WRITTEN STATEMENT

For the past 10 years I have convened, lectured and tutored third year, fourth year and Masters-level statistics to aspiring Psychologists. Psychology students typically dread statistics, have poor maths literacy, and see no inherent value in statistical skill-development for their future careers. Nevertheless, statistical literacy is crucial to the Scientist-Practitioners we wish our graduates to become. These learning barriers create a significant challenge that I joyfully embrace.

My teaching philosophy centres on the key goal of making complex content accessible to students. I scaffold and guide students’ learning by creating a safe environment to ask questions, and providing meaningful, personalised feedback.

Criteria 2. Inspiring, motivating, and guiding students and providing useful and empathetic advice.

I am personally invested in inspiring my students in their journey through statistics. Although students entering psychology rarely recognise the need for advanced statistical knowledge, our graduates require excellent critical thinking and research skills, with a firm foundation of discipline-relevant expertise (Objective 1.3, L&T Strategic Framework: encourages students to be critical thinkers and build research skills to contribute to the advancement of knowledge and professional practice). For Psychology graduates, these skills are predicated on statistical proficiency. Through enthusiastic, passionate teaching, I motivate my students into a new appreciation of statistics.

I guide my students in cultivating integral skills they never knew they needed: the ability to analyse, interpret, and effectively communicate statistics. My students graduate no longer statistics-avoidant, expressing amazement that somebody made the material so accessible, and even enjoyable. I effectively engage and motivate my students, with 96% of PSYH4418 students in 2019 (n=22) agreeing that I effectively engaged them in learning, and 100% (n=27) agreeing that I motivated them to do their best work. My students appreciate my commitment: last year, 28 students from a cohort of 80 (35%) nominated me for the VC’s student-nominated award, for which I was a highly commended finalist.

Criteria 3. Integrating assessment and feedback strategies that promote and enhance student learning.

Integrating feedback into my assessments has enhanced student learning. For example in Psychology Honours, students traditionally submitted a thesis proposal to a coordinator, receiving no feedback or grade; a missed opportunity to support students. I integrated this task into PSYH4418, redesigning it as a formal assessment, ensuring students receive personalised statistical guidance on a personally relevant, embedded learning task. Students appreciate the feedback and their improved statistical understanding thrilled the coordinators, reducing their workload, whilst enhancing the quality of students’ theses.

In a second example, for 5 years I have conducted an interactive two-stage exam, based on two pedagogical approaches: learning-by-teaching and team-based learning. I implemented this exam after noticing a concerning trend: students sat advanced final statistics exams and received marks-only feedback, with no indication of how they might improve. My new approach sees students sitting their exam individually and again immediately afterwards in collaborative groups. This evidence-based approach turns the previously summative-only exam into a formative and summative task. Students learn from each other, explaining their reasoning and receiving peer feedback. Students consistently thank me for the way I designed this exam and this innovative approach was recognised in my invitation to speak at Macquarie’s inaugural Educating for Success 2020 symposium.
SUPPORTING EVIDENCE

Since 2014 I have co-convened the third year pre-Honours statistics unit PSYU3349, and convened the Honours statistics unit PSYH4418. In 2011 I convened the Masters-level statistics unit PSY863.

**Criterion 2: Inspiring, motivating, and guiding students and providing useful and empathetic advice.**

I show sustained performance as well as consistent improvement in student evaluations. Although many survey questions differ year to year, meaning direct comparison is difficult, I demonstrate high scores, with steady enhancement from a high base:

Beyond formal evaluations, students and colleagues alike frequently reach out to me with unsolicited emails.

**My students express appreciation across units and years,** in PSYU3349: “If I could leave a 5 star rating I would 😂” (Lana Sakla, PSYU3349, 2020), PSYH4418: “You do such an amazing job making Stats come alive, making it so accessible and interesting- as well as being so caring with the students. It is so appreciated.” (Natalie Parsa, PSYH4418, 2020); and PSY863: “I loved this unit – it was challenging; however I think the support and teaching style of Naomi really enhanced this experience” (PSY863 LET, 2011).

