Draft Proposal - Goldsmiths Research Methods in Psychology

Gordon Wright & Caroline Rix

2/28/23

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1. Proposal for Psychology Department Research Methods 2024-5

1.1. Statistics and Research Methods for Psychological and Behavioural Science

> ⚠️ **Warning**
>
> General Goldsmiths bollocks

> ❗ **Important**
>
> The Psychology department at Goldsmiths has a number of differentiating features, upon which it must build in order to ensure it remains attractive and distinctive.
>
> - Alchemical, interdisciplinary research programmes and projects
> - Passion for empowering students and producing creative, skillful, disruptive agents of change
> - Blend of Art and Science, craft, entrepreneurship, massively transferable mind-set/skill-set
>
> Research Methods has to be an adventure, "Alive" with enthusiasm, inspiring curiosity and intellectual problem-solving.
> We have to break the A-Level preconception that Research Methods is dry, maths-like or indeed difficult.
> This must be achieved by: - Practical First - The majority of lab sessions should be practical and 'hands on'! - Only present research/methods/topics that are 'ownable' - where we have expertise, cachet and competitive advantage - and that could NOT be done at school - 'Relevant & Applicable' above all else. Nothing is taught 'because the BPS says we have to' or that doesn't have widespread use in a range of future endeavours - Demonstrate and model intellectual virtue, curiosity, empiricism, skepticism, humility and

> ❗ **Departmental integration**
>
> Integration across the years
> Vertical Integration
> project delivery
> Y0 - MSc
> Aggregation of teaching

> **i** Open Stuff
>
> We embrace an Open Science approach in our efforts to cultivate your critical evaluation skills, enhance your understanding of the significance - and power - of research, and equip you with the necessary graduate-level skills to collect, handle, and interpret data using programming software for statistical model development, visualisation and analysis.

> **i** Teaching and Assessment
>
> Through lectures, interactive group discussions, online skills development modules, and practical lab sessions, we will ignite your enthusiasm for Psychology and Behavioural Science research and help you develop the fundamental skills, knowledge - and confidence - required to become a Psychology literate, disruptive scientist of the future. Tada!

AUTHENTIC ASSESSMENT - OPenAI

"Authentic assessment" generally refers to assignments that reflect the skills students will use in their post-graduation careers and life experiences (Archbald, 1991; Gulikers et al., 2004). This is distinct from traditional assessments such as closed-book exams and academic essays (Macandrew & Edwards, 2002). For psychology, authentic assessments may involve the development of scientific inquiry skills, such as a practical research report (Halonen et al., 2003). In clinical psychology, this can include formulation of case studies or mock practitioner dialogues (Villarroel et al., 2018). Other examples of authentic assessments include writing letters to non-psychology audiences (Cranney, 2013), critical evaluation of media materials (Halpern & Butler, 2011), written reflections of volunteering (Hadlington; as cited in Taylor & Hulme, 2015), and research project interviews (Turner & Davila-Ross, 2015). All of these are designed to promote psychological literacy by encouraging communication with non-experts and application of psychology content (Hulme, 2014).

Central to psychological literacy is the effective communication of psychology in practice (Trapp et al., 2011). To this end, blog writing may be an effective assessment for capturing and promoting students' psychological literacy. Blogs are a web-based form of journal or writing platform, and are useful for disseminating information (Richardson, 2006). They are also increasingly popular for assessing written language skills (Kim, 2008; Lee, 2010; Raith, 2009; Williams & Jacobs, 2004). Blog writing may help students take different perspectives, develop a critical appraisal of content, and become more self-reflective (Frye et al., 2010; Jimoyiannis & Angelaina, 2012). It also empowers and engages students (Creme & Hunt, 2002), a core goal of psychology education (Ishak & Salter, 2017). It enhances academic language learning (Murray et al., 2007) and assesses different skills than traditional forms of assessment (Morris et al., 2013). Studies show that students report high levels of engagement with blog writing (Hindley, 2018).

Blog writing may help students overcome the challenge of academic essay writing (Ishak & Salter, 2017) since it is less rigidly governed by academic norms (Bennett et al., 2012) and involves more reflective, creative, and critical tone (Arslan & Aysel, 2010; Novakovich & Long, 2013). It also provides an opportunity to communicate psychology content to a wider audience (Gardiner et al., 2018; Schmidt, 2008; Relojo, 2017). It has been embedded successfully in many different subjects in higher education, such as pharmacy (Dunne & Ryan, 2016), anthropology (Walker &

Chatzigavriil, 2017), professional development (Shanks, 2020), and English literature (Agarwal, 2017). The British Psychological Society, 2019 and the American Psychological Association (2013) stress the importance of critical evaluation and reflection, which is compatible with blog writing. Research shows that blog writing prompts critical thinking and reflection (Chretien et al., 2008; Novakovich, 2016). Challenges to implementing blog writing as an assessment include students having little to no previous experience (Kerawalla et al., 2009). Blog writing should be grounded effectively in course materials, have clear expectations, and be understood through a lens of psychological literacy (Cranney et al., 2008, 2012). We propose that blog writing may provide a useful opportunity to allow students to apply their psychology content in a critical, creative, and non-conventional way.

