranney, J. (2011, October). *The aims of UG psychology and curriculum renewal*. Forum presented at the 46th Annual Conference of the Australian Psychological Society, Canberra, October 4-8, 2011.
- Cranney, J. (2011, October). Introduction to psychological literacy. In J. Cranney (chair), *Innovative learning, teaching and assessment strategies for psychological literacy*. "How

- To" Session conducted at the 46th Annual Conference of the Australian Psychological Society, Canberra, October 4-8, 2011.
- Cranney, J. (Chair). (2011, October). *Building the capacity of undergraduate students*. Symposium conducted at the 46th Annual Conference of the Australian Psychological Society, Canberra, October 4-8, 2011.
- Cranney, J. (2011, August). Psychological literacy as a transformative global perspective. In D. Dunn & J. Cranney (Chairs), *Should psychological literacy be the primary outcome of undergraduate education?*, Symposium conducted at the 119th Convention of the American Psychological Association, August 4-7, Washington D.C., USA.
- Cranney, J., Morris, S., & Jeong, J.M. (2011, July). *Positivity strategies as part of the first-year psychology curriculum*. Poster presented at the 2nd World Congress on Positive Psychology, July 23-26, Philadelphia, USA.
- Cranney, J., & Morris, S. (2011, July). *Psychological literacy and adaptive cognition in a first-year university curriculum*. Poster presented at the 34th Annual International HERDSA Conference, July 4-6, 2011, Radisson Resort, Gold Coast, Australia.
- Cranney, J., Morris, S., & Jeong, J.M. (2011, April). Psychological literacy and adaptive cognition. In J. Cranney (Chair), *Psychological literacy and global citizenship: Why should psychology educators care?* Symposium conducted at the American Education Research Association Annual Conference, April 8-12, New Orleans.
- Cranney, J., & Morris, S. (2010, July). Hard science and soft heads: Critical and creative thinking in the context of first year group research projects. In J. Reece (Chair), *Innovations in learning and teaching*. Symposium conducted at the 27th International Congress of Applied Psychology, July 11-16, 2010, Melbourne.
- Cranney, J., Trapp, A., Sarwono, S., McCarthy, S., & Skinner, N. (2010, July). *Global perspectives on undergraduate psychology education: Should we be changing our game?* Forum at the 27th International Congress of Applied Psychology, July 11-16, Melbourne.
- Martin, F., Provost, S., Cranney, J., & Nosworthy, V. (2010, July). Resources to support quality tertiary learning and teaching of psychology in Australia. In V. Karandashev (Chair), *Towards Providing Global Teaching Resources for Quality Psychology Education*. Symposium conducted at the 4th International Conference on Psychology Education, Sydney, Australia. Retrieved 14 July, 2011, from <http://icope2010.psy.unsw.edu.au/program/Martin%20et%20al.pdf>
- Cranney, J. (2010, July). Introduction to psychological literacy. In J. Cranney (Chair), *Psychological literacy and global citizenship: Why should psychology educators care?* Symposium conducted at the 4th International Conference on Psychology Education, Sydney.

Keynote Addresses

- Cranney, J. (2012, November). *Student success, psychological literacy, and global citizenship*. Invited Keynote Address to be presented at the 23rd Annual Conference of the ISANA International Education Association, Auckland, New Zealand, December 4-7, 2012.
- Cranney, J. (2011, July). *Why psychological literacy should be the primary outcome of undergraduate psychology education*. Invited Keynote Address at the International Conference on Teaching of Psychology, July 29-31, Vancouver.

Invitations to Facilitate or Speak at Workshops/Retreats (July 2010-June 2012)

- Charles Darwin University Psychology Discipline (K.Moore, A. Reedy). (2010). Extensive peer review of undergraduate psychology education, with a subsequent confidential report focussing on LTA strategies for the development of GAs. August 18-20, 2010, Darwin, Australia.
- UK Higher Education Academy Psychology Network (A.Trapp). (2010). Facilitation of the two-day retreat on the future of UG psychology Education in the UK, including a talk on Australian undergraduate education, November 30-December 1, 2010, Chicheley Hall, England.
- Cranney, J. (2011). National standards for psychological literacy and global citizenship. In C. Ewan (Chair), *EU-Australia Tuning Seminar*, February 14, 2011, Sydney, Australia.
- Cranney, J. (2011). National standards for psychological literacy and global citizenship. In B. Oliver (Chair), *Networking in standards-related projects ALTC workshop*, August 11, 2011, Sydney, Australia.
- Monash University School of Psychology (W. McKenzie, S. Rajaratnam). (2011). Psychological Literacy, APAC Standards & Graduate attributes for Undergraduate Psychology. Presentation at the "Future Directions in Undergraduate Psychology at Monash" Workshop, December 8, 2011, Melbourne, Australia.
- James Cook University School of Psychology (K. Martinez). (2011) Psychological literacy as an outcome of undergraduate psychology education. Presentation at the "Undergraduate Psychology Education Review" Workshop, December 14, 2012, Cairns, Australia.
- Southern Queensland University School of Psychology (T. Machin). (2012). Psychological literacy as an outcome of undergraduate psychology education. Presentation at the "Undergraduate Psychology Education Review" Workshop, June 25, 2012, Toowoomba, Australia.

Discussion Papers/Policy:

- Cranney, J., & Botwood, L. (2012). *Review of the aims, outcomes and accreditation standards for Australian undergraduate psychology education: Green paper for discussion*. Retrieved from www.groups.psychology.org.au/PsyEd/resources/
- Cranney, J., et al. (2012) *UNSW Academic Board Discussion Paper: Advancing Global Education at UNSW*. [Chair of the Academic Board Working Party on Global Education, 2012].

Other reports of events/networks:

- Cranney, J., & Botwood, L. (2012). April 2012 Undergraduate Psychology Education Summit: Report. UNSW. Retrieved from www.groups.psychology.org.au/PsyEd/resources/
- Cranney, J. (2011, April). APS grant supports international conference on psychology education. *Observer*, 24 (4). Retrieved from <http://www.psychologicalscience.org/index.php/publications/observer/2011/april-11/aps-grant-supports-international-conference-on-psychology-education.html>.
- Cranney, J., Zhang, S., Martin, F., & Zinkiewicz, L. (2010). Advancing teaching and learning in psychology. *InPsych*, 32, 26-27. Retrieved 23 December, 2010, from <http://www.psychology.org.au/publications/inpsych/2010/june/cranney/>

Appendix F: General Principles and Specific Recommendations for Changes to the APAC Standards and Procedures for Undergraduate Psychology Education

Date: 18/06/12

To: Dr. Nicholas Voudouris, Australian Psychology Accreditation Council (APAC) Chief Executive Officer

Submission by: Jacquelyn Cranney, Member, Australian Psychological Society Program Development Advisory Committee (APS-PDAC), and Associate Professor of Psychology, UNSW

Document Purpose:

This document sets out suggested general principles for accreditation of UG psychology programs, and also suggests specific changes to the Standards and procedures. Additional rationale is provided in Cranney and Botwood's (2012) Green Paper, *Review of the Aims, Outcomes and Accreditation Standards for Australian Undergraduate Psychology Education* (available from j.cranney@unsw.edu.au). This document constitutes a submission to the 2012 APAC Standards Review. [Blue text indicates changes.](#)

A. General Principles

Adapting APA's (2011) "Principles", we assert that the following principles for UG education in psychology, based on the concept of psychological literacy (Cranney et al., in press), are designed for creating:

- A world-class educational system that provides students with the workplace skills needed in this rapidly changing information age (i.e., employability);
- A solid academic background that prepares them for advanced study in a range of fields, as well as the capacity to be critical consumers (i.e., scientific literacy); and
- The knowledge, skills and attitudes that will enhance their personal, professional and global lives (i.e., global citizenship).

Principle 1: Accreditation of UG psychology programs is a worthwhile endeavour; moreover, the aims and procedures of accreditation need to be reviewed periodically, including (a) national consultation with key stakeholders such as students, graduates, employers, educators, peak disciplinary and professional bodies, and government (e.g., the Australian Qualifications Framework [AQF] and the Tertiary Education Quality and Standards Agency [TEQSA]), and (b) consideration of international benchmarking and the consequences for graduate mobility.

Principle 2: Within the opposing contexts of accountability and economic constraint,

accreditation review procedures based on outcomes and outputs (e.g., evaluation of attainment of student learning outcomes) need to be balanced with accreditation review procedures based on inputs (e.g., minimal staffing and resource levels), to ensure quality education in psychological science.

Principle 3: Within the opposing contexts of accountability and economic constraint, minimal or threshold level attainment of outcomes need to be specified and exemplified; moreover, aspirational levels should be exemplified where feasible.

Principle 4: In partnership with each Academic Organisational Unit (AOUs), the accreditation process should focus on quality assurance and improvement (QA&I), delineating required vs. desired areas for improvement, and publically acknowledging areas of excellence.

Principle 5: In acknowledging that the majority of psychology major graduates do not become postgraduate-trained professional psychologists or psychological scientists, the accreditation processes should be designed to take into consideration the career-related needs of all graduates (see AQF Level 7 “Purpose” statement).

Principle 6: In acknowledging the promise of application of psychological theory, research and practice to solving a variety of human-created local and global problems, the process of accreditation needs to take into consideration how this capacity can be best realised for psychology major graduates.

Principle 7: The global needs of human beings should be taken into account in any educational endeavour; thus, the development of psychological literacy and global citizenship should be supported by the process of accreditation of psychology programs.

B. Suggested Changes to the Existing APAC Standards

Although some may argue that the current Standards should be thrown out and rewritten according to (a) the principles outlined above and (b) current research, theory and practice in education and QA&I, we take the middle course below by suggesting a new set of minimal standards for UG psychology education (3-year sequence only). It is strongly suggested that this be followed as soon as possible by a set of APAC “Guidelines” which includes examples of minimal and aspirational performance-level statements and/or examples.

Note that:

1. The revision of the Graduate Attributes is based on work undertaken by groups of delegates to the UG Psychology Education Summit at UNSW on 11/04/12. Note that they considered all the original 2008 SLOs, not just those included in the 2008 APAC Standards. Further minor changes were made on the basis of assessability and feasibility, such that:
2. Although the APAC Standards are “minimal”, occasionally aspirational achievement examples are indicated.

3. Red (or grey should you have printed this in black and white) indicates additions; please note that there have also been deletions (not indicated, to improve readability).

SECTION 3 UNDERGRADUATE 3-YEAR SEQUENCE COURSES

This section provides accreditation standards for undergraduate 3-year sequence courses in psychology.

APAC only recognises for accreditation, courses designed to provide an education in psychology. It does not recognise courses designed to provide education in another discipline or profession, even if these have a substantial psychological content.

Although the purpose of accreditation of undergraduate psychology programs traditionally has been to serve further training in the science and profession of psychology, it is recognised that psychology major graduates have diverse career outcomes, with the majority not undertaking further postgraduate training in psychology. As such, the primary minimal outcome of an accredited three-year sequence needs to be scientific literacy, which is just one component of psychological literacy. Psychological literacy has been defined as the capacity to adaptively apply psychological science to meet personal, professional and societal needs. This should be an outcome for all UG psychology graduates, regardless of their career destination. From a psychology major perspective, psychological literacy can be operationalized either in terms of the graduate attributes, or in terms of the three categories of outcomes: scientific literacy, employability, and global citizenship. Given current economic constraints, the basic 3-year sequence should at a minimum deliver scientific literacy, but every AOU should be able to demonstrate that they have given students structured and explicit opportunities to increase employability skills for a diverse range of career destinations. Note that this general purpose statement of the psychology major outcome is consistent with the Australian Qualifications Framework (AQF) Level 7 Purpose Statement: “The Bachelor Degree qualifies individuals who apply a broad and coherent body of knowledge in a range of contexts to undertake professional work and as a pathway to further training”.

The 3-year sequence may be taken as a stand-alone degree program, or as part of an integrated four-year sequence within a single AOU. The following sections (3.1 and 4.1 of the Standards) describe the Standards where this four year sequence is undertaken in two separate components.

3.1 **Three year programs**

These standards apply to all three-year programs in psychology which lead to a Bachelors degree or Graduate Diploma in Psychological Science (or similar), and to three-year sequences which are integrated into four-year Honours or Pass degree courses. It is important to note that three year sequences are expected to form adequate foundational preparation upon which later study at the advanced level is built (see Standards Section 4.1).

Length (Volume of Learning)

- 3.1.1 The length of the course should be three years of full-time study, or the equivalent (consistent with the AQF Level 7 Volume of Learning Statement).

