An introductory guide to psychological literacy and psychologically literate citizenship

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This guide provides a basic introduction to the related concepts of psychological literacy and psychologically literate citizenship. Psychological literacy encapsulates the idea that an understanding of basic principles of human behaviour and development gained through study of Psychology will help us to better understand ourselves and others, and will help individuals and organisations to function better. Psychologically literate citizenship extends this idea, to incorporate the benefits that an understanding of Psychology can bring to the individuals who study it, and their local and global communities. The guide will argue that Psychology offers potential solutions to many of the world’s most pressing problems. Its publication is particularly timely following the report of Trapp, Banister, Ellis, Latto, Miell and Upton (2011) and the subsequent inclusion of psychological literacy within the criteria for accreditation of undergraduate Psychology degrees by the British Psychological Society (BPS 2012).

The guide commences by introducing the theoretical contexts of psychological literacy and psychologically literate citizenship. It links these concepts to issues around graduate attributes, including employability and global citizenship, suggesting that psychologically literate graduates are also highly employable global citizens. It then goes on to outline some possible areas of the typical undergraduate Psychology curriculum that lend themselves to developing psychological literacy in students. These suggestions are not intended to be exhaustive, but rather to stimulate creative thinking in the reader, and encourage psychologists everywhere to think about the real-life value of their particular areas of expertise in Psychology.

We hope that you will find it useful, share it with your colleagues, and use it to spark enthusiasm for Psychology in your students. At the Higher Education Academy (HEA), we are keen to collate examples of good practice in delivering psychological literacy in the Psychology curriculum; please do get in touch if you’re willing to share your approach to this important issue.

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Introducing psychological literacy

The term ‘psychological literacy’ was introduced over two decades ago by Alan Boneau. In his 1990 paper, Boneau identified 100 psychological terms and concepts ‘of sufficient importance that they should be general knowledge within the psychological community, especially to students’ (p.891) that would form ‘a comprehensive and irreducible knowledge base for psychology’ (p.900). Since then, the central concepts he identified have become less central to the discipline and the notion of psychological literacy has changed. Although there is no single agreed definition of psychological literacy, McGovern et al. (2010) claim it constitutes ‘being insightful and reflective about one’s own and others’ behaviour and mental processes’ and having the ability to apply ‘psychological principles to personal, social, and organizational issues in work, relationships and the broader community’ (p.11). Accordingly, ‘psychologically literate citizens’ are defined as those students who develop as a result of their Psychology degree into ‘critical scientific thinkers and ethical and socially responsible participants in their communities’ (p.10). That is, they are ‘global citizens’ (Stevens & Gielen 2007) who are able to apply their subject knowledge and associated skills and attributes to problem solving and interacting with the everyday world around them.

In their comprehensive exploration of psychological literacy, Cranney, Botwood and Morris (2012) define psychological literacy as ‘the general capacity to adaptively and intentionally apply psychology to meet personal, professional and societal needs’ and global citizenship as ‘the understanding of global interrelatedness, and the capacity to live, work and contribute positively as a member of global communities’ (p.iv). They present key issues that have arisen in Australia as a result of national and international change in higher education (HE) in general and in Psychology education and training in particular. These same issues exist in the United Kingdom (UK): large numbers of Psychology graduates do not go on to further professional training in Psychology, and there is an increasingly recognised need for professionals and citizens with high levels of psychological literacy and global citizenship (Trapp et al. 2011). Embedding the concepts of psychological literacy and psychologically literate citizenship is gaining pace in Australia and the United States of America (USA), but progress in the UK has been slower.

Many of the suggestions in this guide develop ideas discussed at a meeting of the BPS, Association of Heads of Psychology Departments (AHPD), HEA and Experimental Psychology Society (EPS) in 2011 at which members agreed that the psychological community should ‘promote the value of study and practice more vigorously and publicly’ (Trapp et al. 2011, p.10). Moreover, Cranney and Dunn (2011) suggest the concepts of psychological literacy and the psychologically literate citizen need to be explicitly stated through wide dissemination and supported with exemplars. This guide aims to meet these needs for the academic psychological community in the UK by providing an understanding of the concepts and demonstrating how they can be applied within the Psychology undergraduate curriculum. It identifies the importance of psychological literacy and psychologically literate citizenship for students, graduates and academic staff.