- OPENAIabove

BPS Guidelines from OpenAI

1. Ensure that students have a clear understanding of the research methods used in their field of study.

2. Provide opportunities for students to develop critical thinking skills in relation to the research methods used.

3. Encourage students to practice the research methods in a safe and secure environment.

4. Develop a range of teaching materials and resources that best support student learning.

5. Encourage students to become independent learners by providing appropriate scaffolding and support.

6. Encourage students to become active participants in their learning process.

7. Facilitate meaningful discussions about research methods and the application of research methods in practice.

8. Incorporate ethical considerations into the research methods teaching.

9. Promote the use of technology to support the teaching of research methods.

10. Monitor and evaluate students' progress throughout the teaching period.

Source: British Psychological Society (BPS). (2020). Guidance for the teaching of undergraduate research methods. Retrieved from https://www.bps.org.uk/publications/guidance-teaching-undergraduate-research-methods

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> ℹ **BPS website**
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> Research methods Research methods must be delivered at Level 5 or Level 6. Research methods are integral to Psychology and students obtain a sound knowledge of, and a proven ability to use, a range of methods appropriately. Knowledge and understanding of how to obtain and analyse evidence is best acquired and demonstrated through extensive and progressive empirical work in laboratory and naturalistic settings through all stages of a degree. [section 3.4 Subject Benchmark Statement] Psychology students learn the basic principles of sound data

collection. Given the broad theoretical scope of Psychology, rigorous specialist training is required to engender a critical understanding of the role of experimental design, the choice of research methods employed, and the analytic approach taken, for testing psychological theories. [section 3.5 Subject Benchmark Statement] Programmes' coverage of research methods should support students' engagement with the sub-areas listed above, and should be directed towards supporting students' attainment of the subject-specific skills highlighted in section 4.4 of the Subject Benchmark Statement. As they progress through the programme, students should be able to: • apply multiple perspectives to psychological issues, recognising that psychology involves a range of research methods, theories, evidence and applications; • integrate ideas and findings across the multiple perspectives in psychology and recognise distinctive psychological approaches to relevant issues; • identify and evaluate patterns in behaviour, psychological functioning and experience; • generate and explore hypotheses and research questions drawing on relevant theory and research; • carry out empirical studies involving a variety of methods of data collection, including experiments, observation, questionnaires, interviews and focus groups; • analyse, present and evaluate quantitative and qualitative data and evaluate research findings; • employ evidence-based reasoning and examine practical, theoretical and ethical issues associated with the range of methodologies; • use a variety of psychological tools, including specialist software, laboratory equipment and psychometric instruments; • apply psychological knowledge ethically and safely to real world problems; and • critically evaluate psychological theory and research.

Communicate complex information effectively using appropriate written, oral, graphical and electronic means, taking into account diversity among individuals to whom the information is communicated.

Explain the potential impact of psychological research and theory on a broad range of real world settings and situations (e.g., classrooms, industry, commerce, healthcare, as well as local and global communities).

Problem-solve and reason scientifically. Specifically, graduates will be able to identify and pose research questions, consider alternative approaches to their solutions, and evaluate outcomes. (**annis2007?**)

Be sensitive to contextual and interpersonal factors. Graduates will be familiar with the complexity of the factors that shape behaviour and social interaction which, in turn, will make them more aware of the bases of problems and interpersonal conflicts.

or Be a self-critical learner, showing sensitivity to contextual and interpersonal factors. Graduates will be familiar with the complexity of the factors that shape behaviour and social interaction which, in turn, will make them more aware of the bases of problems and interpersonal conflicts.

Show an understanding of various research paradigms, methods, and evaluation procedures, including statistical analysis, as well as their constraints.

Design, carry out, evaluate and interpret scientifically rigorous and ethically sound studies both independently and collaboratively, utilizing quantitative and qualitative methods, statistical analysis and modern digital software.

Psychological literacy is the ability to understand and apply psychological principles and theories to everyday life. This includes the ability to understand how psychological processes and phenomena influence our behavior, emotions, thoughts, and relationships. It also includes the

capacity to use psychological knowledge to make informed decisions and to better understand, explain, and predict the behavior of self and others.

Psychology graduates are highly sought after by employers due to their ability to formulate and communicate well-reasoned, evidence-based, and statistically defensible arguments based on their expertise in the study of human behavior and its causes. On top of this, psychology graduates possess the skills to work independently or collaboratively, as well as strong numerical capabilities, verbal and written communication skills, and an up-to-date knowledge of digital technologies applicable to a wide range of occupational fields.

1.1.1. Intended Learning Outcomes

Intended Learning Outcomes

Create reproducible data analysis scripts and reports within the R statistical programming environment.

QAA Benchmarks

Subject Knowledge and Understanding

««««< HEAD 6.3.4 demonstrate detailed knowledge of several specialised areas and/or applications, some of which are at the cutting edge of research in the discipline 6.3.5 demonstrate a systematic knowledge of a range of research paradigms, research methods and measurement techniques, including statistics and probability, and be aware of their limitations.

Subject-specific skills

PS510XX - RM1 - Introduction to Research Methods and Data Skills

PS520XX - RM2 - Research Methods in Practice and Data Skills

PS530XX - RM3 - Research Project Incubator

*PS710XX - Practical Research Skills

Lectures - Overview of key concepts/context and preview Lab practicals / Data Skills

Labs - Practical or activity based (inc. Group Work)

1.1.2. Executive Summary by year

Y1 - showcase and active participation/skill development

Y2 - Practical drive towards self-motivated research

Y3 - Competent research

Social Constructivist

PeerMark

Podcast/Webpage/Blog

Integrate own interest/guided by stream/lab

1.1.3. Technical Overview

R will be used. Gold standard statistical programming language

«««< HEAD For literate programming (The concept of **"literate programming"** was originally introduced by Donald Knuth in 1984)

Formerly RStudio. The Interactive Development Enviornment for use of R.