Program Structure

- 3.1.2 Across the three years, half (50%) of the units should be psychology [*aspirational: 200% plus*].
- 3.1.3 Normally, there would be a minimum of 25% in the first year, and 50% in each of the second and third years, with a minimum additional 25% gained in one of those years. In AOUs where structural limitations preclude 50% in the second year, then students must be able to average a minimum of 50% psychology across their second and third years (e.g., 33% in second year, followed by 67% in third year). In these cases, the acceptable minimum at second year is 33%.
- 3.1.4 The third year of the course must include a minimum of 50% psychology and there should be the option for students to enrol in more psychology units.
- 3.1.5 The course must be structured to ensure that the **psychology graduate attributes** (see Standard 3.1.7) are covered by all students, while also offering the opportunity through elective components for students to study some areas in greater depth. It is recognised that the elective components in any AOU are likely to reflect the particular areas of strength and expertise of the AOU.

Program Content

- 3.1.6 The emphasis of the **basic 3-year sequence** must be on providing an education in the core discipline **and research methods** of psychology and not in one or more **highly specialist professional areas** (e.g., **clinical or organisational psychology**).
- 3.1.7 The development of graduate attributes across the program should be explicitly sequenced; that is, upper-level UG units should explicitly build upon first-year unit content where possible.
- 3.1.8 The accredited three-year sequence must provide students with a solid foundation in psychological literacy, that is, the psychology graduate attributes and associated learning outcomes (based on the *Graduate Attributes of the Four-Year Undergraduate Psychology Program [2012 Revision]*, available from the APAC website). This set of Graduate Attributes is consistent with the AQF Level 7 Knowledge, Skills and Application Statements. It should be noted that the Program content is not limited to these Graduate Attributes.

Graduate Attribute 1: Discipline knowledge and its application

Demonstrate a broad and coherent body of knowledge of psychology, with depth in the underlying principles and concepts, and the capacity to apply this knowledge as the basis for life-long learning.

- 1.1 Demonstrate an understanding of the history and philosophy of **science and psychology**

1.2 Demonstrate understanding of the major concepts, theoretical perspectives, [research methods](#), empirical findings, and historical trends in the core topics of psychology:

- biological bases of behaviour
- cognition, information processing and language
- individual differences in capacity and behaviour; testing and assessment; and personality
- intercultural diversity
- indigenous issues in psychology
- learning
- lifespan developmental psychology
- motivation and emotion
- perception
- psychological disorders
- psychological well-being
- social psychology

1.3 [Demonstrate the capacity to apply disciplinary knowledge to explaining, predicting, and controlling human behaviour.](#)

Graduate Attribute 2: Research methods in psychology

Understand, apply and evaluate basic research methods in psychology.

2.1 [Demonstrate the capacity to design and conduct basic studies to address psychological questions across a wide variety of domains:](#)

- frame research questions
- undertake literature searches
- critically analyse theoretical and empirical studies
- formulate testable hypotheses
- operationalise variables
- choose an appropriate methodology
- appropriately design questionnaires/surveys as needed
- make valid and reliable measurements
- appropriately analyse data and interpret results
- derive theoretical and practical implications
- acknowledge limitations
- suggest future research
- communicate this research in professional formats

2.2 [Describe the key principles for designing, implementing and evaluating programs of behaviour change](#)

Graduate Attribute 3: Critical and creative thinking skills in psychology

Demonstrate the motivation and capacity to utilise logic, evidence, and psychological science to evaluate claims about, and solve problems regarding, human behaviour.

- 3.1 Recognise the major formal and informal fallacies of human reasoning.
- 3.2 Use logic and evidence to critically evaluate and to develop arguments.
- 3.3 Critically evaluate theoretical and methodological approaches in psychology.
- 3.4 Demonstrate a rigorous and objective attitude in thinking and learning about human behaviour [*aspirational: demonstrate this attitude in creative and pragmatic problem-solving*].

Graduate Attribute 4: Values and ethics in psychology

Demonstrate appropriate professional values.

- 4.1 Demonstrate sensitivity to diversity in individuals [*aspirational: apply that sensitivity in practice, and reflect on the sociocultural, historical, geographical and international contexts that influence beliefs, values and behaviour: i.e., develop cultural awareness and competence*].
- 4.2 Recognise how prejudicial attitudes and behaviours that exist in oneself and in others may lead to discrimination and inequity [*aspirational: demonstrate the capacity to adopt alternative perspectives; promote the value of non-discrimination and equity*].
- 4.3 Recognise ethical and moral influences that impact on individuals in a globalized society [*aspirational: act upon these to help resolve moral conflicts*].
- 4.4 Demonstrate knowledge, understanding and application of relevant professional codes including (a) the Australian Psychological Society *Code of Ethics* and the complementary *Ethical Guidelines*, (b) relevant values identified within the Australian *National Practice Standards for the Mental Health Workforce*, and (c) relevant values identified in those institutional codes regarding student behaviour (e.g., intellectual integrity) [*aspirational: demonstrate knowledge and application of values relevant to global citizenship*].

Graduate Attribute 5: Communication and interpersonal skills in psychology

Demonstrate professional communication skills.

- 5.1 Write effectively in a variety of formats and for a variety of purposes (i.e., standard research reports and research proposals; observing ethics of written communication) [*aspirational: informing and arguing through electronic means*].
- 5.2 Listen and speak effectively (i.e., effective oral presentation; basic two-way interviewing skills) [*aspirational: listen accurately and actively; identify impact of behaviour on others; provide constructive feedback; use flexible techniques to communicate sensitively with diverse ethnic and cultural partners*]

5.3 Across the above domains: demonstrate interpersonal skills for communicating between individuals; collaboratively work in groups to complete projects [*aspirational: manage conflicts appropriately and ethically; demonstrate effective leadership behaviours*].

Graduate Attribute 6: Learning and the application of psychology

Understand and apply psychological principles to personal, social, organisational and global issues.

6.1 Understand the links between basic psychological theories and their application (e.g., capacity to explain psychological phenomena using the concepts, language, findings and major theories of the discipline).

6.2 Select psychological principles that can be applied meaningfully in personal and professional contexts (with reference to ethics, privacy, human rights) and evaluate how well this is done (i.e., outcome evaluation).

6.3 Demonstrate a responsibility and capacity for independent learning to sustain personal and professional development in the changing world of the science and practice of psychology.

- 3.1.9 The AOU must clearly demonstrate that the course provides substantial coverage (and assessment) of the Graduate Attributes. Some Attributes (such as *Values and Ethics in Psychology*) may be naturally integrated within other topics, but must be clearly in evidence in the curriculum.
- 3.1.10 During the third year the AOU must provide a capstone experience; this can be part of a unit, for example, a particular assessed component [*aspirational: a whole unit, preferably with a work-integrated component*]. Capstone experiences should provide the student with explicit opportunities to integrate knowledge, skills and attitudes across different knowledge topics and graduate attributes.
- 3.1.11 The AOU must provide evidence that students are given opportunities to develop general (not just specific to professional psychology or psychological science) employability skills (see AQF Level 7 Purpose Statement).
- 3.1.12 The content of the lectures, tutorials and laboratories in the course must be supported by relevant and up-to-date evidence-based scientific reference material. This material should include peer-reviewed empirical articles in the best international scientific journals, preferably at all year levels and certainly at all levels beyond first year.
- 3.1.13 At all three year levels, students must have formal practical work as part of their coursework in psychology, with much, though by no means all, of this practical work taking place in laboratory sessions.

Program Assessment

- 3.1.14 Where feasible, the AOU should implement explicit criterion-based assessment, with accompanying performance achievement statements (e.g., using detailed marking rubrics). Wherever feasible, students should be informed of these

“standards” for assessment prior to submission of their work, and markers should be appropriately trained. Moreover, “best practice” examples can be helpful to both students and markers.

- 3.1.15 The assessment of components of **most units** should **include written** submissions by students such as essays or laboratory reports, and formal examinations. An AOU must not rely solely on multiple choice assessments in a course. **For all assessments**, the basis upon which they are graded should be clear (*i.e.*, **riterion-based assessment**). See also Standard 2.1.9.
- 3.1.16 Assessment must ensure that the breadth and depth of the **graduate attributes** are assessed in accordance with the unit learning outcomes. **Examples of Fail, Pass and High Distinction grades for key (e.g., final) assessments of Graduate Attributes should be made available for inspection by the APAC Team. [*Aspirational: Provision of employer evaluation of graduate “value”*]**
- 3.1.17 Students should receive detailed and timely feedback on their assessments.
- 3.1.18 Appropriate procedures must be in place (e.g., Boards of Examiners) to ensure that **academic** standards are maintained and that all assessment and awarding of final marks or grades is treated with the utmost care and attention. Regular external independent moderation should be undertaken at intervals to benchmark the assessment practices of the AOU against other APAC-accredited AOU's. The APAC Secretariat can assist with advice about how to set up a benchmarking exercise.
- 3.1.19 Appropriate procedures which meet modern governance standards must be in place to deal with student appeals.
- 3.1.20 Appropriate procedures must be in place to deal with cases of plagiarism or other instances of unethical conduct.

Awarding of credit or advanced standing

- 3.1.21 Students transferring from one AOU to another in Australia while completing a three year course or entering an accredited course following the completion of a degree or other course can only be given credit for studies in psychology previously completed if the AOU at which they completed these studies is APAC-accredited and the completed units for which advanced standing is to be granted are part of an APAC-accredited sequence. The onus is on the AOU to which the student is transferring to ensure that this is the case. AOU's should be prepared to justify such decisions should APAC conduct an audit of the AOU's transfer credit practices.
- 3.1.22 Studies undertaken at non-Australian Institutions must be carefully evaluated by the AOU to determine their strict equivalence to the studies for which credit is to be granted, and the AOU must be prepared to defend its decisions regarding the granting of credit should APAC conduct an audit of the AOU's transfer credit practices.
- 3.1.23 It is the responsibility of the AOU to which a student is transferring to make sure that all **graduate attributes** are covered by the point of completion of the degree. Because there is some flexibility in the structure of courses, and AOU's may vary in the way in which core subjects are covered, it is not sufficient to assume that completion of a particular year at one Institution (for example second year), will

necessarily provide adequate preparation for what would usually be the next year's work in the sequence at the receiving Institution (in this example, third year). It may be necessary to prescribe an individually tailored course to ensure that such students cover all core subjects. This prescription must enable students to complete the equivalent of an accredited course. Please note that APAC does not accredit individual students' courses of study.

3.2 “Applied Behavioural Practitioner” Standards

*This is a suggested development for 2012:

These programs need to be developed as a minor, certificate or diploma. Units should have specific UG accredited unit prerequisites (e.g., first year units plus second-level research methods and learning for a unit on applied behavioural analysis). Units may include: (a) basic aspects of evidence-based **assessment and evaluation** (e.g., interviewing; test and questionnaire construction; evaluation methodology; applied behavioural analysis; administering but not interpreting tests—similar to how “examiners” in the Australian Army are being trained), **interventions** (e.g., fundamental operations of CBT—similar to how nurses, social workers and occupational therapists in Australian are currently being trained—and other evidence-based interventions such as Mindfulness Based Stress Reduction and Acceptance Commitment Therapy), as well as (b) **professionalism** (e.g., further ethics training), (c) **generic mental health worker** capabilities, a kind of “VETplus” (which seeks to match and exceed current VET community mental health offerings), and (d) **specialist** offerings such as those relevant to **indigenous mental health** and **rural health**. These units should be developed by APS, HODSPA, and APAC. Whether the program would be accredited and a specific “registerable” role is created, would need to be worked out.

4.1 Year 4

*This is a suggested development for 2012:

We need to consider the extent of low-level professional training in Year 4, given the 4+2, and competing 5+1 pathways. It may be possible to tap into the “Applied Behavioural Practitioner” units.

Pass-level: Should this cohort be given the opportunity to acquire professional skills at the Year 4 level (e.g., this could include training for “Applied Behavioural Practitioner”)? Note that for this Year 4, those who pass the psychology major should be eligible, and a pass level only is required to graduate from this Year 4. This situation would make it possible for any student who passes to gain some level of psychologically relevant professional training (similar to the situation for nurses and social workers), and would reduce the problem with students feeling as though they have wasted their time and money with an undergraduate psychology degree.

