Psychology Education in the Post-Covid World

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Abstract

A major aim of psychology education is to train students in psychological literacy – the ability to apply psychological knowledge to everyday activities. In this paper we explore how well this has been achieved in recent years. As a result of Covid-19 the focus of teaching in recent months has inevitably been on developing online methods of teaching and attempts to develop psychological literacy have of necessity received less attention. However, we argue that the developments enforced by Covid-19 actually open up a range of new possibilities and that psychological literacy can benefit from these changes. In particular, we suggest that much of the transmission of psychological knowledge can continue to take place online and that universities should become places where the focus is on the application of that knowledge.

Psychological literacy, at least in its modern meaning, is little more than a decade old. Although the term was originally coined by Boneau (1960), its original meaning covered only psychological knowledge – in essence it meant all the concepts that a psychology graduate would be expected to know. All that changed with the publication of the seminal report of McGovern et al. (2010). The definition proposed in this report goes way beyond knowledge and includes problem solving, scientific thinking, acting ethically, communicating effectively,

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and being critically reflective. This is arguably put more succinctly by Cranney et al. (2012, p.4) as 'the general capacity to adaptively and intentionally apply psychology to meet personal, professional and societal needs'. Even more succinctly it might be phrased as applying psychological knowledge to one's everyday life, be that at work or play.

There can be little doubt that psychological literacy has had a major influence on how psychology education is envisaged. Although the idea in its present form emerged from a report prepared under the auspices of the American Psychological Association (McGovern et al., 2010), its impact has gone much further than North America. It figures prominently in European conferences and journals (e.g., ESPLAT Conference, 2019, Psychology Teaching Review, Autumn 2015), and appears as a major theme in the UK's Benchmark Statement for Psychology, which governs how the discipline is taught in all UK universities (QAA, 2019). And one of the most influential centres for the development and promotion of psychological literacy is Australian, where Jacqueline Cranney and her co-workers have published extensively on the topic, and where various resources are housed (www.psychliteracy.com).

However, despite the obvious influence of the concept, it is open to question just how much things have changed – in other words, whether or not psychological literacy has actually been embedded into the psychology curriculum. On one measure its influence has actually waned. A search for the term through Psychinfo gives a multitude of hits up until 2015, but relatively few since that date. It is possible that it has continued to affect the way we teach and that educators are quietly getting on with embedding it into their courses but have done so without publishing descriptions or evaluations in the main journals. Or it may be that they are publishing but via conferences and other media; the ESPLAT Conference of 2019 is one example of this. However, it is also possible that psychological literacy has been

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quietly put on the back burner and while some educators pay lip service to it, many of them have done very little to implement their intentions.

Another indicator of how things have changed comes from the Psychology Benchmark Statement already referred to (QAA, 2019) and its sister document on the standards for accreditation of psychology degrees (BPS, 2019). These documents are notable for their increased emphasis placed on applications over earlier versions of these documents, and for their mention of psychological literacy (in fact the term did not exist when some of the precursors were written). However, it is still interesting to note that even in these publications the emphasis is more strongly on knowledge acquisition. Of the six areas which the BPS document says must be included in psychology degrees, five refer to knowledge and only one to true psychological literacy, viz: 'understanding of real life applications of theory to the full range of experience and behaviour and the application of psychological understanding to real world questions' (BPS, 2019, p.8).

This is not to say that there have not been many commendable attempts to incorporate psychological literacy into the psychology curriculum. Fairly typical of these are the studies contained in a Special Issue of Psychology Teaching Review. Taylor and Hulme (2015) provide an excellent overview of the types of activities that have been used to develop psychological literacy, including writing critiques of media reports, volunteering, gaining hands-on research experience as part of a team, peer mentoring and many more. Critical to many of these activities is the requirement for students to reflect on what they have learned and its relevance to their own learning, personal experience, and everyday life.

There have also been studies to determine how effective such attempts are, a number of which are contained in the same Special Issue as the Taylor and Hulme paper (Bohan et al.,

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2015; Kent & Skipper, 2015; Skipper, 2015). All of the interventions were positively reviewed by students, staff, and, in the case of the Kent and Skipper study, external partners. Other studies have also indicated the effectiveness of interventions, for example peer mentoring of students (Burton et al., 2013).