1.1.4. Hours specification (e.g.) Years 1 & 2

Table 1.1.: Notional Hours

Activity	Time	Note
Lectures	40	2hrs/week
Labs	40	2hrs/week
Data Skills (Online)	40	2hrs/week
Guided Reading/viewing	40	2hrs/week
RPS	20	1hr/week
Independent Study/Coursework	120	6hr/week

1.2. Programme Overview

1.2.1. Pre-Arrival onwards / Onboarding

Showcase in Induction week - Staff labs and research projects for the year.

Year One students self-test

MSc Students - ditto and ability to shop around for supervision

Year 2 develop their pods? Show Y1 and Foundations what they did last year

Year 3/MSc students - Research Bootcamp and refreshers/skills workshops

Support PhD students and staff

1.2.2. Shock and Awe - Shatter the A-Level preconceptions

1.2.3. Vertically Integrated Projects via 'Labs'

1.2.4. HeartData week (recruitment & forward prep)

Potentially Reading Week Term 2? Or week before/after?

Allows all levels of students to blitz data and to showcase their work for external stakeholders and to make a department-wide event.

2. STUFF

2.1. Personal development skills

- self-management
- team working
- problem solving
- application of information skills
- communication
- application of numeracy skills
- specialist skills

OPENAI of below

McGovern et al. (2010) define psychological literacy as 'being insightful and reflective about one's own and others' behaviour and mental processes' (p.11). This concept captures the ability of a psychology student to apply the knowledge and skills gained during their education to all aspects of life, such as the workplace, personal life, and wider social context. Cranney et al. (2012, p.4) adopt a similar definition of psychological literacy as 'the general capacity to adaptively and intentionally apply psychology to meet personal, professional and societal needs'. Dunn (2009) further explains that psychologically literate people are able to use psychology to solve issues on a local, civic, and national level by looking to data instead of personal opinion.

In order to promote psychological literacy, Dunn et al. (2011) and Mair et al. (2013) suggest that the applications of psychology should be recognised and taught in a real-world context; Biggs (1996) recommends that courses should be constructively aligned to explicitly include psychological literacy in the learning outcomes and assessments; and Akhurst et al. (in press), Bernstein (2011), Cranney and Dunn (2011), McGovern (2011) and Zinkiewicz et al. (2003) suggest that psychological literacy should be modelled in professional lives through interactions with colleagues and students, and by using psychology to inform teaching practices, solve problems, and ensure inclusivity.

> **i Note**
>
> - – McGovern et al. (2010) defines psychological literacy as 'being insightful and reflective about one's own and others behaviour and mental processes' (p.11). It is, in essence, the general capacity to apply psychological knowledge to real-world scenarios.

– Dunn (2009) discusses this, claiming that 'psychologically literate people can use what they know about psychology to solve home-based, local, civic, and even national matters by looking to data instead of personal opinion'.

– McGovern et al. (2010, p.11) 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 et al. (2012, p.4) 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.

– We need to:
I   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);
I   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; Trapp et al., 2011);
I   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 ensure inclusivity (Akhurst et al., in press; Bernstein, 2011; Cranney and Dunn, 2011; McGovern, 2011; Zinkiewicz et al., 2003).

– *Psychological Literacy*

Barnett, R. (2006). Graduate attributes in an age of uncertainty. *Graduate attributes, learning and employability*, 49-65.

Cranney, J., Botwood, L., & Morris, S. (2012). National standards for psychological literacy and global citizenship: Outcomes of undergraduate psychology education. *Australia: The University of New South Wales*.

Cranney, J., Morris, S., Martin, F. H., Provost, S., Zinkiewicz, L., Reece, J & Earl, J. (2011). Psychological literacy and applied psychology in undergraduate education.

Dunn (2009) Psychology Today. **https://www.psychologytoday.com/blog/head-the-class/200909/thinking-about-psychological-literacy**

Haigh, M., & Clifford, V. A. (2010). Widening the graduate attribute debate: a Higher education for Global citizenship. *Brookes eJournal of Learning and Teaching*, *2*(5).

McGovern T. V., Corey L., Cranney J., Dixon W., Holmes J. D., Kuebli, et al. . (2010). Psychologically literate citizens, in Undergraduate Education in Pscyhology: A

Blueprint for the Future of the Discipline, ed Halpern D. F., editor. (Washington, DC: American Psychological Association;), 9–27.

Murdoch, D. D. (2016). Psychological literacy: proceed with caution, construction ahead. *Psychology research and behavior management*, *9*, 189.

Trapp, A., Banister, P., Ellis, J., Latto, R., Miell, D., & Upton, D. (2011). The future of undergraduate psychology in the United Kingdom. *Higher Education Academy Psychology Network, University of York, York*.

– Akhurst, J. (2013). Enhancing psychology students' employability through international community-based work placements. Higher Education Academy. Retrieved 30 September 2014 from **tinyurl.com/pd6bmtg**

Akhurst, J., Coxon, M. & Hulme, J. (in press). Applying psychology to psychology learning and teaching. York: Higher Education Academy.

Barnett, R. (2010). Life-wide education: A new and transformative concept for higher education? In N. Jackson & R. Law (Eds.) Enabling a More Complete Education [Conference proceedings]. University of Surrey. (Available at **http://lifewidelearningconferencepbworks.com/E-proceedings**)

Bernstein, D. (2011). A scientist-educator perspective on psychological literacy. In J. Cranney & D. Dunn (Eds.) The psychologically literate citizen. New York: Oxford University Press.