C. Suggested Changes to the Existing APAC Procedures

- Off-line survey of the documentation of how the program develops and assesses the GAs and SLOs (a program portfolio?), with relevant student HD, P and F examples

(this could include student psychological literacy portfolios or other capstone assessments); follow up with Skype meetings;

- AOU's emphasise the common "accreditable sequence" across their different programs, with a brief summary of any key differences, with a subsequent discount of accreditation costs;
- 2+ external experts online rate/calibrate student assessment pieces (nationally common? eg GA portfolios? Use Keith Willey's *SparkPlus* technology);
- To support an aspirational standards approach, as well as the "threshold" levels of achievement, where appropriate aspiration levels or examples should be specified.

Appendix G: Evaluations

- Professor Stephen Marshall, Director, Learning and Teaching Unit, UNSW, Australia
- Professor Dana Dunn, Department of Psychology, Moravian College, PA, USA.
- Professor Regan Gurung, Department of Psychology, University of Wisconsin--Green Bay, Wisconsin, USA.
- Annie Trapp, Department of Psychology, York University (former Director of the Psychology Network, UK Higher Education Academy; current President of the European Psychology Learning and Teaching network).

Evaluation Report

ALTC National Teaching Fellowship

National Standards for Psychological Literacy and Global Citizenship

Associate Professor Jacquelyn Cranney

Internal Project Evaluator

**Professor Stephen J. Marshall
Director, Learning and Teaching @ UNSW**

June 2011

1. Background of the Fellowship

1.1. Context of the Fellowship

According to Cranney (2010) discipline leaders in psychology have identified two major issues in undergraduate psychology education.

“The first relates to how the scientist-practitioner model bears on the nature of undergraduate (**UG**) psychology education. . . . The second . . . relates to the delineation, assessment and evaluation of academic standards. (p. 3)

In an effort to address the first of these issues, Cranney, in 2006, successfully applied for an ALTC Associate Fellowship that had as its purpose:

- the development of Graduate Attributes (GAs) and their associated Student Learning Outcomes (SLOs) for UG Psychology, and
- the embedding of these GAs into UG Psychology programs throughout Australia.

By the end of this Associate Fellowship, the GAs that Cranney had developed in partnership with others in the discipline, had been incorporated into the Australian Psychology Accreditation Council (**APAC**) Standards (e.g., APAC, 2009; Voudouris, 2009) and they are currently evaluated during the APAC site-visit peer review process.

However, as Cranney (2010) acknowledged in her application for the current ALTC Fellowship, the next steps in the further development of an UG Psychology curriculum to address the two major issues identified above are to:

- “develop guidelines for minimum levels of attainment of the SLOs, and strategies for assessing and evaluating that learning.” (p. 3)
- “develop a forward-looking, responsible, and evidence-based pedagogy for UG psychology, to guide the achievement of Aim 1” (p. 3)
- “develop networks of psychology educators, in particular an “UG Network” consisting of UG program and first-year directors from every Department/School of Psychology within Australia, to facilitate input to and engagement with the academic standards and pedagogy aims of this initiative. (p. 4)
- “couch these activities in continued two-way interaction with relevant international and interdisciplinary bodies” (p. 4)

1.2. Nature of the Fellowship

This Fellowship sought to further develop:

- *academic standards* for Undergraduate (UG) psychology education, in particular academic standards for psychological literacy and global citizenship.
- *a forward looking, responsible and evidence based pedagogy* for UG psychology education

- *networks of psychology educators to provide input into and engagement with the academic standards and pedagogies developed during the Fellowship*
- *interactions between national, international and interdisciplinary bodies with an interest in UG psychology education, and in particular, the development and use of academic standards for psychological literacy and global citizenship.*

1.3. Scope and Intended Outcomes of the Fellowship

Specifically, through a wide range of national and international network-based activities, the Fellowship sought to develop:

- greater appreciation of international issues (US, UK, Europe) with respect to the definition and adoption of aims (Graduate Attributes), Student Learning Outcomes (SLOs), and Standards for UG Psychology
- greater appreciation of national issues and their influence on peak disciplinary bodies with respect to the definition and adoption of aims (Graduate Attributes), Student Learning Outcomes, and Standards for UG Psychology
- greater appreciation of trans-disciplinary issues with respect to the definition and adoption of aims (Graduate Attributes), Student Learning Outcomes, and Standards for UG Psychology
- greater acceptance of GAs (particularly those developed for UG Psychology) as Threshold (Student) Learning Outcomes
- greater acceptance of Psychological Literacy and Global Citizenship as key outcomes of UG psychology education and of trans-disciplinary education.
- innovative learning, teaching and assessment resources relevant to psychological literacy and graduate attributes

In addition, the Fellowship sought to:

- further scholarly debate within the discipline as to the nature of a responsible and evidence based pedagogy for UG Psychology
- further support the existing APEN/PsyEd education network
- develop and support a National Psychology Graduate Association
- develop and support local and national students organisations in Psychology
- develop and support local and national trans-disciplinary networks with a general or specific focus on academic standards and quality
- develop opportunities for international and trans-disciplinary benchmarking of UG Psychology Education, with particular focus on approaches to the development and assessment of psychological literacy and global citizenship
- develop and support local and national trans-disciplinary networks whose focus is global education and/or global citizenship.

2. Purpose of this Evaluation

2.1. Why the evaluation is being undertaken

The primary purpose of this evaluation is:

- To determine the extent to which the aims and intended outcomes of the Fellowship have been achieved

In addition, the evaluation will seek:

- To determine if there were any unintended outcomes of the Fellowship
- To determine any factors that helped or hindered the achievement of the outcomes
- To determine what measures, if any, have been put in place to promote sustainability of the Fellowship's focus and outcomes
- To determine what lessons have been learned from this Fellowship and how these might be of assistance to others?

2.2. Key stakeholders for the Fellowship and for the outcomes of this evaluation

The key stakeholders for the Fellowship and for the outcomes of this evaluation are:

- The Office of Learning and Teaching
- The Fellow
- The Fellow's Institution
- The Discipline of Psychology
- Any local, national or international individuals, networks or organisations with an interest in the development of UG Psychology curricula, or the development and assessment of Psychological Literacy and Global Citizenship as GAs or SLOs.

3. Evaluation Questions

- To what extent have the aims and desired outcomes of the Fellowship been achieved?
- Were there any unintended outcomes of the Fellowship?
- What factors helped or hindered the achievement of the Fellowship's outcomes?
- What measures, if any, have been put in place to promote sustainability of the Fellowship's focus and outcomes?
- What lessons have been learned from this Fellowship and how might these be of assistance to others?

4. Evaluation Criteria, Indicators and Evidence

The indicators and evidence used to evaluate “the extent to which the Fellowship’s aims and intended outcomes have been met” are included in the Table 1 below. This is a modification of the original table submitted by the Fellow as part of her original Fellowship application.

Table 1
Fellowship Outcomes, Indicators and Possible Evidence of Achievement

	Desired Outcome	Indicator for Evaluation (evidence)
1	Greater appreciation of international issues (US, UK, Europe) with respect to the definition and adoption of aims (Graduate Attributes), Student Learning Outcomes (SLOs), and Standards for UG Psychology programs	<ul style="list-style-type: none"> • Substantial contributions to international meetings with a focus on the definition and adoption of aims (Graduate Attributes), Student Learning Outcomes (SLOs), and Standards • Substantial contributions to the scholarly literature on the definition and adoption of aims (Graduate Attributes), Student Learning Outcomes (SLOs), and Standards for UG Psychology programs
2	Greater appreciation of national issues and their influence on peak disciplinary bodies with respect to the definition and adoption of aims (Graduate Attributes), Student Learning Outcomes, and Standards for UG Psychology	<ul style="list-style-type: none"> • Substantial contributions to national meetings with a focus on the definition and adoption of aims (Graduate Attributes), Student Learning Outcomes (SLOs), and Standards • Substantial contributions to the scholarly literature on the definition and adoption of aims (Graduate Attributes), Student Learning Outcomes (SLOs), and Standards for UG Psychology programs
3	Greater appreciation of trans-disciplinary issues with respect to the definition and adoption of aims (Graduate Attributes), Student Learning Outcomes, and Standards for UG Psychology	<ul style="list-style-type: none"> • Substantial contributions to meetings and networks with a focus on the definition and adoption of aims (Graduate Attributes), Student Learning Outcomes (SLOs), and Standards • Substantial contributions to the scholarly literature on the definition and adoption of aims (Graduate Attributes), Student Learning Outcomes (SLOs), and Standards for UG Psychology programs
4	Greater acceptance of GA’s (particularly those developed for UG Psychology) as Threshold (Student) Learning Outcomes	<ul style="list-style-type: none"> • The further implementation of GA’s as Threshold Student Learning Outcomes in the accreditation and other standards of national Psychology bodies
5	Greater acceptance of Psychological Literacy and Global Citizenship as key outcomes of UG psychology education and of trans-disciplinary education	<ul style="list-style-type: none"> • UG Network members’ positive ratings with respect to this commitment • Testimony by UG Network members that PL and GC development and assessment is being embedded in their UG curriculum • Possible changes to National Psychology Standards to support the further development of PL and GC
6	Innovative learning, teaching and assessment resources relevant to Psychological Literacy and Graduate Attributes	<ul style="list-style-type: none"> • A substantial number of resources on ALTC Exchange and APS websites, which will have passed the quality review by the APEN Executive • Ratings by UG Network members of these resources, as well as their actual and intended use of such resources • “Hit” rates on these resources

	Desired Outcome	Indicator for Evaluation (evidence)
7	Ongoing scholarly debate within the discipline as to the nature of a responsible and evidence based pedagogy for UG Psychology	<ul style="list-style-type: none"> • A quality-rated document outlining that pedagogy, that is positively rated by UG Network members (including rated actual and likely adoption) and that is endorsed by discipline leaders; the document will be made available on relevant websites for adaptation to different program contexts • Possible impact in international and trans-disciplinary contexts, as indicated by, e.g., invitations to collaboratively adapt the pedagogy for other disciplines; invitations to speak about the pedagogy
8	Increased support for/involvement in the APEN/PsyEd education network	<ul style="list-style-type: none"> • Number of meetings, number of attendees • Ratings by attendees as to value of meetings • Number of attendees who become APEN/PsyEd members by the end of 2012
9	Creation of a National Psychology Graduate Association	<ul style="list-style-type: none"> • Endorsement by and support from APS • Establishment of society structures • Number of members by end of 2012 • Extent of engagement by members with this Initiative (e.g., through commentary on Guidelines development)
10	Support of local and national Psychology Student Organisations	<ul style="list-style-type: none"> • Acknowledgement of the APS that it needs to support a national psychology student organisation • Guidelines for the development of such organisations • Web based materials and resources for students on PL
11	Support of local and international trans-disciplinary networks with a general or specific focus on academic standards and quality	<ul style="list-style-type: none"> • Number of engagements with such networks in relation to the development and assessment of academic standards and quality • Feedback from members of these networks regarding the contributions made to same
12	Engagement in international and trans-disciplinary benchmarking in relation to UG Psychology education with particular focus on approaches to the development and assessment of PL and GC	<ul style="list-style-type: none"> • Contributions to benchmarking activities of international and trans-disciplinary organisations with an interest in Psychology education and/or the development and assessment of PL and GC • Invitations to contribute to international psychology organisations/conferences and/or contribute to or comment on international publications • Commentary by evaluators on these contributions
13	Development and Support of local and national trans-disciplinary networks whose focus is global education and/or global citizenship	<ul style="list-style-type: none"> • A document on the implications of this Initiative for the development of academic standards generally (i.e., beyond psychology), and global citizenship specifically; extent of dissemination of this document (e.g., as indicated by “hit” rates on website) • Contributions to trans-disciplinary workshops on the topics related to the development and /or assessment of global citizenship

	Desired Outcome	Indicator for Evaluation (evidence)
		<ul style="list-style-type: none"> • Evaluation of trans-disciplinary workshops on the topics related to the development and /or assessment of global citizenship

5. Findings

5.1. In Relation to Achievement of the Aims and Desired Outcomes of the Fellowship

Overall, ***the vast majority of the aims and desired outcomes of this Fellowship have been met.*** As one would expect, due to the turbulent nature of the contexts in which Fellowships are conducted, the extent to which *particular* aims have been realized varies from having fully achieved all facets of an intended outcome to having made relatively little progress. However, overall, it is my view that ***the Fellowship has successfully achieved its aims and objectives.***

This section contains a summary of achievements in relation to each of the Fellowship's Desired Outcomes. However, for a more comprehensive description of the full range of achievements of this Fellowship, see the Final Report 2012, ALTC Fellowship, *National Standards for Psychological Literacy and Global Citizenship: The "Where To" and "What" of Undergraduate Psychology Education*, Jacquelyn Cranney, The University of New South Wales.