However, as noted earlier, published studies of this kind seem to have declined in recent years and, certainly over the course of 2020, there has, of course, been a very good excuse for not focusing on psychological literacy: the Covid-19 pandemic. This has had a dramatic impact on virtually all walks of life. Education has been no exception, and, among other significant changes, much learning has had to take place online. With the introduction of vaccines and the hopeful lessening of the impact of the virus, many people will hope and expect that everything will gradually return to normal, or rather to what it was before the pandemic. In this paper we argue that, at least with psychology education, this should not happen. Rather, we suggest that we should take this opportunity to address some of the issues in our teaching and, in particular, to seek to enhance the way in which psychological literacy is embedded in the curriculum.

We now return to the distinction between knowledge (Boneau's psychological literacy) and the application of that knowledge (McGovern et al.'s definition) since this lies at the heart of what we want to discuss. For it seems to us that in general terms a lot of knowledge can be taught effectively via distance learning, but that the application of that knowledge is less easy to achieve without personal contact with staff, other students, and university-based resources. In what follows we consider how psychology has been taught traditionally, how this has changed under the impact of coronavirus, and how it might change in the future. In

particular we wish to discuss how the teaching of psychological literacy might be radically improved.

At the moment, or at least prior to the pandemic, a principal way of delivering information to students in most universities has been via lectures. If the discussion entitled 'How many hours a week is psychology?' in the online site 'The Student Room' is to be believed, a typical week for a student is 10-12 hours, most of which consists of lectures. In many departments these lectures involve hundreds of students, which risks making them impersonal and makes it challenging to achieve meaningful interaction between the students and the lecturer – though we acknowledge that there are many commendable efforts to achieve this even with large groups, for instance through the use of 'flipped learning' (see Zheng et al., 2020).

However, not all lecturers are inspiring and make such efforts, and much of the information is just as easily gleaned from textbooks or from web pages or from podcasts (we speak from personal experience!). Online learning using podcasts by the best lecturers, interactive online sessions, and high quality written material is surely more beneficial and effective for student learning. No doubt such high quality material does not exist in all areas, but it will become more and more readily available over time.

However, it is difficult to see how many aspects of psychological literacy (defined as the *application* of knowledge) can be taught and learned online. In this next section we look at some of the aspects of psychological literacy and consider how they are best taught.

Some aspects of communication skills can be learned online, especially those which involve working at a distance (participating in online meetings, presenting at online conferences, preparing web pages, etc.). Furthermore, these skills are likely to be increasingly important

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in the future. Other communication skills such as writing essays and reports, are probably equally well taught either online or in person. For example, Holmes and Reid (2017) found no significant difference in performance on research methods assessments for students who study online compared to those who study on-campus. However other aspects may require more personal contact (e.g., communicating in groups, providing personal feedback, responding to questions). For example, the quality of interaction between students has been reported to be negatively impacted, particularly when students have switched from on-campus to online (Zoom) sessions (Serhan, 2020). Moreover, students have reported that they lose a sense of connection with their tutors which can also be affected by numerous distractions within their online environment (Serhan, 2020).

Similarly, with teamwork and leadership; while it is important to be able to apply these skills in online meetings, it is perhaps equally if not more important to be able to use these skills in real-life social contexts; and again, some learning and experience in such contexts seems invaluable. This can be achieved via work experience modules, and maybe even placement years (which used to exist in some psychology degrees, see for example, Auburn et al., 1993).

Several of the principal skills which should be acquired by psychology students relate to research. These include designing, running and analysing studies, working with psychology equipment, and using psychological tests (QAA, 2019). Alongside these skills come others such as solving problems, working in teams, decision making, numeracy and critiquing the work of others. An increasing number of studies are now carried out online and expertise in these methods needs to be fostered. But many of the essential research skills can surely only be learned and developed by actually doing them, and this means conducting one's

own practical studies, running participants, and using psychology equipment. Indeed, students who engage in project-oriented *active learning* techniques (e.g., creation of data, generating hypotheses, creating PowerPoint slide presentations) have been shown to perform better in research methods assessments in comparison to those who do not engage with such techniques (LaCosse et al., 2017).

We are making a very simple point here: that while much psychology knowledge and some aspects of psychological literacy can be learned quite readily online, many aspects of the latter may only be acquired to their full potential through personal contact and access to university resources and equipment. In other words, *knowing* about psychology is quite readily achieved using distance learning (and in some respects might be better done in this way), but *doing* psychology often requires face-to-face contact.

If we take this simple point together with the rapidly increasing use of online leaning, then this may have radical implications for how psychology is taught and the way in which universities function. It is not too difficult to envisage a situation where most of the knowledge acquisition in a psychology degree is done at a distance and universities are the places where students learn how to apply their knowledge. One can even imagine a mixed economy where students spend, for example, half their time gaining knowledge through distance learning and then a similar amount of time at university learning how to apply that knowledge.