Biggs, J. (1996). Enhancing teaching through constructive alignment. Higher Education, 32(3), 347–364.

Boneau, C.A. (1990). Psychological literacy: A first approximation. American Psychologist, 45, 891–900.

Bromnick, R. & Horowitz, A. (2013). Reframing employability: Exploring career-related values in psychology undergraduates. Paper presented at the HEA STEM Annual Learning and Teaching Conference, University of Birmingham, April. Retrieved 30 September 2014 from **tinyurl.com/mm9xojq**

CBI/NUS (2011). Working towards your future: Making the most of your time in higher education. London: CBI. Retrieved 22 July 2014 from **tinyurl.com/lsqsdwu**

CIPD (2011). The coaching climate. London: CIPD. (Available via **www.cipd.co.uk/hr-resources/survey-reports/coaching-climate-2011.aspx**)

Cranney, J., Botwood, L. & Morris, S. (2012). National standards for psychological literacy and global citizenship: Outcomes of undergraduate psychology education. Sydney, NSW: Office for Learning and Teaching. Retrieved 22 July 2014 from **tinyurl.com/q98zg4y**

Cranney, J. & Dunn, D. (2011). What the world needs now is psychological literacy. In J. Cranney & D. Dunn (Eds.) The psychologically literate citizen. New York: Oxford University Press.

Dunn, D., Cautin, R.L. & Gurung, A.R. (2011). Curriculum matters: Structure, content, and psychological literacy. In J. Cranney & D. Dunn (Eds.) The psychologically literate citizen. New York: Oxford University Press.

Grabinger, R.S. & Dunlap, J.C. (1995). Rich environments for active learning: A definition. Research in Learning Technology, 3(2), 5–34.

Halpern, D. (2010). Undergraduate education in psychology: A blueprint for the

future of the discipline. Washington, DC: APA.

Harkness, F. (2013). He's just not that into you. The Psychologist, 26(5), 314–315.

Harnish, R. & Bridges, K.R. (2012). Promoting student engagement: Using community service-learning projects in undergraduate psychology. PRISM: A Journal of Regional Engagement, 1(2). Retrieved 22 July 2014 from **http://encompass.eku.edu/prism/vol1/iss2/1**√

– **psychological literacy**

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3. Pedagogical & Delivery Overview

Practical first.

Flipped stats

Evidence suggests that a flipped approach to teaching statistics significantly improves student performance (across a range of metrics) at the mean and throughout the achievement distribution, while controlling for baseline student characteristics Sathy & Moore (2020) (see tables 13.3 & 13.4 - specifically Anxiety, preparedness and under-represented minority status).

3.1. Assessments

> **ℹ assessment types**
>
> Blog
> Podcast
> Website
> Posters
> Information Packs Macandrew & Edwards (2002)
> Portfolios (or ProcessFolio)
> Interview (and self-reflection)
> Clinical Assessment
> Skills assessment
> Oral Examination (mock job interview)
> Self and Peer evaluation
> Literature Review (with or without annotations)
> Annotated Code
> Computational documents (Lab Reports)
> Design and Proposal (Pre-registration)
> Data analysis (Results section)

"Authentic assessment" (Archbald, 1991) refers to assignments that are designed to reflect the skills that students will practice in their careers and other life experiences after graduation (Gulikers et al., 2004), looking beyond traditional assessment such as closed-book exams and traditional formats of academic essays (Macandrew & Edwards, 2002). The impact of employing Authentic Assessments range from increased engagement and satisfaction through to heightened employability skills (Sokhanvar et al., 2021)

3.2. Projects

"Authentic assessment" refers to assignments that are designed to reflect the skills that students will practice in their careers and other life experiences after graduation (Archbald, 1991; Gulikers et al., 2004), looking beyond traditional assessment such as closed-book exams and traditional formats of academic essays (Macandrew & Edwards, 2002). In general psychology, for example, authentic assessments may include the explicit development of scientific inquiry skills, such as a practical research report (Halonen et al., 2003). Or, for more applied facets such as clinical psychology, this may also include formulation of case studies or engagement in mock practitioner dialogues (Villarroel et al., 2018). Previous examples of authentic assessments designed to foster and assess psychological literacy include asking students to write letters to non-psychology audiences (Cranney, 2013), critical evaluation of media materials (Halpern & Butler, 2011), written reflections of volunteering (Hadlington; as cited in Taylor & Hulme, 2015), and research project interviews (Turner & Davila-Ross, 2015). All of these examples are designed to encourage a psychologically literate approach to psychology content because they encourage communication with non-experts and application of psychology content (Hulme, 2014).

Indeed, central to the notion of psychological literacy is the effective communication of psychology in practice (Trapp et al., 2011). Therefore, a psychologically literate education should encourage students to communicate their knowledge in clear and accessible ways. With this in mind, here, we propose that blog writing may also be an effective assessment for capturing and promoting students' psychological literacy. Blog writing inherently aligns with the agenda of psychological literacy because it aims to communicate often complex psychology knowledge in an accessible way (Jolley et al., 2016; Lin et al., 2007).

Primary Citation Pownall et al. (2023) Blogs, which are a web-based form of journal or writing platform, are a powerful tool in the wide dissemination of information in the modern media mix - relevant to current students (Richardson, 2006) .