5.1.1 **Desired Outcome 1 (DO1): Greater appreciation of international issues (US, UK, Europe) with respect to the definition and adoption of aims (Graduate Attributes), Student Learning Outcomes (SLOs), and Standards for UG Psychology programs**

Achievements:

It is clear from the available evidence that the Fellowship ***has been grounded in and enabled by, ongoing engagement with international efforts to address the central issues that are the focus of the Fellowship.*** In particular, there is evidence that the *Fellowship has informed, and been informed by,* work that is currently being done in the *United States* (e.g., to work being done by the Society for Teaching of Psychology, Division 2 of the American Psychological Association), the *United Kingdom* (e.g., the work being done by the UK Higher Education Academy) and *Europe* (e.g., the work being done as part of the EuroPsy Tuning process).

Substantial contributions to the scholarly literature and to international meetings with a focus on UG Psychology education and the definition and adoption of aims (GAs), SLOs, and standards for same, have helped to ensure that the work being done in Australia and via this Fellowship, informs and is informed by, debate and approaches being taken elsewhere.

Some of the particular contributions of the Fellow in relation to this outcome include:

- Substantial contributions to the content of the 4th International Conference on Psychology Education (ICOPE), Sydney, July 2010.

- Substantial contributions to the content of an edited book on psychological literacy—particularly those chapters that discuss/compare international developments/issues in this area
- Facilitation of a retreat jointly sponsored by the British Psychological Society, the HEA Psychology Network, and the Association of Heads of Psychology Departments, on the Future of UG Psychology in the United Kingdom
- Dissemination of information concerning international developments/issues in this area through meetings, conferences, fora/symposia, summits, and workshops within and outside higher education institutions in Australia, US, UK and Europe.

Finding: ***The available evidence suggests that DO1 has been achieved.***

5.1.2 **Desired Outcome 2: Greater appreciation of national issues and their influence on peak disciplinary bodies with respect to the definition and adoption of aims (Graduate Attributes), Student Learning Outcomes, and Standards for UG Psychology**

Achievements:

It is clear from the available evidence that the activities associated with this Fellowship ***have had a significant impact on raising the awareness of national issues*** and their influence on the definition and adoption of aims (GAs), SLOs, and standards for UG Psychology.

The Fellow's membership (and sometimes leadership) of key national discipline societies, networks, committees, and working groups have provided her with considerable opportunity to develop her own and others' appreciation of national issues and trends that influence and are influenced by the definition and adoption of aims (GAs), SLOs, and standards for UG Psychology.

In particular, her membership of the PDAC has enabled her to ensure that discussion of UG Psychology has been a key element of this Committee's agendas for more than half of their meetings throughout 2011 and 2012.

Her membership of the UG subcommittee of NPETRG has provided important opportunities for the Fellow to engage national policy and decision makers within the discipline in a consideration of the issues associated with the future direction and development of UG Psychology education, its aims, learning objectives, and the standards that should be applied to the assessment of student learning.

Substantial contributions to national meetings of the HODSPA have also enabled the Fellow to raise awareness, amongst the key institutional stakeholders with the responsibility and opportunity to change UG Psychology curriculum in Australian universities, of the issues associated with the definition and adoption of aims (Graduate Attributes), Student Learning Outcomes (SLOs), and Standards for UG Psychology programs.

Other contributions of the Fellow in relation to the achievement of this outcome include:

- Establishment of the Undergraduate Subcommittee of PDAC

- Chairing the psychological literacy working group of PIFoPS
- Membership of the Undergraduate Subcommittee of NPETRG
- Keynote speaker at two meetings of HODSPA
- Key note speaker at meetings of SARAG
- Dissemination and sharing of information relevant to the definition and adoption of aims (Graduate Attributes), Student Learning Outcomes (SLOs), and Standards for UG Psychology programs through various other meetings, conference forums/symposia, summit, and workshops

Finding: ***The available evidence suggests that DO2 has been achieved***, although to varying extents amongst different stakeholder groups.

5.1.3 **Desired Outcome 3: Greater appreciation of trans-disciplinary issues with respect to the definition and adoption of aims (Graduate Attributes), Student Learning Outcomes, and Standards for UG Psychology**

Achievements:

It is clear from the available evidence that the activities associated with this Fellowship ***have had a significant impact on raising the awareness of trans-disciplinary issues*** and their influence on the definition and adoption of aims (GAs), SLOs, and standards for UG Psychology.

As the Vice-President of Australian Learning and Teaching Fellows group (a group comprising Fellows from a wide variety of different disciplinary backgrounds), the Fellow has been closely involved in developing agendas for the group's regular fora that have focused on issues associated with the definition and adoption of standards and assessment in a wide range of disciplines.

Through this and a range of other roles that have included being an invited speaker in a range of different national and international workshops, seminars and/or fora on standards; a member of national and international reference groups/working parties (e.g., Heath LTAS), to more sustained local service/administrative positions (e.g., as a member of the UNSW Academic Board and its Committee on Education), the Fellow has made significant contributions to the development of a greater appreciation of the commonalities and differences amongst disciplines and professions regarding the definition and adoption of standards.

Finding: ***The available evidence suggests that DO3 has been achieved.***

5.1.4 **Desired Outcome 4: Greater acceptance of GAs (particularly those developed for UG Psychology) as Threshold (Student) Learning Outcomes**

Achievements:

It is clear from the available evidence that the leadership provided via the activities associated with this Fellowship ***have had a positive impact on the acceptance of***

GAs (particularly those developed for UG Psychology), as Threshold (Student) Learning Outcomes.

While the GAs developed for Psychology as part of the preceding Associate Fellowship had been accepted and included in APAC standards as minimal or Threshold Student Learning Outcomes, there is evidence from this Fellowship that, particularly amongst Heads of School, full acceptance of the GAs beyond those concerning discipline knowledge and research (or scientific literacy), is yet to be achieved.

However, through the activities of this Fellowship, with its focus on a re-examination of the aims of UG psychology education, the relevance of GAs to the development of standards or Threshold Student Learning Outcomes for UG psychology programs remains a keenly debated topic within the discipline.

Evidence for this can be found amongst the activities and discussion of the April 2012 UG Psychology Education Summit where one of the principal activities was a revision of the current SLOs included in APAC's Standards, and another was an attempt to create "standards based assessment" statements for the Threshold Student Learning Outcomes associated with each revised Graduate Attribute. Further evidence for a growing acceptance of GAs (particularly those associated with Psychological Literacy and Global Citizenship) as Threshold (Student) Learning Outcomes in UG Psychology can be found in:

- the positive ratings of the original GAs by the 2010 APEN Meeting participants
- Refinement of GA assessment requirements for APAC accreditation
- the outcomes of the 2012 Summit, where it was recommended that the revised list of GAs and their associated Threshold Student Learning Outcomes be submitted to the APAC Standards Review to determine if they should be adopted as part of their developing standards framework.

Finding: *The available evidence suggests that DO4 has been achieved*, despite the fact that there remains stronger support from disciplinary leaders involved in setting the standards for UG Psychology Education than from Heads of School and others responsible for their implementation.

5.1.5 Desired Outcome 5: Greater acceptance of Psychological Literacy and Global Citizenship as key outcomes of UG psychology education and of trans-disciplinary education

Achievements:

One of the main achievements of this Fellowship has been the development and adoption of the new concept of "Psychological Literacy" and its relationship to "Global Citizenship". As two of the key GAs defined for UG Psychology education, a shared understanding of these terms and the relationships between them is required as a basis upon which to develop SLOs and assessment standards.

It is clear from the available evidence that the Fellowship has played a major role in the development, dissemination, acceptance and adoption of these terms within and beyond the discipline of psychology. Some of the evidence that supports this finding includes:

- the hit rate on psychological literacy website www.psychologicalliteracy.com which

was created explicitly to develop a global presence and common understanding of the term

- UG Network members' positive responses with respect to their intention to integrate Psychological Literacy and Global Citizenship into curriculum
- Evidence of efforts being made to integrate PL and/or GC into UG curriculum both in Psychology and other disciplines at Monash University, University of South Australia, Griffith University, James Cook University, University of New South Wales
- Developing changes to National Psychology Standards to include the development and assessment of PL and GC as two key elements of UG Psychology education
- Evidence of other national and international institutions and bodies (e.g., in the UK) integrating PL into their curriculum, pedagogy, or standards—both in Psychology and elsewhere (e.g., Law)

Finding: *The available evidence suggests that while much remains to be done, DO5 has been achieved.*

5.1.6 Desired Outcome 6: Resources to support innovative curriculum strategies for the development and assessment of Psychological Literacy and Global Citizenship

Achievements:

One of the main achievements of this Fellowship in addition to those associated with its desired outcomes, was its success in adapting to the changing circumstances of the ALTC, in particular, the closure of the ALTC Exchange website, which had been identified in the original Fellowship application as the likely repository for all resources developed during the Fellowship.

As one of the principal mechanisms by which practitioners would share resources and good practices in the development and assessment of Psychological Literacy and Global Citizenship it was essential for the success of the Fellowship that a viable and sustainable alternative be found. After overcoming some barriers related to IP and access to the website, it was agreed that the most appropriate solution was to make these resources publically available through the Australian Psychological Society (APS) website.

To stimulate interest in the development of resources for the site, the Fellowship funded an APS sponsored competition, whereby the winners (those that were deemed to have developed high quality learning, teaching and /or assessment resources for PL and GC) were supported to present their work at the annual APS conference. Thirty entries were received and many of these are now available on the site <http://www.groups.psychology.org.au/GroupContent.aspx?ID=4588>. To boost the number of resources on the website and to promote quality LTA strategies for GA and PL development, the PsyEd, with the support of this Fellowship has formulated a proposal to APS to support similar annual competitions in the future.

In addition to the above, the Fellowship has developed resources on the possible design and use of capstone courses in UG Psychology programs, yet to be published on the website.

As yet hit rates on the site are not available so it is difficult to gauge the extent to which the site and its resources are be utilized.

Finding: The available evidence suggests that while much has been achieved in relation to this desired outcome, the challenge ahead will be to maintain interest within the discipline in the development of such resources.

5.1.7 Desired Outcome 7: Ongoing scholarly debate within the discipline as to the nature of a responsible and evidence based pedagogy for UG Psychology

Achievements:

One of the major achievements of this Fellowship has been the stimulation of scholarly debate within the discipline nationally and internationally as to the nature of a responsible and evidence based pedagogy for UG Psychology and of the place of psychological literacy within such a pedagogy. This has been achieved through:

- **the publication of a range of strategic scholarly works including:**

Books

Cranney, J., & Dunn, D. (Eds.) (2011). *The psychologically literate citizen: foundations and global perspectives*. New York: Oxford University Press. ISBN-13: 978-0-19-979494-2

McCarthy, S., Dickson, L., Cranney, J., Karandashev, V. & Trapp, A. (Eds.) (2012). *Teaching psychology around the world: volume 3*. Newcastle on Tyne, UK: Cambridge Scholars Press.

Book Chapters

Cranney, J., Morris, S., Krochmalik, A., & Botwood, L. (in press). Assessing psychological literacy. In D. S. Dunn, S.C. Baker, C.M. Mehrotra, R.E. Landrum, & M. A. McCarthy, (Eds.). *Assessing teaching and learning in psychology: Current and future perspectives*. Cengage.

Cranney, J., & Dalton, H. (2012). Optimising adaptive student behaviors. In Groccia, J., Alsudary, M., & Buskist, B. (Eds.). *Handbook of college and university teaching: Global perspectives*. Pp. 60-76. Los Angeles: Sage.

Cranney, J., & Voudouris, N.J. (2012). Psychology education and training in Australia: Shaping the future. In S. McCarthy, K. L. Dickson, J. Cranney, V. Karandashev & A. Trapp (Eds.), *Teaching psychology around the world: Volume 3*. Pp. 2-14. Newcastle on Tyne, UK: Cambridge Scholars Press.

Cranney, J., & McDonald, F. (2012). Evidence-based learning. In N. Seel (Ed.), *Encyclopedia of the sciences of learning* (pp.1185-1188). New York: Springer.

Cranney, J., & Dunn, D.S. (2011). Psychological literacy and the psychologically literate citizen: New frontiers for a global discipline. In J. Cranney and D. S. Dunn (Eds.), *The psychologically literate citizen: Foundations and global perspectives* (pp.3-12). New York: Oxford University Press.