The guide is organised as follows: first it highlights the ways in which psychological literacy is important for employability and global psychologically literate citizenship, and second, it provides examples within the Psychology curriculum where the development of psychological literacy can be demonstrated. Finally, we present the way forward: an argument for promoting psychological literacy in undergraduate Psychology courses.
Enhancing employability in Psychology graduates

“Just about every job suitable for a general graduate will be done better by a psychology graduate.” (Florance, Miell & Van Laar 2011, p.699).

The governments of the UK and higher education institutions (HEIs) themselves are concerned increasingly with the link between employability and course content (Business Innovation & Skills, BIS, 2011). This is highly salient for Psychology courses as only 15-20% of Psychology graduates pursue professional psychology careers (Quality Assurance Agency, QAA, 2010, p.2), meaning that the significant majority of students who complete a Psychology degree in the UK are employed outside professional or scientific psychology (Trapp et al. 2011). Consequently, it is imperative for educators to provide opportunities for Psychology students to apply their skills and knowledge to authentic problems in a range of contexts that demonstrate the broad application of psychological theory to real life and work situations.

Following recent changes to accreditation criteria, the British Psychological Society (BPS 2012’) advise including ‘employability’ within the undergraduate curriculum as good practice. The aim is to help Psychology graduates explore opportunities to apply evidence-based psychological thinking not only to the traditional chartered routes, but also in a multitude of careers. At the time of writing, a few undergraduate courses in the UK contain an element of work-based learning or a placement (e.g Huddersfield, Glasgow Caledonian University and Aston), and others are considering similar ideas. The Higher Education Academy (HEA) recently produced a guide for Psychology departments to facilitate them in embedding employability into the Psychology curriculum (Reddy, Lantz & Hulme 2013), which provides case studies to illustrate such initiatives.

Tomorrow’s graduates will need to be flexible enough to perform jobs that do not yet exist (Trapp et al. 2011). For example, they will have to adapt to changing technology and keep up to date with information that has evolved, possibly unrecognisably, since they last engaged in formal study. Psychological literacy entails the desire and capability to become a lifelong learner; skills in information retrieval, critical evaluation and independent working are core attributes for learning across new contexts. Today’s Psychology graduates should be well equipped to be tomorrow’s leaders at all levels across any industry in which humans are involved.

The National Committee of Inquiry into Higher Education (2009) argues that employers seek graduate employees who are numerate, able to write concisely and clearly, and communicate key findings effectively. Furthermore, in addition to the clear value of understanding quantitative methods, knowledge of qualitative methods (e.g the design and analysis of focus group data and interview data) is critical to identifying existing issues in the workplace and to evaluating current practice. The Labour Force Survey for 2011-12 found that over that last decade, stress, depression or anxiety and musculoskeletal disorders accounted for the majority of days lost due to work-related ill health, 10.4 and 7.5 million days respectively (Health and Safety Executive 2012). At the same time a number of occupational psychologists and researchers working in this field have highlighted the importance of positive emotional wellbeing in the workplace and strategies to enhance wellbeing (Weinberg & Cooper 2007). Given these statistics, having the skills to propose and evaluate viable solutions to improve health at work is clearly a valuable asset that Psychology graduates should possess following research methods training.

Although there are clear links between psychological literacy and the skills identified as valued by employers, such as effective communication skills, evidence-based problem solving abilities, an ability to
think critically and adopt an evaluative approach to work (Reddy et al. 2013), the ability to apply psychological literacy has a much greater potential: the ability to benefit global society and to enrich individual graduates’ lives and communities.

**Global citizenship**

Employability encompasses not only immediate employment, but also lifelong employability and as such involves qualities such as adaptability, resilience, and lifelong learning. Barnett (2010) describes ‘lifewide learning’ as learning in multiple contexts, not only through lifelong learning (defined as a single dimension), but also through every situation throughout our lives, and transferring that learning across all the different contexts in which we find ourselves, such as work, community, social groups, parenting and so on. Barnett argues that increasingly students are simultaneously students at university and of ‘real-world’ experiences through part-time work while studying, sandwich years, work placements, clinical experience and real-world projects. He emphasises that many students are ‘as much as if not more in the world than they are in universities’ (p.12) and that many extra-curricular experiences are significant learning and personal development opportunities. Barnett’s vision is the university which celebrates these opportunities, shifts its pedagogical purposes from concern with the intellectual growth of the student to concern with lifewide development of that student, such that the university considers the implications of lifewide learning and the reverse, that university learning should also impact on everyday life for its own programmes of study and the student’s experience therein. This is one of the outcomes associated with psychological literacy.