Blog writing is thought to offer the opportunity to take different perspectives in writing, develop a more critical appraisal of the content, and thus can prompt higher levels of self-reflection (e.g., Frye et al., 2010; Jimoyiannis & Angelaina, 2012). Activities that encourage creative participation in the process of academic writing have been found to empower and engage students (Creme & Hunt, 2002), a core goal of a psychology education (Ishak & Salter, 2017). Therefore, blog writing promotes wider academic language learning (Murray et al., 2007) and thus complements more traditional forms of assessments by allowing a different set of skills to be assessed (Morris et al., 2013). Across the literature, studies show that students report high levels of engagement with blog writing exercises, owing to the high levels of creativity associated with this form of writing (Hindley, 2018).

Research demonstrates students often report feeling unprepared and overwhelmed at the perceived "rules" of academic essay writing (Ishak & Salter, 2017). Blog writing should help students to overcome this pedagogic challenge, given that blogs are governed less rigidly by academic norms (Bennett et al., 2012) and typically involve more reflective, creative, and critical tone (Arslan & Aysel, 2010; Novakovich & Long, 2013). Writing in a clear and accessible way is an important transferable skill and undergraduate outcomes across subjects in higher education (Hawkey & Barker, 2004; Leki & Carson, 1994). Blog writing can, in theory, enhance these skills, given its highly reflective nature and deviance away from the conventions of academic writing with which some students struggle (Dippold, 2009; Soysa et al., 2013; Xie et al., 2008). Similarly,

blog writing also provides a useful opportunity to communicate psychology content to a wider audience. Scholars have noted how traditional forms of academic psychology dissemination, such as journal articles, are typically inaccessible to a general audience, both in terms of language use and access (i.e., because they are published behind a paywall that requires institutional subscriptions; Relojo, 2017). Blog writing may thus be an important platform to mediate the relationship between science and the general public (e.g., Gardiner et al., 2018; Schmidt, 2008), which again is a facet of the psychological literacy approach (Hulme, 2014).

Blog writing as an assessment has been embedded successfully in many different academic subjects in higher education, such as in pharmacy (Dunne & Ryan, 2016), anthropology (Walker & Chatzigavriil, 2017), professional development (Shanks, 2020), and English literature (Agarwal, 2017). Indeed, given that the British Psychological Society, 2019 note in their degree accreditation standards that "critical evaluation and reflection" is a key graduate attribute for psychology programs, blog writing may be particularly compatible with psychology undergraduate content. The blog approach to writing has been promoted through BPS-led initiatives, such as the Voices in Psychology program (Sutton & Pownall, 2018, 2019). This also extends to the American Psychological Association's guidelines for undergraduate psychology majors (2013), who too stress that scientific inquiry, critical thinking, and communication are among the core goals of a psychology degree.

Moreover, research shows that blog writing prompts critical thinking and reflection (Chretien et al., 2008; Novakovich, 2016). For example, Novakovich (2016) investigated whether there are differences in the quality of writing generated through in-class workshops between the use of traditional methods compared with blog writing. They concluded that blog writing fostered more complex literacy skills, which is echoed by other empirical studies (e.g., Alsamadani, 2018; Febianti & Wahyuni, 2019).

However, there are also some challenges in implementing blogs as an effective assessment format. For example, students often have little to no previous experience of blogging which can impede engagement with it as an assessment (Kerawalla et al., 2009). Similarly, Kerawalla et al. (2009) warned that blog writing as an assessment in higher education should be grounded effectively in the course materials; without an effective sense of purpose, blogs as an assessment can be perceived as lacking clarity about their function, audience, and tone. Therefore, the expectations of blog writing should be made clear to students. Given the necessary alignment with subject-specific degree outcomes, blog writing may be best understood through a lens of psychological literacy, given that this approach encourages psychology students to apply their knowledge to daily life (Cranney et al., 2008, 2012). Therefore, we propose that blog writing may provide a useful opportunity to allow students to apply their psychology content in a critical, creative, non-conventional way.

> **i** Blog Rubric example
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> Scientific Blog marking rubric
> Below are the grading criteria for the assessment of the science blog. The profiles give an indication of typical performance at each class band, and clearly permit some variations up-wards
> or downwards while remaining in the same class band. These descriptions should be taken as

indicative rather than prescriptive. Seven key attributes of written work are considered when assigning marks, with some (e.g., 'accuracy') clearly more important than others:

1. Accuracy (i.e., is the material reported accurately?)
2. Appropriateness for general audience (i.e., is key content well defined and explained, could a
3. non-specialist follow the argument)
4. Application to question (i.e., is the material used effectively in the assignment)
5. Evidence (i.e., are claims supported by relevant evidence and/or theory from the literature?)
6. Argument (i.e., is there a convincing line of argument through the work?)
7. Critical evaluation (i.e., is the material presented evaluated fully?)
8. Structure and coherence (i.e., is the answer well-structured with good flow between points?)
9. Presentation (i.e., is the clarity of expression good)

See accompanying website for Rubric or go here https://osf.io/rgf8t

4. Considerations

4.0.1. Preparation

Need to begin preparation

Lectures x 40

Open Educational Resources Textbook for Research Methods CCBY4.0

Lab Practicals x 40

Open Educational Resources Textbook for Data Skills (Navarro) CCBY4.0

Recordings and worksheets for above x 40

Y3/MSc Bootcamp

4.0.2. Infrastructure

4.0.2.1. Recording suite

4.0.2.2. Materials storage

4.0.3. Estates and Facilities

4.0.3.1. Removal of computer banks in labs to make them more useful for practicals?

4.0.3.2. Wall-mounted monitors

4.0.3.3.