Cranney, J., Morris, S., Martin, F., Provost, S., Zinkiewicz, L., Reece, J., Milne-Home, J., Burton, L., White, F., Homewood, J., Earl, J., & McCarthy, S. (2011). Psychological Literacy and applied psychology in undergraduate education. In

J. Cranney and D. S. Dunn (Eds.), *The psychologically literate citizen: Foundations and global perspectives* (pp. 146-164). New York: Oxford University Press.

Cranney, J., & Morris, S. (2011). Adaptive cognition and psychological literacy. In J. Cranney and D. S. Dunn (Eds.), *The psychologically literate citizen: Foundations and global perspectives* (pp.251-268). New York: Oxford University Press.

Cranney, J., & Dunn, D.S. (2011). What the world needs now is psychological literacy. In J. Cranney and D. S. Dunn (Eds.), *The psychologically literate citizen: Foundations and global perspectives* (pp.322-336). New York: Oxford University Press.

Conference Papers

Cranney, J., Morris, S., & Spehar, B. (2012, September). *The role of capstone experiences in scientific literacy, employability and global citizenship*. Paper to be presented at the 47th Annual Conference of the Australian Psychological Society, Perth, September 27-30, 2012.

Cranney, J. & Morris, S. (2012, July). New developments in psychological literacy. In J. Cranney (Chair), *Psychological literacy as a global outcome of undergraduate psychology education*. Symposium to be conducted at International Congress of Psychology, Cape Town South Africa.

Cranney, J., Morris, S., & Spehar, B. (2012, July). The role of capstone experiences in scientific literacy, employability and global citizenship. In J. Bryan & R. Ranzijn (Chairs), *Innovations in developing graduate work-readiness capabilities*. Symposium to be conducted at International Congress of Psychology, Cape Town South Africa.

Cranney, J., & Morris, S. (2012, July). Psychological literacy and global citizenship. In V. Karandashev (Chair), *Globalization of Psychology Education: Challenges and Promises*. Symposium to be conducted at International Congress of Psychology, Cape Town South Africa.

Cranney, J., Morris, S., Spehar, B., & Botwood, L. (2012, May). *From National Standards to Capstone Courses: Challenges in Designing Standards-Based Assessment*. Poster presented at the Learning and Teaching Forum, UNSW, May 11, 2012.

Cranney, J. (2011, October). *The aims of UG psychology and curriculum renewal*. Forum presented at the 46th Annual Conference of the Australian Psychological Society, Canberra, October 4-8, 2011.

Cranney, J. (2011, October). Introduction to psychological literacy. In J. Cranney (chair), *Innovative learning, teaching and assessment strategies for psychological literacy*. "How To" Session conducted at the 46th Annual Conference of the Australian Psychological Society, Canberra, October 4-8, 2011.

Cranney, J. (Chair). (2011, October). *Building the capacity of undergraduate students*. Symposium conducted at the 46th Annual Conference of the Australian Psychological Society, Canberra, October 4-8, 2011.

Cranney, J. (2011, August). Psychological literacy as a transformative global perspective. In D. Dunn & J. Cranney (Chairs), *Should psychological literacy be the primary outcome of undergraduate education?*, Symposium conducted at the 119th Convention of the American Psychological Association, August 4-7, Washington D.C., USA.

Cranney, J., Morris, S., & Jeong, J.M. (2011, July). *Positivity strategies as part of the first-year psychology curriculum*. Poster presented at the 2nd World Congress on Positive Psychology, July 23-26, Philadelphia, USA.

Cranney, J., & Morris, S. (2011, July). *Psychological literacy and adaptive cognition in a first-year university curriculum*. Poster presented at the 34th Annual International HERDSA Conference, July 4-6, 2011, Radisson Resort, Gold Coast, Australia.

Cranney, J., Morris, S., & Jeong, J.M. (2011, April). Psychological literacy and adaptive cognition. In J. Cranney (Chair), *Psychological literacy and global citizenship: Why should psychology educators care?* Symposium conducted at the American Education Research Association Annual Conference, April 8-12, New Orleans.

Cranney, J., & Morris, S. (2010, July). Hard science and soft heads: Critical and creative thinking in the context of first year group research projects. In J. Reece (Chair), *Innovations in learning and teaching*. Symposium conducted at the 27th International Congress of Applied Psychology, July 11-16, 2010, Melbourne.

Cranney, J., Trapp, A., Sarwono, S., McCarthy, S., & Skinner, N. (2010, July). *Global perspectives on undergraduate psychology education: Should we be changing our game?* Forum at the 27th International Congress of Applied Psychology, July 11-16, Melbourne.

Martin, F., Provost, S., Cranney, J., & Nosworthy, V. (2010, July). Resources to support quality tertiary learning and teaching of psychology in Australia. In V. Karandashev (Chair), *Towards Providing Global Teaching Resources for Quality Psychology Education*. Symposium conducted at the 4th International Conference on Psychology Education, Sydney, Australia. Retrieved 14 July, 2011, from <http://icope2010.psy.unsw.edu.au/program/Martin%20et%20al.pdf>

Cranney, J. (2010, July). Introduction to psychological literacy. In J. Cranney (Chair), *Psychological literacy and global citizenship: Why should psychology educators care?* Symposium conducted at the 4th International Conference on Psychology Education, Sydney.

- **Contributions to scholarly conferences, meetings including:**

- **Keynote Addresses**

Cranney, J. (2012, November). *Student success, psychological literacy, and global citizenship*. Invited Keynote Address to be presented at the 23rd Annual Conference of the ISANA International Education Association, Auckland, New Zealand, December 4-7, 2012.

Cranney, J. (2011, July). *Why psychological literacy should be the primary outcome of undergraduate psychology education*. Invited Keynote Address at the International Conference on Teaching of Psychology, July 29-31,

Vancouver.

Invitations to Facilitate or Speak at Workshops/Retreats (July 2010-June 2012)

Charles Darwin University Psychology Discipline (K.Moore, A. Reedy). (2010) I undertook an extensive peer review of undergraduate psychology education, with a subsequent confidential report focussing on LTA strategies for the development of GAs. August 18-20, 2010, Darwin, Australia.

UK Higher Education Academy Psychology Network (A.Trapp). (2010). I facilitated the two-day retreat on the future of UG psychology Education in the UK, as well as giving a talk on Australian undergraduate education, November 30-December 1, 2010, Chicheley Hall, England.

Cranney, J. (2011). National standards for psychological literacy and global citizenship. In C. Ewan (Chair), *EU-Australia Tuning Seminar*, February 14, 2011, Sydney, Australia.

Cranney, J. (2011). National standards for psychological literacy and global citizenship. In B. Oliver (Chair), *Networking in standards-related projects ALTC workshop*, August 11, 2011, Sydney, Australia.

Monash University School of Psychology (W. McKenzie, S. Rajaratnam). (2011). Psychological Literacy, APAC Standards & Graduate attributes for Undergraduate Psychology. Keynote presentation at the "Future Directions in Undergraduate Psychology at Monash" Workshop, December 8, 2011, Melbourne, Australia.

James Cook University School of Psychology (K. Martinez). (2011) Psychological literacy as an outcome of undergraduate psychology education. Keynote presentation at the "Undergraduate Psychology Education Review" Workshop, December 14, 2012, Cairns, Australia.

Southern Queensland University School of Psychology (T. Machin). (2012). Psychological literacy as an outcome of undergraduate psychology education. Keynote presentation at the "Undergraduate Psychology Education Review" Workshop, June 25, 2012, Toowoomba, Australia.

Discussion Papers/Policy:

Cranney, J., & Botwood, L. (2012). *Review of the aims, outcomes and accreditation standards for Australian undergraduate psychology education: Green paper for discussion*. [Available on PsyEd website]

Cranney, J., et al. (2012) *UNSW Global Education: Issues and Discussion Paper*. [Chair of the Academic Board Working Party, 2012].

Other reports of events/networks:

Cranney, J., & Botwood, L. (2012). April 2012 Undergraduate Psychology Education Summit: Report. UNSW. [Will be available on PsyEd website.]

Cranney, J. (2011, April). APS grant supports international conference on psychology education. *Observer*, 24 (4). Retrieved from <http://www.psychologicalscience.org/index.php/publications/observer/2011/april-11/aps-grant-supports-international-conference-on-psychology-education.html>.

Cranney, J., Zhang, S., Martin, F., & Zinkiewicz, L. (2010). Advancing teaching and learning in psychology. *InPsych*, 32, 26-27. Retrieved 23 December, 2010, from <http://www.psychology.org.au/publications/inpsych/2010/june/cranney/>

Cranney, J. (2012 in prep) *National Standards for Psychological Literacy and Global Citizenship: The "Where To" and "What" of Undergraduate Psychology Education*. Office for Learning and Teaching National Teaching Fellowship final report.

Finding: *The published reviews of and responses to these contributions, feedback from participants in the conferences and meetings in which these contributions have been made, and the changes that national and international bodies responsible for psychology education have made or are debating making to UG Psychology pedagogy in response to the challenges and issues raised in these publications, presentations and fora, collectively provide good evidence that this desired outcome has been achieved.*

5.1.8 Desired Outcome 8: Increased support for/involvement in the APEN/PsyEd education network

Achievements:

To increase engagement with the APEN/PsyEd, most of the meetings, conferences and symposia conducted as part of this Fellowship were run under or in conjunction with this banner. In total **16** meetings/conferences/symposia were held with a total of approximately **775** people attending/participating.

Feedback from attendees/participants as to value of these events meetings was positive.

Finding: *The available evidence suggests that DO8 has been achieved.*

5.1.9 Desired Outcome 9: Creation of a National Psychology Graduate Association

Achievements:

Initial consideration of the issues associated with the creation and maintenance of such an association indicated that a national organization would not be successful unless strong university-based chapters were created and sustained. The Fellowship, therefore, adopted a strategy of focusing on the development of such an organisation at the local level, using the Fellow's home institution as a pilot site, as the first stage of a longer-term endeavor to create the proposed national association.

As a first stage in the development of the local Psychology Graduate Association at UNSW, the Fellow engaged a range of stakeholders in the development of a draft set of guidelines for the establishment of such an organization. Support for the establishment of such an organization at UNSW was garnered, and the organization established, with positive feedback and engagement from key stakeholder groups.

One of the key purposes in establishing psychology graduate associations was to create ongoing opportunities for members to inform debate about the aims and outcomes of UG Psychology education. To this end, pilot surveys have been developed and implemented as means of providing members of the fledgling UNSW Psychology Graduate association and employers of psychology graduates with opportunities to contribute to current debates within UNSW and beyond about the aims and outcomes of UG Psychology education. Draft reports on each of these surveys have been prepared.

In addition, the Fellow was invited to attend the June 21, 2012 Meeting of the UNSW School of Psychology Executive Committee, which consists of selected psychology employers (some graduates) within the region. The Fellow is in the process of gathering a response from these stakeholders regarding suggested career outcomes of UG education.

Finding: The available evidence suggests that within the revised parameters described above DO9 has been achieved.

5.1.10 Desired Outcome 10: Support of local and national Psychology Student Organisations

Achievements:

The major achievements of the Fellowship in relation to this desired outcome include:

- Acknowledgement by the Australian Psychological Society (APS) that it needs to support a national psychology student organization as evidenced by its agreement to:
 - Involve the President of the UNSW Psychological Society on the APS Membership Advisory Group
 - establish a student section on the APS website
- The development of draft guidelines for establishing such organisations

As with the establishment of Psychology Graduate Associations, the formation of local and national student organisations was, in part, to create ongoing opportunities for current students to inform debate about the aims and outcomes of UG Psychology education. However, it was also intended that such organisations would provide an additional mechanism by which to inform and engage current students with the concept of Psychological Literacy.

In accord with these aims, the Fellowship has:

- surveyed a sample of UG Psychology students from six universities throughout Australia, seeking data related to their current goals for and experiences of UG psychology programs; their level of awareness of, and engagement with, the concepts of Psychological Literacy; and their views as to how UG psychology education should evolve/develop in the future

- published, on the UNSW Psychology website materials and resources for students on Psychological Literacy

Finding: *The available evidence suggests that while much remains to be done, DO 10 has been achieved.*

5.1.11 Desired Outcome 11: Support of local and international trans-disciplinary networks with a general or specific focus on academic standards and quality

Achievements:

Evidence of support of local and international trans-disciplinary networks with a general or specific focus on academic standards and quality includes:

- Support for the trans-disciplinary team responsible for the design and development of the Diploma of Professional Practice (DPP) at UNSW and the development of aims and standards for developing and assessing Psychological literacy as part of Global Citizenship within that program
- Support of the establishment of the Australian Learning and Teaching Fellows (ALTF) association (currently Vice-President), and their Forums, which always have standards and assessment as a theme.
- Support for the organization and facilitation of the Sydney ALTC Roundtable (with UNSW PEI), which allowed NSW participants to network and learn how to apply for an ALTC grant.
- Support for the ALTF's efforts to argue in the national arena for the continuation of the ALTC's tradition of supporting, recognizing and rewarding collaborative, cross-institutional research and development of learning and teaching

Further evidence for the support provided to local and international trans-disciplinary networks with a general or specific focus on academic standards and quality via this Fellowship includes:

- the number of engagements with such networks in relation to the development and assessment of academic standards and quality: **24** in total throughout the Fellowship
- the positive feedback from members of these networks regarding the contributions made to same.