The aim of HE is not just to prepare students as future employees and employers, but also to prepare them for responsible and proactive citizenship (McGovern et al. 2010). The Report of the National Committee (2009) states the aim of higher education is ‘to enable society to make progress through an understanding of itself and its world: in short, to sustain a learning society’ (Section 5.10)\(^2\). Thus, in addition to preparation for employment (Trapp et al. 2011), a degree in Psychology offers the opportunity to produce graduates who can apply psychological science to benefit themselves, others and local and global communities (Cranney & Dunn 2011; Cranney & Morris 2011). In fact, Trapp et al. argue that including Psychology at any level of education will help produce citizens who are better informed and better equipped to make critical and ethical evaluations. Psychology graduates can become models and educators in their workplace and community by demonstrating the benefits of psychological science and of professional psychology.

In broader terms, the concept of the psychologically literate citizen has been discussed by Hulme and coworkers (see Hulme 2013; Lantz 2013) as well as in the HEA departmental employability guide (Reddy et al. 2013). In a similar vein, Knott et al. (2013) implemented a programme to develop ‘cultural experiential learning and leadership’ in undergraduate Psychology students. Their evaluation of student perceptions showed enhanced cultural awareness as well as leadership skills. This is increasingly important given that the 21st century presents many unprecedented, diverse and complex economic and cultural challenges for which efficient and effective solutions require citizens with the qualities to persist, adapt and thrive (Barnett 2006). It can be argued that there is a global need for the development of psychological literacy, not only in Psychology academics and graduates, but also in the general population.

Graduates are more than employees and employers; they are both our neighbours and potential leaders of the future. Haigh and Clifford (2010) suggest that education should be about educating global citizens with a range of attributes to enable them to become ‘responsible, capable, compassionate, self-aware,

\(^2\) [http://www.leeds.ac.uk/educol/ncihe/](http://www.leeds.ac.uk/educol/ncihe/)
eco-literate, cosmopolitan and employed'. Undergraduate programmes in Psychology are well placed to address this (Cranney & Dunn 2011), but as Barnett (2006) argues, educators need to focus on personal aspects such as authenticity, dispositions, inspiration, passion and spirit as well as the subject of study and the acquisition of skills.

The concepts of psychological literacy and psychologically literate citizenship should be embedded within the UK Psychology undergraduate curriculum (Trapp et al. 2011) through providing opportunities to practice applying psychological skills and knowledge. This is increasingly important as competition for places for continued study in the traditional Psychology professions is highly competitive as a result of greater demand and reduced funding. Therefore, making Psychology students aware that what they are studying in psychology has unquestionable relevance across a range of contexts can lead to newly considered career paths and opportunities. In particular, understanding that psychology is an inherent aspect of any endeavour in which humans are involved encourages students to follow new avenues for career opportunities. For example, psychologists can be readily employed in advertising and marketing, business and management, engineering, politics, product design, environmental design and interior design, as well as art, music and other creative pursuits and the traditional professions of psychology. In parallel, employers, communities and society in general are likely to benefit from the ethical, scientific and critical approach adopted by Psychology graduates.
Embedding psychological literacy in the Psychology curriculum

Applying psychological principles to teaching and learning enables educators to engage and motivate students through an evidence-based approach. Although curricula vary across HEIs, and their emphases necessarily reflect the interests and expertise of their staff as well as the resources at their disposal, the QAA (2010) benchmark for Psychology states that Honours degree students are expected to study the discipline’s core topics with ethical, theoretical and practical research issues arising in each of the knowledge areas within Psychology. The core areas are individual differences, cognitive psychology, biological psychology, developmental psychology and social psychology. They also expect that sub-areas of research methods, design, analysis using quantitative and qualitative methods and psychometrics and measurement techniques will be covered (QAA 2010, p.3, Section 3.3). For a course to be accredited by the BPS, the same core topics must be included. Therefore, embedding opportunities for developing psychologically literate Psychology graduates in undergraduate curricula should be straightforward. Having established the need, the next stage is to seek support from academic staff to engage with the aims of psychological literacy and to model a psychologically literate approach in their own practice (McGovern 2011).