The time spent at university would be somewhat different to what is currently the norm. There would be very little time spent in lectures; the bulk of contact time would be spent doing practical work and research projects, assisting staff with their research, presenting papers to colleagues, interacting in groups, using psychological tests and discussing issues

with staff and other students. The time spent would be intensive for both staff and students, but we suspect it would be very rewarding. Indeed, 'flipped learning' has been shown to be an effective pedagogical approach within higher education teaching (see Brewer & Movahedazarhouligh, 2018). However, Roehling et al. (2017) recommend a balanced approach such that selected seminars in psychology are flipped and certain lectures to teach core concepts retained where necessary. Gale (1990) in his BPS Presidential Address talked of university psychology departments becoming 'playrooms'. His idea was that students should go from one 'playroom' (actually a research lab) to another and spend a day or two in each working with the people doing research there. This may be unrealistic given the very large number of students on some courses, but the principle of developing skills with staff and other students and moving from one experience to another seems a sound one. For example, undergraduate psychology students who also serve as research assistants have been shown to have stronger methodological knowledge and critical analysis skills than those who do not take such opportunities (Pawlow & Meinz, 2017). As such, increased exposure to different research methodologies and real laboratory spaces should be beneficial to students.

In the model we are proposing, where the greater part of knowledge learning is done online and skills learning is done primarily at university, then this does of course change the nature of universities. Campus-based lectures would be become a thing of the past. Large lecture theatres would disappear. Instead, students would be developing ways of applying their knowledge. They might spend less time actually on campus, but the time they did spend would be full and challenging, much of it would be small-group based, and they would have more interactions with staff during this time than is currently the case. Indeed, students

tend to prefer on-campus seminars due to valuing the importance of social interaction and engagement which may be otherwise lacking in online environments (Nguyen et al., 2021).

There would, of course, be implications for the way in which we examine students. Knowledge acquisition can be tested reasonably well using computer-generated multiple-choice assessments. This might even be done at a national level, as in the Graduate Record Examination used in the USA to assess students' knowledge of psychology following their undergraduate degree but before they embark on postgraduate study. National exams would be a step too far for many, but the point we are making is that many aspects of knowledge are readily assessed by multiple-choice tests and other online methods.

Some aspects of psychological literacy also lend themselves to remote assessment. Online essays can be used to assess writing skills, statistical problems can be used to assess numerical skills, problem-based learning (or essays) can test how well students are able to think about applications of knowledge, and many more examples could be given. However, since many of the skills involved in psychological literacy are skills of *doing*, then clearly, they are often best tested by observing how well they are actually done. The difficulties of assessing psychological literacy remotely are arguably illustrated on the Australian website devoted to this topic. There is on that site a quiz to test your psychological literacy – though interestingly this seems to test psychological knowledge rather than its applications. It asks respondents to indicate whether statements such as the claim that we use only 10% of our brains or that false memories are easily planted are true or false; surely the answers to these questions depend on the knowledge of the psychological literature rather than the way in which it is applied?

The question of how psychological literacy should be assessed is a thorny one and we do not claim to have all (or even many) of the answers. However, observation is likely to be part of the solution; indeed, it is difficult to envisage how leadership and social interaction in face-to-face situations could be assessed without observing students actually doing these things. Interviews or oral examinations could be used to assess communication skills, as suggested by Turner and Davila-Ross (2015) with respect to research projects. Many other ways of assessing students are possible, including problem solving, supervised practical work, case studies, presentations and so on. We could even use standardised tests to check if students have acquired (or think they have acquired) the requisite skills (see, for example, the work of Roberts et al., 2015). Our list of assessment methods is not exhaustive, nor it is intended to be. We are simply making the point that a variety of different methods will need to be used, and that traditional, essay-based formal examinations will not figure highly in the list of methods used. It is, of course, vital that the assessment methods used ensure that students genuinely demonstrate psychological literacy.

While we can see benefits in the model we have developed here, there may also disadvantages. If students spend less time on campus then they will miss out on what many see as some of the major advantages of a university education – moving away from home, developing independence, and meeting new people. It should be possible to arrange the time spent at university so that these effects are minimised, but this might be the price we have to pay in order to ensure our students become genuinely psychologically literate. Perhaps more dramatic will be the effects on teaching staff, who will have to make changes to their methods of teaching – though the time spent with students is likely to be more enjoyable and rewarding.

References

Auburn, T., Ley, A., & Arnold, J. (1993). Psychology undergraduates' experience of placements: A role-transition perspective. *Studies in Higher Education, 18*(3), 265-285, DOI: 10.1080/03075079312331382211

Bohan, J., Friel, N., & Szymanek, L. (2015). Embedding information literacy skills in the psychology curriculum: Supporting students in their transition to independent researchers. *Psychology Teaching Review, 21*(2), 81-85.

Boneau, C.A. (1960). Psychological literacy: A first approximation. *American Psychologist, 45*, 891-900.

BPS (2019). *Standards for the accreditation of undergraduate, conversion and integrated masters programmes in psychology*. British Psychological Society.

Brewer, R., & Movahedazarhouligh, S. (2018). Successful stories and conflicts: A literature review on the effectiveness of flipped learning in higher education. *Journal of Computer Assisted Learning*, *34*(4), 409-416.

Burton, L.J., Chester, A., Zenos, S & Elgar, K. (2013). Peer mentoring to develop psychological literacy in first-year and graduate students. *Psychology Learning and Teaching, 12*(2), 136-146.

Cranney, J., Botwood, L., & Morris, S. (2012). *National standards for psychological literacy and global citizenship*. Sydney, Australia: University of New South Wales. Available at:

http://www2.psy.unsw.edu.au/Users/JCranney/Publications/Cranney_NTF_Final_Report_23

1112_Final_pdf.pdf

Cranney, J., Morris, S., & Baldwin, P. (n.d.). *Psychological Literacy.* Retrieved from:

http://www.psychliteracy.com/

Gale, A. (1990). Applying psychology to the psychology degree: Pass with first class honours,

or miserable failure? *The Psychologist, November*, 483-488.

Holmes, C. M., & Reid, C. (2017). A comparison study of on-campus and online learning

outcomes for a research methods course. *The Journal of Counselor Preparation and

Supervision*, *9*(2), http://dx.doi.org/10.7729/92.1182

Kent, A., & Skipper, Y. (2015). Making a difference with psychology: Reporting on a module

to develop psychological literacy in final year undergraduates. *Psychology Teaching Review,

21*(2), 35-47.

LaCosse, J., Ainsworth, S. E., Shepherd, M. A., Ent, M., Klein, K. M., Holland-Carter, L. A., ... &

Licht, B. (2017). An active-learning approach to fostering understanding of research

methods in large classes. *Teaching of Psychology*, *44*(2), 117-123.

McGovern, T.V., Corey, L., Cranney, J., Dixon, W.E., 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*. Washington, D.C.: American Psychological

Association.

Nguyen, T., Netto, C. L., Wilkins, J. F., Bröker, P., Vargas, E. E., Sealfon, C. D., ... & Stein, G. M.

(2021). Insights into students' experiences and perceptions of remote learning methods:

from the COVID-19 pandemic to best practice for the future. *Frontiers in Education* (6),

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https://doi.org/10.3389/feduc.2021.647986Pawlow, L. A., & Meinz, E. J. (2017). Characteristics of psychology students who serve as research assistants. *College Student Journal*, *51*(1), 77-80.

QAA (2019). *Subject benchmark statement Psychology*. Quality Assurance Agency.

Roberts, L.D., Heritage, B., & Gasson, N. (2015). The measurement of psychological literacy: A first approximation. *Frontiers in Psychology, 6,* Article 105.

Roehling, P. V., Root Luna, L. M., Richie, F. J., & Shaughnessy, J. J. (2017). The benefits, drawbacks, and challenges of using the flipped classroom in an introduction to psychology course. *Teaching of Psychology*, *44*(3), 183-192.

Serhan, D. (2020). Transitioning from face-to-face to remote learning: Students' attitudes and perceptions of using Zoom during COVID-19 pandemic. *International Journal of Technology in Education and Science*, *4*(4), 335-342.

Skipper, Y. (2015). An evaluation of an intervention to change first-year psychology students' theory of intelligence*. Psychology Teaching Review, 21*(2), 69-80.

Taylor, J., & Hulme, J. (2015. Introducing a compendium of psychological literacy case studies: Reflections on psychological literacy in practice. *Psychology Teaching Review, 21*(2), 25-34.

Turner, M., & Davila-Ross, M. (2015). Using oral exams to assess psychological literacy: The final year research project interview. *Psychology Teaching Review, 21*(2), 48-68.

Zheng, L., Bhagat, K., Zhen, Y., & Zhang, X. (2020). The effectiveness of the flipped Classroom on students' learning achievement and learning motivation: A meta-analysis. *Journal of Educational Technology & Society, 23*(1), 1-15. doi:10.2307/26915403

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