Finding: *Based on the available evidence it is clear that this Fellowship has made considerable progress in achieving DO 11.*

5.1.12 Desired Outcome 12: Engagement in international and trans-disciplinary benchmarking in relation to UG Psychology education with particular focus on approaches to the development and assessment of PL and GC

Achievements:

Much of the evidence that attests to the Fellow's engagement in international and trans-disciplinary benchmarking in relation to UG Psychology education with particular focus on approaches to the development and assessment of PL and GC is outlined in DO1 and DO3 above. However, in addition to this, it is worth noting that the Fellow:

- has provided a keynote address on these issues at the 2011 ICTP meeting
- continues to receive invitations to speak at international and trans-disciplinary meetings on these topics (e.g, ISANA in December 2012)
- has been invited to join established (e.g., Psychology Learning and Teaching) and new (e.g., Teaching and Learning Inquiry: The ISSOTL Journal) editorial boards that have an interest in publications relevant to the development and assessment of Psychological Literacy and Global Citizenship.

Finding: *The available evidence suggests that DO 12 has been realised.*

5.1.13 Desired Outcome 13: Development and support of local and national trans-disciplinary networks whose focus is global education and/or global citizenship

Achievements:

Evidence of developing and supporting local and national trans-disciplinary networks whose focus is global education and/or global citizenship includes:

- the establishment of a Global Citizenship @ UNSW Community of Practice
- the organisation and facilitation of a workshop on Global Citizenship convened by A/Professor Betty Leask from the University of South Australia
- the leadership of the Academic Board Global Education Working Group at UNSW, which has developed an issues paper to support policy development for Global Education, as well as advancing engagement with U21
- the organization and facilitation of a national ALTC Global Citizenship Workshop which brought together educators from universities across the country to discuss and explore the concept of, and issues associated with Global Citizenship.

Finding: *The available evidence suggests that while much of the work undertaken as part of the Fellowship in respect of DO 12 has been focused on local initiatives and support, the overall desired outcome has been achieved.*

5.2. In Relation to Any Unintended Outcomes of the Fellowship

There were no "out of character" unintended outcomes of this Fellowship. For example, the design and implementation of a capstone course for psychology major students at UNSW was not specified in the original Fellowship application; however this outcome fits with the specified aims, as it provided a demonstration of the pedagogy based on psychological literacy and global citizenship, and raised discussion of the potential for the capstone portfolio being an instrument for cross-

institutional quality benchmarking.

5.3. In Relation to Factors that Helped or Hindered the Achievement of the Fellowship's Outcomes

5.3.1 Factors that Helped Achievement of the Outcomes

Four factors have been identified by the Fellow as being critical to the success of this Fellowship:

- **Sustained stakeholder and network engagement**

From the outset, it was understood that to develop *a forward looking, responsible and evidence based pedagogy* for UG psychology education, widespread and sustained engagement with critical stakeholders locally, nationally and internationally would be critical.

Indeed, the ongoing engagement of bodies like APS PDAC, HODSPA, and the APS PsyEd/APEN, who respectively have the capacity to initiate/effect change (a) in the accreditation standards for Australian Psychology programs, (b) to programs and courses within institutions, and (c) in teaching, has been critical to ensuring that the various perspectives and challenges faced by these groups in relation to any proposed changes were shared, debated and, where possible, mutually resolved.

- **Ongoing critical reflection on and response to the contributions/ideas/issues/and feedback from stakeholders and participants in Fellowship activities**

How to change UG Psychology education and what role the concept of Psychological Literacy might play in it, are highly contestable questions. Different stakeholder groups, depending on their everyday roles, responsibilities and involvement in psychology education hold different views as to how to resolve these issues. Listening carefully and critically to these different views and using them to guide the planning (focus, structure, prioritization and process) of future Fellowship activities, helped to ensure the ongoing engagement and contributions of all key stakeholder groups.

- **The extension of time granted by the ALTC**

Given the large number of critical stakeholder groups with an interest in the aims and outcomes of this Fellowship, having sufficient time to engage and work with them was critical to the success of the Fellowship. While most, but certainly not all of these stakeholders are represented by various local, national, or international Committees, Working Groups, Advisory Boards and the like, the most efficient way for the Fellowship to engage with them was through their regular schedules of meetings. This posed many logistical challenges for the Fellowship in relation to the scheduling of Fellowship events around these meetings, but the extended timeframe afforded the Fellowship proved to be significant in assisting the Fellow to resolve these dilemmas.

- **The level of funding available to support the Fellowship**

The amount of logistical planning involved to accommodate the diverse needs of the Fellowship, and of its associated local, national, and international stakeholder groups, coupled with the effort required to design, develop, implement and evaluate Fellowship programs, activities, and resources, made the establishment of an organizational infrastructure comprising a part-time Project Officer and two part-time research assistants essential. The funding provided by the ALTC to support both the activities of the Fellowship and the establishment and maintenance of this organisational and administrative infrastructure was therefore essential to the success of the Fellowship.

5.3.2 Factors that have Hindered Achievement of the Outcomes

Four factors have been identified by the Fellow as having hindered achievement of the outcomes of this Fellowship:

- **The pace at which National Bodies can respond to change**

Due to the widespread range of issues and interests to which national disciplinary bodies must attend, the pace of change associated with such bodies is often slow. While having agreed to the need to restructure to support the creation of a National Psychology Student Body, the Australian Psychological Society (APS) has been slow to effect this change, and one of the critical elements/levers necessary to develop, support and maintain a National Psychology Student Body has not been realized, thus limiting the opportunity for this Fellowship to fully realize this particular outcome.

- **The level of administrative support available particularly in the final months of the Fellowship**

The final months of any major undertaking like a Fellowship are often very challenging as it is at these times that the final outcomes of a project are being realized, summative evaluation and reporting of these outcomes and achievements are undertaken and disseminated, and the organizational and administrative infrastructures established to facilitate such projects are dismantled or integrated into existing institutional structures and processes. These are often times when the level of support required to complete such tasks is higher. In the case of this Fellowship, the lack of opportunity to expand the level of support available to the Fellowship has meant that not all outcomes have been able to be completed to the degree/extent that the Fellow desired.

- **The Contested nature of “standards”**

The fact that the nature of “standards” as they apply to higher education learning and teaching is currently a highly contested concept has, to some extent, slowed down the progress of this Fellowship. Indeed, throughout the period of the Fellowship, as the Fellowship has aimed to engage the psychology community in a reconsideration of the aims and desired learning outcomes for UG Psychology education, the question of what approach the Australian higher education sector will take to the definition and assessment of standards for learning and teaching has raged. Lack of clarity on this issue, has to some extent slowed down the process, but undoubtedly the time and consideration given to this wider debate, has informed the debate more directly associated with the aims of this Fellowship.

- **Unexpected Personal Commitments**

Fellowships like any other human endeavor are susceptible to interruption by

unexpected changes/challenges in personal circumstances and this Fellowship has been similarly affected in that the number of publications that the Fellow had planned on producing during the Fellowship (considerable though the number is) is smaller than they had hoped.

5.4. In Relation to Sustainability of Focus and Outcomes of the Fellowship

A number of strategies have been employed throughout this Fellowship to ensure that the outcomes of this Fellowship are sustained. Not the least of these has been the Fellow's deliberate efforts to engage and utilize existing formal and informal educator networks in the work of the Fellowship. This approach has resulted in many of these bodies taking decisions, developing agendas, and establishing plans to effect changes that align directly with the aims and intended outcomes of the Fellowship. The fact that these bodies are the key national and international discipline bodies responsible for the development of policy and standards in the discipline will help to ensure that the aims, objects and issues associated with the Fellowship continue to be addressed.

Evidence of the positive impact of these strategies on the sustainability of the objects of this Fellowship includes:

- there is growing (though as yet not universal) agreement across peak disciplinary bodies that an increased emphasis on application and employability is needed in UG psychology education
- there is increasing acceptance and use of the term "psychological literacy" within the discipline
- Departments/Schools of Psychology in Australia are reviewing their programs with the aim of addressing issues raised in the Fellowship, and many are already implementing innovative LTA to address issues raised during the Fellowship
- the Fellow continues to be invited to contribute to national and university discussions regarding this issue.
- the Fellow remains committed to this cause.

5.5. Lessons Learned

The Fellow has indicated that the lessons learned during this Initiative relate to motivation and flexibility, change management and stakeholder engagement:

- The Fellowship experience is unique, and one must be willing to make the most of every opportunity, particularly in a rapidly changing HE environment
- Regardless of how one has planned the Fellowship activities, there is a background of ongoing activity relevant to professional activities that cannot be ignored, but needs to be balanced and leveraged whenever possible for the Fellowship
- To achieve some balance, one must be highly motivated to achieve the aims of the initiative
- To achieve change, one must be willing to engage with, understand and respond to stakeholders, but at the same time have the courage of conviction to (a)

modify one's original agenda if necessary, but also (b) lead the change, regardless of (some) dissenting voices.

6. Conclusions and Recommendations

6.1 Conclusions

Overall, the available evidence supports the conclusion that **the Fellowship has not only substantially achieved all of its desired outcomes, but that it has substantially achieved most its overall aims.**

Undoubtedly, as a result of the activities of this Fellowship there is a growing widespread debate amongst psychology educators locally, nationally and internationally as to:

- *how UG psychology education needs to change* to meet current and future needs of students
- *the standards that should be applied* when planning and evaluating UG Psychology education
- *the relevance and role of the concepts of “Psychological Literacy” and “Global Citizenship”* in UG Psychology education and other disciplinary or trans-disciplinary contexts

Further, it is clear that as a result of the activities of this Fellowship that existing and newly created *local, national and international* networks of psychology educators have been, and remain, committed to engagement with these issues.

From a process perspective, the available evidence suggests that **the Fellowship has been well managed and that the funding allocated to support the Fellowship has been used appropriately and well.**

6.2 Recommendations

6.2.1 Recommendations for Future Fellows

To support sustainability of the processes and outcomes of Fellowships, where possible, it is recommended that Fellows:

- build the activities of their Fellowships on or around those of the formal organisations /associations /societies that represent professional, discipline or other key stakeholder groups
- seek to ensure that the ongoing agenda/business of these organisations /associations /societies includes engagement with the issues that are the focus of their Fellowship
- encourage and support the establishment of sub-committees, reference groups, working parties within these organisations /associations /societies to consider/address the issues that are the focus of their Fellowship

To ensure efficient and effective completion of Fellowships, particularly evaluative and reporting activities, it is recommended that Fellows structure their budgets and deploy their resources in such a way that the level of research and/or administrative support available can be expanded at this critical time.

6.2.2 Recommendations for OLT re Future Fellows

To ensure maximum sustainable benefit can be realized from the processes and outcomes of Fellowships, the Office of Learning and Teaching is encouraged to continue to be as flexible as possible in their dealings with Fellows, particularly in relation to extensions of time, to ensure that Fellows might leverage, to the greatest extent possible, the regular schedules of meetings of those professional, discipline, or other organisations /associations /societies representing key stakeholder groups.

July 18, 2012

*Evaluation of ALTC/OLT National Teaching Fellowship
Awarded to Jacquelyn Cranney, PhD*

Dana S. Dunn, PhD
Moravian College

Overview

I was invited by Professor Cranney to write an evaluation of her excellent work during the course of her ALTC/OLT Fellowship. I am delighted to do so. My comments follow the prescribed areas of evaluation, however, my main focus will be to discuss the promise of psychological literacy as the primary outcome of UG education. My comments are apt to reflect the fact that I teach, write, and do research in the USA.