4.0.4. Technology

4.0.4.1. Posit Cloud as Entry Level

4.0.4.2. Student download for Y2 onwards

4.0.4.3. Possible Posit Server run by Ian

4.0.5. Costs

4.0.5.1. Cost for Posit Cloud (Maybe)

4.0.5.2. Chromebooks on loan

4.0.6. Risks

4.0.6.1. Technology obstacles (lower than SPSS)

4.0.6.2. Finite knowledge within staff

4.0.6.3. Staff resistance

4.0.7. Staffing

4.0.7.1. Recruit next TFs specifically to help build the infrastructure and programme

4.0.8. Timetabling

4.0.8.1. HeartData week

asdgasdfhg

4.0.8.2. Induction planning

4.0.8.3. Pre-arrival comms

4.0.9. Accessibility

4.0.9.1. Homework club - Where staff are on hand every week

4.0.10. Student Support/Welfare

4.0.10.1. Enhanced by access to resources

4.0.11. Employability

4.0.11.1. R and Python are most versatile tools on the market

5.

Part I.

Years

6. Foundations (Level 3)

sdgasdg

7. Foundation Year schedule

Week	Schedule			
1	**Lecture:**	There was a wee cooper who lived in fife and his hat was green	**IndStud:**	There was a wee cooper who lived in fife and his hat was green
	Lab:	There was a wee cooper who lived in fife and his hat was green	**Data:**	There was a wee cooper who lived in fife and his hat was green
2	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
3	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
4	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
5	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
		Reading Week		
6	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
7	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
8	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
9	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
10	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	

Week	Schedule			
11	**Lecture:**	There was a wee cooper who lived in fife and his hat was green	**IndStud:**	There was a wee cooper who lived in fife and his hat was green
	Lab:	There was a wee cooper who lived in fife and his hat was green	**Data:**	There was a wee cooper who lived in fife and his hat was green
12	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
13	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
14	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
15	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
		Reading Week		
16	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
17	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
18	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
19	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
20	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	

8. Year 1 (Level 4)

8.0.1. Module Content

This module equips students with the practical and conceptual skills necessary for the effective study of psychology. It includes computer skills, presenting results of experiments, structuring an essay, and critiquing a scientific paper. Additionally, it provides an introduction to experimental design, data, and statistics in psychology. Students will learn the theoretical aspects of basic statistical concepts and tests, and gain experience using statistical packages.

8.0.2. Module Learning Outcomes

The student should be able to:

demonstrate a comprehensive understanding of the principles of experimental psychology, from reading and summarizing scientific papers to planning, writing and presenting essays, reports and presentations.

understand the importance and relevance of data analysis, the different types of experiments and tests used.

understand the philosophical underpinnings of qualitative and quantitative approaches to research and evaluate their merits.

demonstrate the skills to analyse and interpret data using qualitative and quantitative frameworks and methods.

demonstrate statistical proficiency in the ability to use R to compute summary statistics, z-scores, chi-square, binomial tests, and parametric and non-parametric comparison of two means.

be able to visualise and present/communicate research findings to a range of audiences

select and provide a rationale for using a statistical test to analyse a particular dataset, and present the results correctly in both graphical and APA format.

8.0.3. Assessment

Assessment Element	Length	%	F or S	LO Tested
RPS				

8.0.4. Reading and Resource List

We have a custom made textbook to support key study skills throughout your degree:

9. Year 1 schedule

Week	Schedule			
-1	**Pre-Arrival:**	Preparing for Research at Goldsmiths	**IndStud:**	Maths ability/anxiety/refresher quiz
	Lab:	Online Refresher Q&A	**Data:**	
0	**WelcomeWeek**	I⬚Data Fair	**IndStud:**	Epistemology/Ontology Task
	Lab:	Data Collection on self!	**Data:**	Reflective exercise
1	**Lecture:**	Finding patterns and relationships	**IndStud:**	First journal article!
	Lab:	Visualise the year group	**Data:**	Blog about what you have learned. Posit/Quarto
2	**Lecture:**	Finding patterns and relationships	**IndStud:**	
	Lab:		**Data:**	
3	**Lecture:**	Correlations and Models (GLM)	**IndStud:**	
	Lab:		**Data:**	
4	**Lecture:**	Distributions and Sampling	**IndStud:**	
	Lab:		**Data:**	
5	**Lecture:**	Probabilities and P-Values	**IndStud:**	
	Lab:		**Data:**	
6	**Lecture:**	Reading Week Open Science, Reporting and Critique	**IndStud:**	
	Lab:		**Data:**	
7	**Lecture:**	Qualititative Research	**IndStud:**	
	Lab:		**Data:**	
8	**Lecture:**	Correlational Research	**IndStud:**	
	Lab:		**Data:**	

Week	Schedule			
9	**Lecture:**	Quasi-Experimental Research	**IndStud:**	
	Lab:		**Data:**	
10	**Lecture:**	Experimental Research	**IndStud:**	
	Lab:		**Data:**	

Week	Schedule			
11	**Lecture:**	Statistical Models	**IndStud:**	There was a wee cooper who lived in fife and his hat was green
	Lab:	There was a wee cooper who lived in fife and his hat was green	**Data:**	There was a wee cooper who lived in fife and his hat was green
12	**Lecture:**	Inferential Statistics	**IndStud:**	
	Lab:		**Data:**	
13	**Lecture:**	Alpha, Power, Effect & Sample Size	**IndStud:**	
	Lab:		**Data:**	
14	**Lecture:**	Correlation in depth	**IndStud:**	
	Lab:		**Data:**	
15	**Lecture:**	Regression	**IndStud:**	
	Lab:		**Data:**	
		Reading Week		
16	**Lecture:**	Multiple Regression	**IndStud:**	
	Lab:		**Data:**	
17	**Lecture:**	Logistic Regression	**IndStud:**	
	Lab:		**Data:**	
18	**Lecture:**	Comparing two means	**IndStud:**	
	Lab:		**Data:**	
19	**Lecture:**	Comparing several means	**IndStud:**	
	Lab:		**Data:**	
20	**Lecture:**	Employability and Data Skills	**IndStud:**	
	Lab:		**Data:**	

10. Year 2 (level 5)

10.0.1. Module aims

Experimental designs in psychology typically employ statistical analyses such as analysis of variance, factor analysis and regression. The aim of this module is to make these topics more accessible through the use of practical examples and data collection on a self-directed group research project.

10.0.2. Module Content

The module's overall aim is to offer a supportive and intellectually rigorous environment allowing students to develop highly valuable, transferrable research and collaboration skills in the context of undertaking a group research project.

This module teaches fundamental empirical research techniques within the framework of Open Science and reproducibility, promoting best practice in study design, Open Materials and Data, and methodological practice. This module fully immerses students in the Goldsmiths 'community of practice,' providing structured research support and opportunities to reflect on learning, modelling the key milestones of the final year dissertation.

The module seeks to promote the application of a scientific, intellectually virtuous, research-based approach to any and all future endeavours, and integrates metacognitive and reflective practices to deliver this transformative learning towards academic and personal development.

Over the course of two terms students will follow a programme of lectures introducing a critical approach to psychological research, as well as how such skills can be transferred beyond psychology; across academic disciplines and into the everyday world, with extensive use of case studies and problem-based learning.

Structured weekly labs will enable students to work collaboratively to identify an area of research, critically evaluate current research in the area, and develop a modest research project building on these insights.

Students will work together, alongside lab tutors and researchers in the department, to design and deliver the research project, including obtaining ethical approval, data collection and analysis, then interpreting and writing up the results, and sharing the materials and data in line with Open Science best practices in the Psychological, Behavioural and Data Sciences.

10.0.3. Module Learning Outcomes

1. Show a critical understanding of research design and methodology

2. Design, conduct, analyse, interpret and disseminate a psychological research project

3. Understand the conceptual and historical issues concerned with psychology as a science and area of practical application

4. Demonstrate valuable time-management and collaborative project-management skills and proficiencies

5. Reflect on their own learning, skill development and metacognition, preparing them for the final year dissertation

6. be able to use R to analyse: regression, correlations, reliability and validity, effect sizes, one-way within and between subjects designs (and post-hocs), two-way within, between and mixed designs; and factor analysis

7. Be able to present reproducible, APA format literate-programmed research reports.

10.0.4. Assessment

Assessment Element	Length	%	F or S	LO Tested
RPS				

10.0.5. Reading and Resource List

We have a custom made textbook to support key study skills throughout your degree:

11. Year 2 schedule

Week	Schedule				
1	**Lecture:**	ANOVA recap	**IndStud:**	There was a wee cooper who lived in fife and his hat was green	
	Lab:	There was a wee cooper who lived in fife and his hat was green	**Data:**	There was a wee cooper who lived in fife and his hat was green	
2	**Lecture:**	ANCOVA	**IndStud:**		
	Lab:		**Data:**		
3	**Lecture:**	Factorial ANOVA	**IndStud:**		
	Lab:		**Data:**		
4	**Lecture:**	RM ANOVA	**IndStud:**		
	Lab:		**Data:**		
5	**Lecture:**	Mixed Designs	**IndStud:**		
	Lab:		**Data:**		
		Reading Week			
6	**Lecture:**	Non-parametrics and non-numeric data	**IndStud:**		
	Lab:		**Data:**		
7	**Lecture:**	Case studies, n=1 & Ethnography	**IndStud:**		
	Lab:		**Data:**		
8	**Lecture:**	Thematic Analysis & Grounded Theory	**IndStud:**		
	Lab:		**Data:**		
9	**Lecture:**	Focus Groups & Consumer Research	**IndStud:**		
	Lab:		**Data:**		
10	**Lecture:**	Interpretative Phenomenological Analysis & Discourse Analysis	**IndStud:**		

Week	Schedule	
	Lab:	**Data:**

Week	Schedule			
11	**Lecture:**	Your final year project	**IndStud:**	There was a wee cooper who lived in fife and his hat was green
	Lab:	There was a wee cooper who lived in fife and his hat was green	**Data:**	There was a wee cooper who lived in fife and his hat was green
12	**Lecture:**	MANOVA	**IndStud:**	
	Lab:		**Data:**	
13	**Lecture:**	FA (LVM, PCA, EFA, CFA)	**IndStud:**	
	Lab:		**Data:**	
14	**Lecture:**	Mediation & Moderation	**IndStud:**	
	Lab:		**Data:**	
15	**Lecture:**	Longitudinal Data	**IndStud:**	
	Lab:		**Data:**	
		Reading Week		
16	**Lecture:**	Multi-Level Models	**IndStud:**	
	Lab:		**Data:**	
17	**Lecture:**	Categorical Data	**IndStud:**	
	Lab:		**Data:**	
18	**Lecture:**	Big Data	**IndStud:**	
	Lab:		**Data:**	
19	**Lecture:**	Machine Learning	**IndStud:**	
	Lab:		**Data:**	
20	**Lecture:**	Artificial Intelligence	**IndStud:**	
	Lab:		**Data:**	

12. Dissertation (Y3 & MSc)

12.0.1. Module Content

12.0.2. Module Learning Outcomes

12.0.3. Assessment

Assessment Element	Length	%	F or S	LO Tested

12.0.4. Reading and Resource List

We have a custom made textbook to support key study skills throughout your degree:

Table 12.2.: Y3 Term 1 Laydown

Week	Lecture	Practical
Pre	Preparing to become a Psychologist	
WW	Let's measure some stuff	
1	Answering questions with data	Doing stuff with stuff
2	Finding patterns and relationships	
3	Correlations and models	
4	Distributions and sampling	
5	Probabilities and P-Values	
RW	--	--

13. Dissertation Schedule (Y3 & MSc)

Week	Schedule			
1	**Lecture:**	There was a wee cooper who lived in fife and his hat was green	**IndStud:**	There was a wee cooper who lived in fife and his hat was green
	Lab:	There was a wee cooper who lived in fife and his hat was green	**Data:**	There was a wee cooper who lived in fife and his hat was green
2	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
3	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
4	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
5	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
		Reading Week		

14. Year 3 RM module (NEW MODULE) (Level 6)

14.0.1. Module Content

14.0.2. Module Learning Outcomes

14.0.3. Assessment

Assessment Element	Length	%	F or S	LO Tested

14.0.4. Reading and Resource List

We have a custom made textbook to support key study skills throughout your degree:

15. Year 3 schedule (NEW MODULE)

Week	Schedule			
1	**Lecture:**	There was a wee cooper who lived in fife and his hat was green	**IndStud:**	There was a wee cooper who lived in fife and his hat was green
	Lab:	There was a wee cooper who lived in fife and his hat was green	**Data:**	There was a wee cooper who lived in fife and his hat was green
2	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
3	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
4	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
5	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
		Reading Week		
6	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
7	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
8	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
9	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
10	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	

16. MSc Module (NEW)

xcghfg

17. MSc Module (NEW) schedule

Week	Schedule			
1	**Lecture:**	There was a wee cooper who lived in fife and his hat was green	**IndStud:**	There was a wee cooper who lived in fife and his hat was green
	Lab:	There was a wee cooper who lived in fife and his hat was green	**Data:**	There was a wee cooper who lived in fife and his hat was green
2	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
3	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
4	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
5	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
		Reading Week		
6	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
7	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
8	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
9	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
10	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	

Week	Schedule			
11	**Lecture:**	There was a wee cooper who lived in fife and his hat was green	**IndStud:**	There was a wee cooper who lived in fife and his hat was green
	Lab:	There was a wee cooper who lived in fife and his hat was green	**Data:**	There was a wee cooper who lived in fife and his hat was green
12	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
13	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
14	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
15	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
		Reading Week		
16	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
17	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
18	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
19	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	
20	**Lecture:**		**IndStud:**	
	Lab:		**Data:**	

Part II.

Guidelines

18. QAA

3.4 Research methods are integral to psychology and students obtain a sound knowledge of, and a proven ability to use, a range of both qualitative and quantitative methods appropriately. Knowledge and understanding of how to obtain and analyse evidence is best acquired and demonstrated through extensive and progressive empirical work in laboratory and naturalistic settings through all stages of a degree.

3.5 Psychology students learn the basic principles of sound data collection. Given the broad theoretical scope of psychology, rigorous specialist training is required to engender a critical understanding of the role of experimental design, the choice of research methods employed, and the analytic approach taken, for testing psychological theories.

Subject knowledge and understanding 6.3 On graduating with an honours degree in psychology, graduates are able to:

1. understand the scientific underpinnings of psychology as a discipline, its historical origins, development and limitations

2. recognise the inherent variability and diversity of psychological functioning and its significance

3. demonstrate systematic knowledge and critical understanding of a range of influences on psychological functioning, how they are conceptualised across the core areas as outlined in paragraphs 4.4 and 4.5 and how they interrelate

4. demonstrate detailed knowledge of several specialised areas and/or applications, some of which are at the cutting edge of research in the discipline

5. demonstrate a systematic knowledge of a range of research paradigms, research methods and measurement techniques, including statistics and probability, and be aware of their limitations.

Subject-specific skills 6.4 On graduating with an honours degree in psychology, graduates are able to:

1. reason scientifically, understand the role of evidence and make critical judgements about arguments in psychology

2. adopt multiple perspectives and systematically analyse the relationships between them

3. detect meaningful patterns in behaviour and evaluate their significance

4. recognise the subjective and variable nature of individual experience

5. pose, operationalise and critique research questions

6. demonstrate substantial competence in research skills through practical activities

7. reason analytically and demonstrate competence in a range of quantitative and qualitative methods

8. competently initiate, design, conduct and report on an empirically-based research project under appropriate supervision, and recognise its theoretical, practical and methodological implications and limitations

9. be aware of ethical principles and approval procedures and demonstrate these in relation to personal study, particularly with regard to the research project, and be aware of the ethical context of psychology as a discipline.

Generic skills 6.5 On graduating with an honours degree in psychology, graduates are able to:

1. **communicate ideas and research findings by written, oral and visual means**

2. **interpret and use numerical, textual and other forms of data**

3. **be computer literate, for the purposes of furthering their own learning and in the analysis and presentation of ideas and research findings**

4. **solve problems by clarifying questions, considering alternative solutions and evaluating outcomes**

5. **be sensitive to, and take account of, contextual and interpersonal factors in groups and teams**

6. **undertake self-directed study and project management, in order to meet desired objectives**

7. **take charge of their own learning, and reflect and evaluate personal strengths and weaknesses for the purposes of future learning.**

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