Taking each of the core topics in Psychology mentioned above, the next section gives examples of how psychological literacy can be embedded effectively throughout the Psychology undergraduate curriculum.

Cognitive psychology
Cognitive psychology is defined as the study of mental processes including attention, language and communication, learning and memory, thinking, reasoning and problem solving, and perception (APA 2013). Psychology graduates can apply what they learn in cognitive psychology to optimise their study behaviours to become effective and motivated learners, powerful communicators and effective problem solvers. The benefits of understanding how we learn as well as what we learn are well understood (see for example Flavell 1978). This is one aspect of metacognition: one’s awareness of one’s own cognitive strategies and methods of cognition which are strongly positively correlated with enhanced performance and academic success. Thus, through studying cognitive psychology, graduates are better able to monitor their strategies and processes to enhance their performance across contexts. They understand the role of attention and the potential limitations of switching attention between tasks. Importantly, they also understand how all we see is not all that there is (Kahneman 2012) and, in fact, that what we see might not be what there is (see for example, http://www.lottolab.org/articles/illusionsoflight.asp).

Recently the concept of emotion has been encompassed under the umbrella of cognitive psychology. Emotion studies typically include the psychological states of stress and well-being. Armed with knowledge of emotion and cognition, graduates are better able to understand and manage stress and develop skills that enable them to lead positive, full and meaningful lives (see for example http://www.authentichappiness.sas.upenn.edu/Default.aspx). They can also help others do the same by modelling positive attitudes and behaviours. Experiencing stress is a ubiquitous human experience. However, managing stress and dealing with it effectively is a skill that needs to be acquired. Psychology students have an advantage in that although they may experience stress in the same way as any other human, they will have learned about the purposes and physical manifestations of stress, and how to cope with stressors. Studies investigating wellbeing demonstrate the importance of resilience: ‘a psychological process defined as the ability to cope well with setbacks and bounce back’ (Masten & Wright 2010). Resilience is positively correlated with academic performance and success in work and personal life. For example, resilient children have strong interpersonal problem-solving skills as well as enthusiasm for hard work, which they apply to achieve their high expectations (Benard 1991).

The study of emotion also includes consideration of the concept of emotional intelligence (EI) (EI, Salovey & Meyer 1990). Although still a very contentious concept, at the very least, consideration of intrapersonal and interpersonal intelligence (i.e. Gardner 1999) enables students to understand how those high in such attributes are better able to perceive, understand, manage and reason with one’s own and
others’ emotions. These concepts are increasingly relevant in the work environment (Goleman 1995), providing Psychology graduates with another distinct advantage over graduates from other disciplines. The HEA website features many teaching resources to help tutors to teach students about EI while developing it in students at the same time. Evidence suggests that learning about, and developing EI has benefits for students and their departments as well as for longer term psychological literacy and employability:

http://www.heacademy.ac.uk/resources/detail/subjects/psychology/Emotional_Intelligence_within_Personal_Development_Planning_Teaching_EI_in_Universities.

**Biological psychology**

Biological psychologists take the perspective that behaviour and experiences are caused by activity in the body’s nervous system via electrochemical processes and genetic influences. Investigation is typically at the level of neurons, neurotransmitters, brain circuitry and the basic biological processes that underlie normal and abnormal behaviour. In doing so, biological psychology contributes to the understanding of many disorders including Parkinson’s Disease, Alzheimer’s Disease, depression, schizophrenia, autism, anxiety and drug and alcohol abuse. An understanding of the biological bases of mental health (one aspect of mental health literacy) can help Psychology graduates to reduce the stigma associated with such conditions, and to promote awareness in their own communities and places of work. Mental health issues are experienced personally or experienced second hand among an increasing proportion of the population (see for example, http://www.mentalhealth.org.uk/help-information/mental-health-statistics/). Form (2000) argues that the public is not generally expert about mental health. As such they are typically unable to recognise specific disorders or different types of psychological distress and consequently, their beliefs about the causes of mental disorders and the most effective treatments for them differ widely. Form argues that attitudes which hinder recognition and appropriate ‘help seeking’ are common and that much of the mental health information most readily available to the public is misleading. He concludes that the public’s mental health literacy needs to be improved, to promote public acceptance of evidence-based mental health care and to help many people with common mental disorders seek effective self help. As a corollary of improving psychological literacy, mental health literacy will also improve. This demonstrates the urgent necessity for promoting this initiative.

Although relatively few students will become professional biological psychologists, all graduates will have some understanding of the effects of hormones and drugs on the nervous system and consequently, on behaviour. The application of this knowledge is highly relevant and offers opportunities for student engagement and discussion. For example, demonstrating the impact of drugs on brain processes can highlight the delicate balance between healthy and unhealthy behaviours and promote meaningful discussions on topics which are salient to adolescents and young adults in the modern world (see Charlton & Lymburner 2011, in Cranney & Dunn 2011). Students in biological psychology will also study topics such as sleep, learning how deprivation can impact behaviour, health and relationships, and eating behaviour, including developing an understanding of the factors which influence healthy eating, obesity and eating disorders. On a more positive note, they will learn that sleeping after learning is a good way to help store memories for better recall. All of these aspects of Psychology will be useful in the workplace (for example, working alongside colleagues who are experiencing some of these issues), in their lives as potential parents (for example, parenting their own adolescent children), and in everyday life.
when encountering diversity in behaviour which may have meaningful biological foundations.

**Developmental psychology**
Psychology education provides students with a holistic account of human development (from early childhood, through adolescence, middle age, to becoming an older adult) and an understanding of this development will help a Psychology graduate in caring for others at each stage of the life course (eg the needs of a hyperactive child or a dementia sufferer). Understanding how humans develop physically, mentally and socially during their life span enables individuals to be more tolerant and respectful of those who are at a different stage of life. In the learning environment, psychologically literate teaching staff should be more able to appreciate the complexities of childhood, adolescence and the transition from school to university. Moreover, individuals are better able to manage their own lives as they change through the lifespan as a result of such application of knowledge and they may well become better-informed parents. For example, they might demonstrate: (a) improved clarity in decision making about day care (studies on day care and attachment); (b) better understanding of atypical development (eg autism); (c) the value of turn taking in language learning; and (d) greater appreciation of diversity in development.

**Social psychology**
Social psychology describes, explains and predicts thoughts, emotions and behaviour in groups and relationships. This is fundamental in education, employment and life in general and many applications of social psychological literacy can be highlighted to students (Buunk & Van Vugt 2007). For example, knowledge of attribution theory and the predictions it makes regarding dispositional and situational attributions can help a psychologist understand and treat depression, but is also relevant to Psychology graduates in understanding behaviour in the work place. Even during their studies, Psychology students can use attribution theory to understand their own attributions regarding exam stress (Darley & Cooper 1998). Another important area of social psychology research is social influence, and this knowledge can be applied to many work situations where the graduate needs to persuade others, whether it be for educational motives (eg as a teacher), employability (eg convincing a potential employer) or for commercial motives (eg working in advertising). A good example is where Psychology tutors at the University of Michigan have applied persuasion to many different real-life scenarios (http://www.umich.edu/~psychol/380/sommers/groups9.html).

Social psychology practical work often involves group-based activities, and when students are given an engaging, co-operative learning environment they develop a sense of belonging and involvement (Wang, Haertel, & Walberg 1993). This has been shown to be important in student retention and success at undergraduate level (Thomas 2012), and so has benefits for institutions as well as for an individual student’s psychological literacy. The benefits of understanding how one’s learning or work environment can encourage and discourage certain behaviours is valuable in many walks of life (eg setting up a meeting room, or increasing the productivity of a team). Group-based and role-play activities cover literacies in group communication, groupthink, cohesion and conflict, conformity, team roles, influencing others, social loafing and leadership. Such activities can be of great help to students immediately following the degree, when they are required to demonstrate their skills in
group activities within employer assessment centres or in a job interview where they need to manage non-verbal cues as well as their own stress. Similarly, leadership skills developed in group activities can be drawn upon in everyday life as well as in recognised formal work roles (e.g. volunteer roles, sports teams and managing a work team), and role play can demonstrate and develop these skills (for role play ideas see http://www.businessballs.com/roleplayinggames.htm). Taylor and Mair (2013) discuss ways for educators to identify these using a team-working activity.

**Individual differences**

Psychology undergraduates are equipped to appreciate individual differences through studying, for example, personality, intelligence and mental health. Within the teaching of individual differences there is an opportunity to encourage a non-judgmental attitude in students and to encourage awareness of and respect for diversity in ethnicity, culture, ability and disability, sexuality and appearance at work and in our communities. Psychological literacy and psychologically literate citizenship can be embedded in many aspects of this core topic. For example, activities can be designed to develop understanding of psychometric methods to assess differences in personality for recruitment assessment processes, such as measuring personality factors that predict suitability for a role. These are personally relevant to career choices (Murray & Roberts 2012). Activities can be planned that extend knowledge of aspects of the individual that are relatively stable and others that can be changed. For example, psychologically literate graduates understand that intelligence is a product of the environment as well as genes, and that resilience and emotional intelligence can be increased. Such knowledge is important in self-development and can help transition from a fixed to a growth ‘mindset’ which creates motivation and success in personal relationships, business, education, and sport (Dweck 2008).

**Research methods**

Psychology undergraduate students study a range of research skills which provide a set of transferable skills that are demanded by employers. They include ethics, the ability to identify a phenomenon worthy of investigation, to design and conduct a study using quantitative and qualitative methods, to collect, analyse and interpret data, and evaluate and disseminate the findings in writing and orally. Developing students’ ethical awareness is a key asset for society. Moreover, an appreciation and understanding of ethics is crucial for global citizenship.

The final year project in the undergraduate Psychology programme provides an opportunity for students to apply and integrate the skills developed throughout their programme and for tutors to highlight how these skills, plus those developed as a factor of carrying out the project, can be applied to life after university. For example, prior to starting their project, students will apply for ethical clearance which will demonstrate their awareness of the need to design, conduct, analyse and disseminate their research in an ethical manner. The BPS Code of Ethics (2009) defines ethics as the science of morals or rules of behaviour. The Code states ‘while ethics and Psychology are distinct, there is nevertheless an overlap as both are concerned with behaviour’; they argue that ‘thinking about ethics should pervade all professional activity’ (p.6). Undergraduate Psychology students are participants in a substantial proportion of published psychological research (Moyer & Franklin 2011). Tutors can exploit this opportunity to prompt students to consider
research ethics, as well as the educational value of being a participant.

Understanding how to identify search literature for valid and reliable sources of information and acknowledge them appropriately are important skills for all in the rapidly changing 21st century when more information is available to us than ever before and litigation as a result of plagiarism is becoming more common. Continuing to learn and develop independently, beyond graduation, is crucial if graduates are going to be able to adapt to new technological advances, keep up-to-date with the discovery of new knowledge, be flexible in the face of new global issues, and navigate changes in both lifestyle and ways of working. Research methods in Psychology are well suited to investigating a variety of issues, and can be applied to the solution of diverse problems, and so a psychologically literate graduate will be well positioned to thrive in a fast-moving world.

Conceptual and historical issues in Psychology (CHIP)
This core area is taught in a variety of different ways within the undergraduate curriculum, sometimes in discrete modules, and sometimes embedded throughout the curriculum as part of the other core areas mentioned above. However it is taught, CHIP emphasises the transient nature of knowledge, epistemological thought and the philosophy of science, all of which facilitate psychological literacy by encouraging critical thinking, independent learning and open mindedness. Taught well, CHIP can help students to understand the viewpoints of others, their own biases in considering evidence and theory, and indeed the biases of Psychology as a discipline in itself.

The way forward

Because Psychology is concerned with understanding human cognition, emotions and behaviour, Psychology graduates are equipped with a deep understanding of themselves and others and, given an appropriately focused curriculum, they can acquire a broad range of attributes and competences to apply this knowledge in any endeavour in which humans are involved.

“Psychological literacy is a core component of graduate literacy in general and the psychologically literate citizen is a core component of the global citizen.” (Cranney & Dunn 2011, p.10). Greater awareness of the importance of psychological literacy is needed. Although many Psychology educators already use a number of methods and cover content that links with psychological literacy, they may not highlight the significance, or there may be pockets of excellence in some areas that do not permeate the whole curriculum. For example, it might be very useful for a named ambassador within each department to have responsibility for embedding psychological literacy throughout the degree. However, although an ambassador would be useful, he or she may not be sufficient. For widespread embedding and uptake of psychological literacy, systemic support from heads of departments and institutional leaders is needed. Fortunately, we are seeing national educational and Psychology associations (eg HEA, BPS) starting to provide support for strategies that value and help departments and educators wanting to improve learning outcomes for Psychology students by developing psychological literacy. Linked to this concept of intentionality for educators is the need to enable an awareness of the importance of psychological literacy for students: they must perceive their learning and skills as increasing their psychological literacy, and see that as useful for life during and after university.