Extent to Which the Fellowship Project Achieved Intended Outcomes

The purposes underlying delivery of quality undergraduate education are being both reviewed and renewed. Stakeholders—college/university faculty and administrators, regents and trustees, government officials, professional organizations and societies, and students and their families—now recognize that much of what is learned in the course of UG education should be applicable to students' subsequent public (career, work) and private (home, family) lives. As the work done by Professor Cranney during her Fellowship attests, particular recognition of this issue has emerged from the psychological community. Two issues stand out: Most UG psychology majors in Australia (and in the US) do not continue further study of psychology for professional careers and there is collective recognition that psychological knowledge gained at the UG level should be applicable to postgraduate life (i.e., in the work place and in community life).

Professor Cranney's research, writing, speaking, and collegial consulting advocate that these two issues be addressed by recognizing a role for psychological literacy (PL) and its connection to the promotion of global citizenship. PL is defined as a general intellectual capacity to adaptively apply principles and findings from psychological science to address personal, professional, and societal needs. In effect, PL addresses how knowledge of psychology can be used in helpful and pragmatic ways to improve daily life in all its spheres. PL is not limited to one nation, rather, it is a construct that promotes global citizenship or how individuals from around the world can share knowledge and cooperation so as to live, work, and prosper together.

Her Fellowship had four aims (see her 2012 final report for in-depth discussion) and Professor Cranney met them (some aspects are still in progress):

- (1) Further development of academic standards for PL and global citizenship occurred;
- (2) Efforts by Professor Cranney, her colleagues, and interested others developed and promulgated creation and discussion of new evidence-based pedagogies linked to (1)—much of this work is on-going;
- (3) Networks of colleagues around the world are discussing, sharing, and implementing PL and global citizenship concerns into their scholarship, pedagogy, curricula, and, most importantly, classroom efforts;
- (4) Interaction between and among various professional organizations (e.g., the *Australian Psychological Society [APS]* and the *American Psychological Association [APA]*) regarding PL and global citizenship continues apace.

Strengths and Challenges of the Project Management Process

A review of Professor Cranney's report indicates an impressive vision for the Fellowship and a challenging (but largely achieved) set of outcomes pointing to success. Her vision was a broad and sweeping one. I believe it is clear that this project would not have come to fruition (especially in a relatively short time frame for something of this magnitude) without funding from the Fellowship award and accompanying time off from some of her normal duties as a faculty member. That so much was accomplished—literally on both a national and a global scale—attests to the project's success. As Professor Cranney notes, one of the chief challenges of managing the project and moving it forward was gaining interest and cooperation from various stakeholders in addition to the Fellowship team. Professional bodies and educators and education networks all had to become engaged and convinced that relevant activities (e.g., considering changes to accreditation standards) were worthy pursuits, that the ideas and constructs (i.e., PL, global citizenship) were worthy, and so on. What is clear is that Professor Cranney and her colleagues (both in Australia and beyond) managed to achieve a high degree of what in the US is called “buy in”—that is, where disparate constituencies with often competing visions and values are able to agree on a core set of ideas as a means to further them. Generally speaking, that appears to be what happened as a result of efforts based in or developing from the project management process. The key issue is—and will remain—sustaining interest and enthusiasm at all levels for the goals of the Fellowship. Based on Professor Cranney's evaluative report, I believe there is good reason for optimism on this front, as the next section of this report indicates.

Success of the Dissemination Strategies as of August 2012

The scope of the activities resulting from the Fellowship—formal and informal, meetings, presentations, discussions, publications, committee works, among other efforts—is nothing less than dramatic. The number of people who have become interested in or involved in works promoting PL and global citizenship in Australia and around the world is quite remarkable (see also the discussion of issues of sustainability and impact in the Fellowship evaluation report). Noteworthy outcomes include the creation of web sites dedicated to PL and global citizenship, networking via email, and through scholarly publications (e.g., Cranney & Dunn, 2011) and myriad professional talks and presentations. Naturally, an on-going goal is that the dissemination strategies (for a full list, see Professor Cranney's report) should lead to new, related initiatives. Arguably, any initiatives resulting from the Fellowship efforts can be counted as a success, but those that deal with serious, sustained changes in curricula, departmental or program planning, or organizational educational philosophy are those that are likely to have the greatest long term impact. My own hope is that Professor Cranney will write and publish a review article (with appropriate dissemination links posted on the web sites and via email networks) on the successful outcome of the Fellowship's efforts to promote PL and global citizenship five years after the formal end of the project.

Utility of the Project's Deliverables for Relevant Stakeholders

Any innovative pedagogy, especially one with a novel philosophy with broad goals, must ultimately be useful. The issue of utility or applicability is important because educators and academic programs will not adopt new initiatives if they do not prove to be helpful. Relevant stakeholders here include those listed in Appendix C from Australia as well as interested international colleagues (see, for example, authors of chapters in Cranney & Dunn [2011], as well as Halpern [2010]). All of the project's deliverables will help interested and motivated stakeholders to focus on issues of accreditation, the place and role of PL and scientific literacy, global citizenship within the psychology major, the importance of a capstone experience within UG education (during year 3 in Australia, year 4 in the US), professional opportunities for 3-year graduates (i.e., certificates, minors), refined and enhanced learning outcomes linked to professional organizations (APS, APA), among other initiatives. All of these initiatives are prompting needed discussions about the future of UG education in psychology in Australia and around the world. This Fellowship project and the impact of its outcomes are reminiscent of the Bologna process in Europe and certainly will

have more impact than most of the curricular discussions occurring in the US (e.g., Dunn et al., 2010), although PL and its link to global considerations did emerge there (McGovern et al., 2010).

Psychological Literacy as Primary Outcome of UG Education

Conceptually, PL is exciting and unifying (for students, educators, and the discipline) but ultimately it is also very practical—the channeling of psychological knowledge to improve work, community, and self/family following UG education. Too often, UG education is seen as a precursor to further study when only a minority of post-graduate psychology majors elect to continue their educations in the discipline to pursue related careers in education or practice. The US, for example, can be singled out for undue focus on graduate rather than UG education (although that emphasis is changing, albeit slowly; see, for example, Dunn et al., 2011). To be sure, the intellectual foundations of psychology are important and worthy of study in their own right, but for some time there has been a growing consensus that UG education needs to provide more than the liberal arts education (i.e., preparation for a variety of careers but not one in particular) touted by many US colleges and universities. PL picks up where the more amorphous liberal education emphasis stops. How so? PL is promising because it emphasizes that psychological insights derived from empirical research have applicability in daily life—in career settings (e.g., efficiency, planning), in the home (e.g., child rearing), and in the community (e.g., promoting diversity)—without education necessarily beyond the UG level. Psychology then becomes educationally and socially (societally) enriching.

The component that elevates PL’s transformative potential, of course, is its connection to global citizenship. Here, PL can promote positive relations and cooperation among various cultures as well as nations. Given the almost universal interest in psychology (a popular topic in and out of the classroom around the world) and the serious need for international cooperation to address a variety of problems (e.g., health, climate change, peace/war, energy, water conservation, food for the planet), PL and global citizenship would seem to make a great deal of sense. As a starting point, PL and its globalizing potential can help students everywhere begin to think of themselves as part of a larger community than their college or university, region, or nation, that what they do—how they think, feel, and act—has decided implications for their peers around the planet. Certainly, channeling energy and effort and education into a productive global effort makes sense, something that PL can help to foster.

My own personal hope is that PL and the idea of global citizenship become a clearer part of the educational planning process and pedagogical experience of students in the US. Due to Professor Cranney’s Fellowship, Australia is leading the way in advancing PL and global citizenship. Some ideas are taking hold in the US—my colleagues and I hope more will develop in addition to curricular changes (e.g., Dunn, Cautin, & Gurung, 2011). Certainly, PL needs to become an organizing theme in UG education from the start of the college experience (i.e., in introductory or general psychology) as well as a capstone moment towards the end of the UG educational experience. Eventually, my hope is that PL will become a noticeable theme in graduate education, as well.

Professor Cranney is currently writing a chapter on psychological literacy for the forthcoming *Handbook of Psychology Education*, which is aimed at faculty members who teach or administrate within undergraduate psychology programs around the world (see Cranney, in preparation). Professor Cranney is also a Founding Editorial Board Member for the *Oxford Bibliographies (OB): Psychology* and my belief is that many of the publications, conference presentations, and other materials resulting from the Fellowship will make for a fine bibliography on PL and global citizenship for *OB: Psychology*. (Information about *OB: Psychology* may be found at: <http://www.oxfordbibliographies.com/obo/page/psychology/>). I am encouraging her to write this bibliographic article when her understandably busy schedule allows her the free time to do so. Her current work (as summarized in the Fellowship evaluation report) and future efforts will do much to shape the directions of

scholarship and pedagogical application of PL and global citizenship.

Closing Comments

I am gratified to have had opportunity to reflect and write on Dr. Cranney's scholarly efforts to promote psychological literacy and global citizenship. Her work is rallying teacher-scholars around the world to see psychological literacy and its global application as essential features of UG education, as well as encourage the next iteration of creative efforts where quality teaching, pedagogy, and student learning are concerned. I would be pleased to provide additional detail or clarification regarding any of my comments within this evaluative report.

References

- Cranney, J. (in preparation). Psychological literacy. In D. S. Dunn (Ed.), *The Oxford handbook of psychology education*. New York: Oxford University Press.
- Cranney, J., & Dunn, D. S. (Eds.). (2011). *The Psychologically Literate Citizen: Foundations and Global perspectives*. New York: Oxford University Press.
- Dunn, D. S., Brewer, C. L., Cautin, R. L., Gurung, R. A., Keith, K. D., McGregor, L. N., Nida, S. A., Puccio, P., & Voight, M. J. (2010). The undergraduate psychology curriculum: Call for a core. In D. F. Halpern (Ed.), *Undergraduate Education in Psychology: A Blueprint for the Future of the Discipline* (pp. 47-61). Washington, DC: American Psychological Association. [doi:10.1037/12063-003](https://doi.org/10.1037/12063-003)
- Dunn, D. S., Cautin, R. L., & Gurung, R. A. R. (2011). Curriculum matters: Structure, content, and psychological literacy. In J. Cranney & D. S. Dunn (Eds.), *Educating the psychologically literate citizen: Global perspectives* (pp. 15-26). New York: Oxford University Press.
- Dunn, D. S., McCarthy, M. A., Baker, S. C., & Halonen, J. S. (2011). *Using Quality Benchmarks for Assessing and Developing Undergraduate Programs*. San Francisco: Jossey-Bass.
- Halpern, D. F. (Ed.). (2010). *Undergraduate Education in Psychology: A Blueprint for the Future of the Discipline*. Washington, DC: American Psychological Association.
- McGovern, T. V., Corey, L., Cranney, J., Dixon, W. E., Jr., Holmes, J. D., Kuebli, J. E., Ritchey, K. A., Smith, R. A., & Walker, S. J. (2010). Psychologically literate citizens. In D. F. Halpern (Ed.), *Undergraduate Education in Psychology: A Blueprint for the Future of the Discipline* (pp. 9-27). Washington, DC: American Psychological Association. [doi:10.1037/12063-001](https://doi.org/10.1037/12063-001)

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July 24th, 2012

Re: Project Review

This document comprises an external review of Dr. Jacky Cranney's Fellowship material. After providing a brief biography of my background and relevant experiences, I consider four major components: 1) the extent to which the Fellowship project has achieved its intended outcomes; 2) the strengths and challenges of the project management process; 3) the success of the dissemination strategies [to date]; and 4) the utility of the deliverables from the project for the relevant stakeholders.

Reviewer Background

I am a social/personality psychologist by training and have worked extensively in the field of the scholarship of teaching and learning. I am also an active member of the Society for the Teaching of Psychology (currently Past-President). I have also served as Associate Dean of Liberal Arts and Sciences, Chair of the psychology department, and Chair of the Human Development department. Consequently, I have experience in many reviews of faculty and projects. As President of the Society for Teaching, I worked closely with the American Psychological Association on curricular matters. In 2008, the APA gathered psychologists from around the world to examine many of the topics examined in this fellowship. I was part of a group that worked explicitly on curriculum, and am co-author on a chapter on the same. Currently, I chair a major APA taskforce on examining the Introductory Psychology course. I shall use this background and experiences to position my comments. I should note I was also present at the one-day summit April 2012 held at UNSW where I spoke on international perspectives. I appreciate the electronic submission of materials and the evaluation criteria, which I used in making my recommendation.