I am known for my empathy and care for the students, both by the students themselves: “Despite the difficulty of the content and how personally challenging PSY418 has been at times, I have been really enjoying our classes together. I really appreciate the valuable time you’re taking to personally field all of our questions- your answers are always thoughtful and considered. Your passion has been infectious, inspiring, and a definite strength of the honours year. I can tell you want us to do our best and that you are totally on our team! Anyway, I just wanted to let you know that your efforts have been helping change a crummy year into something better. It helps to make it all worth it. So thank you!” (Cameron Ragg, PSY418, 2019) as well as by my peers: “I also liked that you were very open to students’ questions, and first validated the question (avoiding the possibility that the student would feel stupid for asking, and hence encouraging other students to ask questions where they needed to). You answered them comprehensively and respectfully too, and I know that students appreciate that” (A/Prof Kevin Brooks, peer review of teaching, 2014).

Students speak of my ability to guide them with challenging content: “Can I just say I think you did an amazing job addressing the relentless questions on the forum throughout the unit. While I personally struggled to master the content (I am resigned to always finding stats really tough), you definitely went over and above to assist in our learning.” (Damien Bellemore, PSYH4418, 2020) and provide them with the tools they will need in their future careers: “I just wanted to say thank you for PSYH4418! I feel a lot more competent as an aspiring psychologist equipped with the content of the course... especially factor analysis / path analysis which seemed so complex and daunting. I really enjoyed it 😊” (Jarrod Cooke, PSYH4418, 2020); “It really helped to mesh the theory and the practical in my mind.” (Suzanne Byrne, PSY349, 2019).
Students express surprise that they enjoyed statistics: “I actually thoroughly enjoyed learning stats this year, so thank you for your endless peppiness and for making stats enjoyable.” (James Arico, PSYH4418, 2020). They find the concepts unexpectedly make sense, helped along by a light-hearted touch: “Just finished our last lecture for stats! It’s amazingly all come together with the last lecture! Just wanted to say thank you so much for a great semester! And while you couldn’t see or hear me, I was chuckling along the whole semester with your online lectures. You explained everything over and over in many different ways and it was really easy to follow and helpful!” (Melissa Pehlivan, PSYH4418, 2020); “I just want to say an impromptu thank you! It means so much to me as a student when a lecturer really engages with their audience the way you do. I always get a laugh out of your jokes. Your humour is well received. Please keep up the fantastic work and passion with which you teach. I look forward to more of your lectures!” (George Dimopoulos, PSY418, 2016).

Criterion 3: Integrating assessment and feedback strategies that promote and enhance student learning.

Students express appreciation for my thoughtful assessment and feedback strategies in PSYH4418. In 2017, 90% of students (n = 40) agreed that they made effective use of the feedback provided for their learning (LEU mean 4.5). In 2019, 93% of students (n = 28) agreed that the assessment tasks were a useful learning activity (LEU mean 4.7).

My effective assessments are appreciated by my peers: staff see the clear benefits of the PSYH4418 research proposal assignment for their students: “I think the change is great. It is wonderful to have students doing this as part of their coursework. I get the feeling that students may be taking this proposal more seriously now and as such it has reinforced the principle that they should be deeply familiar with the subject matter and their hypotheses now rather than after data is collected.” (A/Prof Melissa Norberg, 2016), do the students themselves: “Feedback on the assignment was helpful when thinking about how to best analyse data for my thesis. Thanks Naomi!” (PSY418 LEU, 2017); “The Research Proposal Assessment was incredibly useful.” (Talia Nardo, PSY418, 2016).

Although it is rare for students to express thanks for exams, the PSYH4418 two-stage exam has prompted them to do so, from the first year it was run: “I really enjoyed the two-stage exam. I thought it went really well and I learned a lot from it. I found it to be extremely helpful and insightful. If only all my exams were structured that way! I strongly recommend keeping the format for future years.” (Alyssa Mulray, PSY418, 2015) until its most recent year: “Because statistics is really problem-solving based, you can’t just remember a question you thought you got wrong and look up the answer later - so it was really helpful to have the group component to gauge my own performance. Doing the exam a second time with a group allowed me to understand other student’s rationale to solving questions I was unsure of the first time through” (Karina Chan, PSYH4418, 2019).

Staff express admiration for my teaching and assessment practices: “I have always been a little envious of how highly your students regard you and how they seem to enjoy a subject which does not come easily to them. So I thought it only fair to let you know that I have taken some of your engagement and assessment strategies and adapted them for my own unit this past session. The results were fantastic, thank you so much!” (Prof Mike Jones, Head of Psychology statistics teaching group, 2020).

References: