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Psychological literacy: from classroom to real world

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Psychology is being studied by a growing number of people. At pre-tertiary level, it is now the fourth most popular subject, with 56,000 entries for A-level examinations and 97,000 entries for AS-level examinations this year (JCQ, 2013). According to the Quality Assurance Agency, psychology is also the most popular science subject at undergraduate level in the UK, and the second most studied subject overall (QAA, 2010). There are currently approximately 90,000 students studying psychology in UK universities, of whom almost 18,000 are postgraduates (HESA, 2012). This implies that there must be an enormous number of people in the UK who have studied psychology in some form, at some stage in their lives, and the numbers can only be increasing each year. It is therefore worth asking what impact the study of psychology has on these individuals, and in turn, what is the wider impact on society as a whole?

Between 15 and 20% of psychology graduates will go onto careers in professional psychology (QAA, 2010), and for these individuals, an appropriate psychology qualification provides the necessary credentials to enter those careers. However, this leaves a sizeable majority of 80 to 85% of graduates who will take alternative routes. Having gained their qualifications, and heading out into a non-psychological career or continued education, can they now forget everything they learned about research methods, social psychology, cognition and the brain? As more people experience psychology education, it is appropriate for us to question to what extent their exposure to the discipline will benefit them, their employers, and their communities in ways beyond simply participating in academic study and achieving an academic qualification, but where the particular discipline of study is of little relevance to the career destination of the student.

It may be that substantially more students enter psychology courses with a view to becoming a professional psychologist than actually achieve this goal (Trapp et al., 2011), leading Reddy et al. (2013) to question whether students perceive psychology as a vocational, rather than an academic subject. Similarly, recent letters to the Psychologist (including Harkness, 2013) suggest that there may be considerable numbers of psychology graduates striving over several years to gain sufficient experience to enter training programmes. For those who do not achieve training places, there may be a sense of rejection and failure, the feeling of giving up a dream, or of having to follow a less desirable career which may not keep them in touch with psychological knowledge.

The term psychological literacy was first coined by Boneau (1990), to describe the core knowledge and skill set acquired through the study of psychology (although

some 23 years later, his conception now appears somewhat dated). More recently, the concept of psychological literacy has evolved to become less prescriptive in terms of content, and more applied in nature. McGovern et al. (2010, p11) define psychological literacy as "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". Cranney, Botwood and Morris (2012, p4) adopt a similar stance, describing psychological literacy as "the general capacity to adaptively and intentionally apply psychology to meet personal, professional and societal needs". The concept of psychological literacy thus captures the ability of a psychology student to apply the knowledge and skills that they acquire during their education to all aspects of life: the workplace, their personal lives, and the wider social context. As such, psychological literacy may provide a lens through which we can view the wider benefits of psychology education. It may also hold out some hope to students who may be coming to accept that their aspirations towards a career in psychology are likely to remain unfulfilled, but who remain enthused and inspired by the subject, and are looking for ways to continue to stay in touch with it.

The concept of psychological literacy, then, relates to the ability of students to take their learning from the classroom, and to apply it to their everyday work and lives. If psychology is the study of human mind, brain and behaviour, then presumably, psychology is relevant and can be applied wherever one might find people. The possibilities are fairly limitless; in September, the Guardian (2013) reported that psychology, in the forms of social isolation, confinement and experiencing constant surveillance, would be the major challenge facing potential volunteers sent to colonise the planet Mars. The applications of psychology in the criminal justice, health and education systems are already well recognised, hence the clearly demarcated professional areas of psychology relating to these, specifically forensic psychology, health and clinical psychology, and educational psychology. Marketing and human resources departments are also often well informed about psychological theory and strategies that help them to do their jobs effectively, for example, using qualitative research methods to investigate markets, and using psychometric tests as recruitment tools. The application of psychological theory in a human resources context is also reflected in the rise of psychologically-orientated coaching services adopted within UK management and industry; in 2011, 77% of UK organisations used coaching as a leadership development tool (CIPD, 2011). However, the concept of psychological literacy allows us to take learning about psychology beyond those traditional graduate workplaces and into the much wider world (or solar system, apparently).

At an individual level, good psychology students at all levels learn to think critically, to evaluate evidence, and to recognise that knowledge evolves over time, rather than remaining fixed. They are equipped with the skills to find new information, and even to create knowledge for themselves through the application of their research methods and statistics training. They are well prepared to communicate their newfound knowledge through reports, articles and essays. The typical undergraduate degree prepares students to undertake psychological research using a variety of methods, and with an emphasis on ethical process (see QAA, 2010, for a comprehensive list of the skills associated with psychology graduates). Such skills are invaluable in the modern world. Students now are being prepared for jobs that do

not yet exist, using technology that has not yet been invented (Trapp et al., 2011; Reddy et al., 2013). Global knowledge is expanding at a massive rate, and by the time students graduate, some of what they learned in their first year at university may already have become outdated. The modern graduate, on gaining employment, will need to learn new skills, acquire and evaluate new knowledge, and learn independently if they are to maintain currency. Employers are desperately seeking curious, creative problem solvers, who are numerate, communicative and independent (CBI, 2011). Lifelong learning (e.g. Mocker & Spear, 1982) is not optional; it is essential to on-going employability.

Likewise, in everyday life, we are constantly bombarded with information, through the media, our employment, and our interactions with friends and social networks. We live in 'a world full of data' (Porkess, 2013). Sometimes, we have to make important decisions based on incomplete or competing 'facts'. When reading the newspaper, choosing how to vote, or making decisions about our children's education or care provision for our elderly relatives, we need to research, analyse and evaluate information. A solid grounding in psychology provides us with the skills we need to carry out this process effectively. One might argue that the same is true for any other subject studied at university, and to some extent, this is true. Geography and sociology students, for example, are well versed in evaluating evidence, using data and thinking scientifically on the basis of evidence. However, psychology, with its emphasis on people, allows us to consider the human aspects of our choices in a more informed way. How important is the entertainment provided in a care home? To what extent am I being subjected to persuasion techniques when I listen to this politician's speech? The subject knowledge acquired by studying psychology, as well as the skills, can be beneficial in all that we do. Likewise our experiences in everyday life can add to our understanding of psychology; we are equipped to employ life-wide learning in all of our social contexts (Barnett, 2010), not just lifelong learning throughout our life span.

Just about every aspect of the academic psychology curriculum has relevance to life in the real world. An understanding of cognitive psychology, including metacognition, can help students to be aware of their own learning capabilities and limitations, and can help to inform their personal and professional development and career choices. Developmental psychology adds to our understanding of our children, of ourselves and our families as we grow older, and of colleagues and friends who have developed atypically. Social psychology can help us to overcome conflict and prejudice, to appreciate cultural diversity, and to improve productivity and enhance team working. From biological psychology we gain insight into a vast array of human functions and dysfunctions, and can learn the harmfulness of stigma towards those who are somehow 'different'. The psychology student, at whatever level, gains an understanding of human diversity that is unparalleled in any other discipline, and learns that problem solving, of any sort, cannot rely solely on 'common sense'; they appreciate the need for an evidence-based, informed approach (Mair et al., 2013).

From a personal and employability perspective, then, psychological literacy, the ability to apply psychology to the 'real world', has the potential to enable students and graduates to develop themselves as thinkers, decision makers and problem solvers. Their ability to cope with life can be enhanced, and their employers will

value their skills, knowledge and independence. Studying psychology can make a student self-aware, alert to social contexts, and create agility and flexibility of thought.

There is also significant potential for psychological literacy to benefit the global community. Students often enter psychology programmes because they want to help (Bromnick & Horowitz, 2013). Psychology students and graduates are more likely than some other graduates to engage in voluntary work (HESA, 2012) and are frequently motivated by the opportunity to make a difference. This has been used by several UK undergraduate providers to engage students in community psychology projects (e.g. Akhurst, 2013; see also Harnish and Bridges, 2012). The desire to help, coupled with psychological understanding, can contribute to the ability of students to positively contribute to the world in which we live. That is, they are psychologically literate citizens, global citizens (Stevens & Gielen, 2007) who are able to apply their knowledge of psychology and their associated skills and attributes to problem solving and interacting with the everyday world around them. McGovern et al. define psychologically literate citizens as "critical scientific thinkers and ethical and socially responsible participants in their communities" (p.10). Do we want to enhance wellbeing in our workplace? Reduce the negative impact that our species has on the global environment? Increase charitable giving? Reduce bullying, conflict and racism, or improve our nation's health? Psychology has the potential to facilitate behaviour and attitude change to help us to overcome the challenges that face us in the modern world. Solving our problems as a global community requires people with an understanding of psychology. Diane Halpern (2010, p162) expresses this most eloquently:

"Today's students must prepare themselves for a world in which knowledge is accumulating at a rapidly accelerating rate and in which old problems such as poverty, racism, and pollution join new problems such as global terrorism, a health crisis created by alarming increases in obesity, and the growing gap between the poor and the very rich. All of these problems require psychological skills, knowledge and values for their solution."

The thought of our students and graduates, rather than forgetting all they learned in our classes, going on to create a "better world" using their psychological skills and knowledge (Harré, 2011), is exciting, and, given the large numbers of psychologically educated individuals, could have a huge impact. However, in order to achieve these aspirational outcomes, psychology educators may need to adapt the curriculum to facilitate transfer of knowledge and skills to situations beyond the classroom. Dunn et al. (2011, p16) state that: "Promoting psychological literacy entails re-orientating what and how we teach students in a way that emphasises psychology's relevance". We cannot expect our students to transfer their learning to the real world, if we have not taught them that to do so is not only possible, but appropriate, and given them practice in doing so. This will require action on the part of those of us who deliver psychology education:

 We need to recognise and to teach the applications of psychology, its relevance to the real world and the transferability of skills, rather than always teaching it in a theoretical context (Dunn et al., 2011; Mair et al., 2013);

- We need to constructively align (Biggs, 1996) our courses to explicitly include psychological literacy in our learning outcomes, our teaching, and the assessments that we give to our students (Dunn et al., 2011; Trapp, 2010, 2011);
- We need to model psychological literacy in our own professional lives, through our interactions with colleagues and students, using psychology to inform our teaching practices, solve problems and to ensure inclusivity (Zinckiewicz et al., 2003; Bernstein, 2011; McGovern, 2011; Cranney and Dunn, 2011).

To some extent, undergraduate courses already incorporate an element of psychological literacy; all of us who teach on British Psychological Society (BPS) accredited programmes, for example, offer students the opportunity to demonstrate their skills through an independent final-year research project (e.g. Watt, 2013), and teach students about ethics. However, psychological literacy is rarely made an explicit outcome of psychology courses, despite now being referenced in the BPS accreditation criteria, and particularly not at school or college level. In order to educate psychologically literate citizens, students need to be given opportunities to practice applying their knowledge and skills to solving novel, real-world problems. Research methods teaching provides one obvious home for this type of work, but in fact no aspect of the psychology curriculum is necessarily exempt. For example, cognitive psychology can be used to improve students' own learning strategies, social psychology can be used to enhance group-working experiences, and developmental psychology provides a framework for thinking about students' own personal development. There are likely to be gains in the classroom from taking this approach; we will be supporting our students to enhance their independent learning skills, and through making the relevance of psychology apparent, are likely to engage them far more deeply than we might through teaching apparently abstract theory (Grabinger & Dunlap, 1995; Dunn et al., 2011). Embedding psychological literacy in the curriculum may enhance our students' intrinsic motivation to learn, by bringing psychology to life - but also by bringing life to psychology.

By fully engaging with the concept of psychological literacy, the large numbers of psychology students who pass through our educational establishments can be equipped to apply psychology to enhance their own lives, their employability and contributions to the workplace, and their communities. They will have the opportunity to continue to engage with the discipline of psychology, well beyond the day that they achieve their qualification, even if they do not manage to gain entrance to a career in professional psychology. Developing our own psychological literacy, and becoming psychologically literate citizens ourselves, will mean that not only can we enable our students to make a difference to the world, but we can make a difference ourselves – to our students, our colleagues and institutions, our families and our communities.

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