Fellowship project Effectiveness

The primary aim of Dr. Cranney's Fellowship was to "engage stakeholders in psychology education in a review of the aims ("where to") of the undergraduate (UG) degree program, and subsequently the expected learning outcomes and curriculum content ("what")." Whereas facilitating communication between psychology educators (staff, faculty, administrators, certification bodies) is a theme running through this entire fellowship, the two central foci of the fellowship are the development of the concept of psychological literacy and global citizenship, and the development of pedagogy – learning outcome revisions, curricular changes, that aid in the development of said literacy and citizenship.

The 60 page, 6 chapter report on this Fellowship nicely illustrates the success and accomplishments to date. The project has clearly achieved a level of effectiveness both in terms of the collaborations it has fostered, but in the extent to which Dr. Cranney has managed to meet with and spend quality time with university staff all over Australia and the world. A simple measure of effectiveness is the extent to which one's focus is understood and in awareness. With the publication of Cranney and Dunn (2011) on Psychological Literacy and Global Citizenship and the many meetings conducted over the Fellowship and nicely summarized in Figure 2 (p. 3) it is clear that psychological literacy and global citizenship are not terms that will come as surprises to Australian psychological educators. This fellowship has nicely built on Graduate attributes (GAs) with associated student learning outcomes (SLOs), delineated during Cranney's (2008) ALTC Associate Fellowship Initiative.

The Project management process

Communicating with an entire country of stakeholders and getting them to agree and discuss assessment issues, action items, and be visionary, is not a mean task. In the course of the Fellowship, Dr. Cranney has certainly managed this project to maximize communications. There are many strengths to how this project was managed. Primary among them is the utility of creating face to face meetings of stakeholders. Although Australian psychology

departments are significantly fewer in number than those in the U.S. though also many times the size of those in some countries such as New Zealand, it is critical to be able to have buy in from them all. The Education Summit held in April 2012 reached out to all centers and had representation from over 90% of them. Managing this event was perhaps one of the most important elements of this Fellowship as without that connection and opportunity to directly address key issues in one room, it is very difficult to foster change and improvement.

One of the projects' few weaknesses is a function not so much of Dr. Cranney's handling of the process but of the enormity of the task and the concurrent events (e.g., the disestablishment of ALTC, further development of the national academic standards agenda through the establishment of the Tertiary Education Quality and Standards Agency (TEQSA) and the Standards Panel in 2012). Although I saw reference to a UG Subcommittee of PDAC, I believe greater infrastructure would further advance the goals of the fellowship. In reading the report I got the sense that the Fellow was often on her own in advocating for a revision of UG curriculum and addressing UG issues. I realize she had a lot of support from different constituencies but I was left wondering if the creation of a subgroup for UG issues charged with the revision of the SLOs at the outset would have helped. The lack of a specific or additional committee hampers the revision process of GAs and other project deliverables. As Dr. Cranney noted in her report, "the final April 2012 UG Psychology Summit exercise highlighted to educators the difficulty in obtaining consensus on standards and respective assessment approaches". An afternoon with near 50 diverse individuals does not allow enough time for the thorough revision of LOs and a structure for a more long term evaluation and revision with committed representatives of different universities may be a prudent direction to go the next time around. The Fellowship clearly accomplished a sizeable amount of work but I can imagine it put an undue load on the Fellow who was often the sole mover and shaker.

Dissemination strategies

I commend Dr. Cranney on the dissemination strategies used in this fellowship. Not only did she travel extensively to meetings on the project, but her edited book on psychological literacy (with Dunn) extends her work far beyond Australia's shores. The book and associated writing projects illustrate the successful development of the notion of psychological literacy and global citizenship.

The three web sites (e.g., www.psychologicalliteracy.com) related to this project, and the many papers written up on the graduate attributes and related SLOs, have wide distribution. Having representatives of the majority of Australian universities present at the Summit as well as key administrators from major psychological associations and organizations, suggest all key stakeholders are in communication.

Project Deliverables

In the United States, there is tremendous variation across departments in terms of curricular and requirements for the major. In recent years, more departments have revised the departmental learning outcomes to fall in line with the APA learning outcomes although there is no consistent assessment of said outcomes. This Fellowship nicely mirrors the APA in the U.S. as well as other international work in setting up clear-cut learning outcomes and providing a process for the revision and implementation of the same. The deliverables in this Fellowship are hence critical to the stakeholders.

To this end, I saw clear evidence of the utility of the fellowship in Appendix F (General Principles and Specific Recommendations for Changes to the APAC Standards and Procedures for Undergraduate Psychology Education). This last document incorporates benchmarks with aspirational thresholds as well as clear goals for psychology educators in Australia. The suggestions for change reflect well the achievements of this fellowship.

I would like to note that although some of the foundations of this document rest on the APA's guidelines for undergraduate education, the same guidelines are currently under revision. Early drafts of deliberations of the revision committee suggest that the APA will move towards having five goals versus the original ten. Accordingly, I would suggest that

stakeholders assess the current Australian document with an eye towards streamlining GA.

On a related note, one major change for the future relates to getting more specific about assessment. Around the world, but especially in American psychology, educators are getting more critical about how to assess outcomes. I note that many of the survey findings in the report use self-reported attitudes and opinions. This data is valid in its own right but it would be well worth the effort to create/strengthen an infrastructure for better national reporting of student learning in line with stated outcomes. There are both direct and indirect measures of learning and a robust educational system should have a fair degree of both. Psychological literacy and global citizenship are somewhat novel concepts and the measures to accurately capture when students' achieve both are in need of development.

In conclusion, I would like to commend Dr. Cranney for taking on an extremely important project and executing it efficiently and thoroughly. Her efforts both mirror international efforts to revise how educators deliver psychology and how students learn and use it, as well as address global concerns about the future of psychological education. I greatly appreciate the opportunity I was given to review this document and to play a part in this important process.

Sincerely,

Regan A. R. Gurung, Ph. D.

**An Evaluation of National Standards for Psychological Literacy and Global Citizenship:
Outcomes of Undergraduate Psychology Education (2012)**

**Annie Trapp, University of York, UK
September 3, 2012**

The final report published in 2012 for the Fellowship awarded to Jacquelyn Cranney, University of New South Wales is entitled *National Standards for Psychological Literacy and Global Citizenship: Outcomes of Undergraduate Psychology Education*.

This evaluation of the Fellowship, based on the final report, considers:

- The extent to which the Fellowship project has achieved its intended outcomes;
- The strengths and challenges of the project management process;
- The success of the dissemination strategies (to date); and
- The utility of the deliverables from the project for the relevant stakeholders.

Context

Traditionally, undergraduate psychology education across the world has been driven by the need to provide the foundation education and training for future generations of research and practising psychologists. In many countries, particularly those countries where there is a shortage of professional psychologists, this is still the main rationale for undergraduate psychology education.

However, in some countries, for example, the USA, Australia, and some European countries including the UK, national policies to widen participation in higher education, or a liberal arts tradition of university education, have led to a large increase in the number of students graduating at undergraduate level. The expectation of the majority of first year students is that they will progress to a career in the relevant discipline of study. Currently, for psychology graduates such expectations are unrealistic; further training towards a professional qualification in the discipline may be beyond students' financial resources or constrained by the limited number of postgraduate training places relevant to a recognised qualification to practice as a professional psychologist. In Australia, this is now the situation for the majority of psychology graduates and it is a situation that urgently needs to be addressed from a moral and ethical perspective as well as for reasons related to societal and market needs, and the accountability of higher education.

Policy makers influential in decisions around undergraduate psychology education are interested, therefore, in providing both an education that serves as a foundation for graduates progressing to professional and research psychology training and an education that has broader relevance and application. With this in mind, major reviews of psychology undergraduate education have recently taken place in the USA (Halpern, 2010), Europe (Lunt, 2011) and the UK (Trapp et al, 2011) and the European Federation of Psychology Association (EFPA) has highlighted the need to define and promote the value of the undergraduate psychology degree. The concept of psychological literacy, that is, "the general capacity to adaptively apply psychological science to meet personal, professional and societal needs" (Cranney, 2012) is an underlying principle in all these reviews.

The Fellowship: outcomes

The Fellowship arose out of this context and builds on previous initiatives to justify and delineate the outcomes of psychology education in Australia. The Fellowship planned activities at different levels to further develop academic standards for psychological literacy

and global citizenship amongst relevant stakeholders in Australia. At the outset a Fellowship advisory board was created to provide formative feedback and guidance.

Considerable care was taken to involve key national and international organisations and individuals in Fellowship activities. Through membership of key groups including the APS Program Development and Advisory Committee (PDAC), the APS National Psychology Education and Training Reference Group (NPETRG) and the APS Presidential Initiative (PIFOPS) in 2011, Cranney has ensured robust debate of the undergraduate curriculum and through a process of consensus building achieved significant change at the policy level particularly in respect to standards and the development of graduate outcomes. The Green Paper that reviews the aims, outcomes and accreditation standards for Australian undergraduate psychology education (Cranney & Botwood, 2012) is a substantial legacy to psychology education in Australia. Within the Green Paper the challenges and expectations of different stakeholder are clearly set out together with a vision for reforming undergraduate psychology education. The recommendations in the Green Paper include a means to providing psychology undergraduates with a more useful and meaningful education, the provision of graduates skilled to work as Applied Behavioural Practitioners, and the implementation of standards that take into consideration the employability of graduates from a local and a global perspective. The recommendations in this Green Paper have the potential to transform undergraduate psychology education within Australia and to serve as a model of good practice for psychology education in other countries.

Another notable aspect of the Fellowship is the scholarly development of the concept of psychological literacy at the national and international level through meetings and publications. Particular attention is drawn to the edited book, *The psychologically literate citizen: foundations and global perspectives*, (Cranney and Dunn, 2011). The final report of the Fellowship provides examples of departments that have already embraced the concept of psychological literacy and undertaken curriculum innovation as well as positive indications from other departments of their intention to integrate psychological literacy into the curriculum. To promote and assist these changes, the Fellowship has collected exemplars of curriculum change and pedagogy that are publicly available.

The Fellowship: project management

Critical to the success of this Fellowship was the inclusion of stakeholders particularly the national psychological bodies in Australia, psychology educators, students, alumni and employers. Where networks did not exist they were created and in addition to specialised meetings to discuss the undergraduate curriculum, efforts were made to keep the issue of undergraduate psychology education on the agenda of broader meetings discussing psychological training and policy.

This approach assisted in building a shared understanding of the drivers and constraints to undergraduate psychology education and respect for the concerns and constraints perceived by different stakeholder groups. The Fellowship provided plentiful opportunities to promote the concept of psychological literacy to key groups, and to provide reassurance that scientific literacy remains an underlying principle and integral part of the undergraduate psychology degree.

As a result the project has achieved significant outcomes through top down strategies including policy change as well as more local changes within departments relating to curriculum change and the personal development of teaching staff.

The Fellowship: dissemination

The Fellowship has disseminated its work through approximately 60 meetings and succeeded in gaining the participation of 36 Australian universities in Fellowship activities. Considerable attention has been given to ensuring the developmental dissemination of the Fellowship's outcomes to a broad audience through an impressive array of conference papers, invited talks, authored books, discussion and policy papers and materials available

on dedicated websites. The volume of outputs to disseminate the work of the Fellowship is a fine testament to the academic approach, dedication and tireless work of the Fellowship holder.

The dissemination materials have relevance to the international community as well as national policy makers and educators and will impact positively on the sustainability of the Fellowship achievements.

The Fellowship: utility, sustainability and future directions

It is clear from the Fellowship report that the concept of scientific literacy is deeply rooted and widely accepted by stakeholders of Australian psychology education. Whilst, there is also general support for the wider concept of psychological literacy, its integration into undergraduate education through curriculum change and pedagogy will, in some instances, demand a cultural shift with strong leadership and appropriate staff development within departments.

The implementation of new standards and accreditation will be most effective if departments are able to retain their individual strengths supported by an underlying consensus amongst psychology educators that the end goal of undergraduate programmes is to maximise the number of students with the skills to contribute effectively to societal needs. Accreditors and assessors will need to be wary of mere lip service being paid to the concept of psychological literacy and they will need to seek evidence of measurable outcomes – not always an easy task.

In addition to capstone courses and integrated work experience as a means for students to practise their psychological literacy, stakeholders may wish to explore opportunities that encourage student mobility. There is also a role for alumni with diverse lifestyles and careers to be involved in departmental reviews, as employers are key players in validating the skills gained by graduates during their study.

The work undertaken in this Fellowship will feed into the continued global debate on broadening the value of the undergraduate psychology education. At the national level, the momentum generated by this Fellowship will need to be maintained. This now becomes the responsibility of the key national bodies, networks and stakeholders who have made such positive contributions to date in achieving the aims and the outcomes of this Fellowship.

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