It is clear that despite studying Psychology for three years, many students do not connect the theoretical content and professional skills acquired during their programme and, therefore, are limited in applying this to their everyday life. This somewhat disappointing finding was demonstrated in Morris et al. (2013) following a special programme in which explicit strategies were implemented to introduce students to graduate attributes and expose them to the concept of psychological literacy. The graduate attributes
were those derived by Cranney et al. (2009): discipline knowledge and application as the basis for lifelong learning; research skills; critical and creative thinking using logic, evidence, and psychological science to evaluate claims about and solve problems regarding human behaviour; values and ethics that maintain professional values; communication and interpersonal skills in psychology; and learning and application in psychology to meet personal, professional, and societal needs. Morris et al.’s (2013) large, cross-sectional survey evaluated students’ perceptions of awareness and importance of graduate attributes and psychological literacy. They found that ratings for both concepts were moderately high across all participants. However, ratings varied as a function of degree programme, year and specialist units completed. The highest scores for awareness and importance of graduate attributes were provided by students taking a degree in which Psychology was the main discipline. However, these students showed no increase in perceived development over the three years of the programme. Morris et al. suggest that this group rated their graduate attributes highly because they were highly motivated high achievers. Students undertaking a degree in which Psychology was only one component gave lower ratings, probably as a result of Psychology being studied less than other disciplines. Moreover, the findings suggest that although discipline knowledge, research methods and critical and creative thinking skills were reinforced throughout the degree, the other graduate attributes and psychological literacy became apparent only through a particular unit, ‘Psychology applications’. Morris et al. conclude that graduate attributes should be explicitly emphasised throughout the curriculum. (See http://www.groups.psychology.org.au/PsyEd/education_resources/ for related learning and teaching resources).

Morris et al. (2013) conclude that completing specialist units in Psychology as an integral part of a Psychology major is associated with greater psychological literacy. They recommend that in order to become more aware of their achievements, know where improvements are needed, and help career development and achievement during and after their degree programme, students should track the development of their graduate attributes throughout their undergraduate major programme using a portfolio. They emphasise the importance of the development of psychological literacy for all undergraduate students, regardless of their career destinations. Cranney (2013) states that ‘the more students are made aware of, and explicitly seek to develop these graduate attributes, the more psychologically literate they will be, and hence the more successful they will be as students, graduates, professionals, and citizens’ (p1).

Thus there appears a need to embed graduate attributes that link to psychological literacy within the curriculum. Indeed this is one of the key drivers in the Australian educational system where these attributes have been incorporated in national accreditation criteria. Further detail regarding this process can be found in Crowe (2012, p.61), where these attributes are pragmatically grouped into three categories: (i) scientific literacy (‘the ‘foundational knowledge’ that is applied adaptively’); (ii) employability (‘adaptive application of principles to employment issues; eg critical thinking, values, communication’); and (iii) global citizenship (‘applying psychological principles to advancing the long-term wellbeing of local and global communities, essential for dealing with the world today and into the future’).
Conclusions

This guide has highlighted the value of psychological literacy in developing psychologically literate (global) citizens. In doing so it demonstrates the need for greater awareness among Psychology academics and course designers. For widespread embedding and promotion of psychological literacy, systemic support from heads of departments and institutional leaders is needed. We encourage all departments to consider identifying an ambassador to oversee the embedding of psychological literacy throughout the curriculum and in staff training. The potential benefits are clear for the short, medium and long term. For example, increasing staff and student awareness of psychological literacy will lead to more independent learners who apply psychological theory to their learning and development in and out of university. This will lead to better retention and success, and improved employability prospects for all, but especially for those entering non-professional Psychology careers. Over the longer term, psychologically literate graduates will be able to demonstrate personal and social responsibility that will make them highly valued global citizens.
Further reading and resources

Psychological literacy
- Dr Jacky Cranney has created a useful website: www.psychologickaliteracy.com ‘to make you think about yourself and the world you inhabit’. It enables individuals to contribute their own materials as well as to download resources.

Graduate attributes

Emotional intelligence
- The HEA’s Personal Development Planning Teaching Emotional Intelligence in Universities provides a good introduction and useful teaching resources: http://www.heacademy.ac.uk/resources/detail/subjects/psychology/Emotional_Intelligence.

Employability
References


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