

# ASCILITE 2023

*People, Partnerships and Pedagogies*

## Behavioural insights for better teaching and learning

**Filia Garivaldis**

Monash University

A persisting assumption in education is that students have the same passion and motivation to learn that educators have to teach. This assumption can lead to the use of a familiar but narrow set of solutions for addressing teaching and learning challenges. However, there are many barriers students face when attempting to engage fully with their courses or units of study, that are seldom addressed by educators. Behavioural science can offer valuable insights into addressing such barriers. From understanding students and the context of their learning better, to designing pedagogical methods better aligned with these needs, behavioural science can help create targeted solutions to the ongoing challenges experienced in the field of education. In this workshop, we offer a range of practical and theoretical examples from the area of behavioural science, that challenge the assumption that providing access to learning material is enough. We also draw on the expertise of educators and scholars in higher education, to brainstorm solutions, beyond just the use of pedagogy, that can address some of these challenges.

Keywords: behavioural science, teaching and learning, behaviour change, expert elicitation, professional development.

### Bringing behavioural science to education

Education is recognised as the single best investment a country can make to create prosperous, healthy, and equitable societies (United Nations, <https://www.un.org/sustainabledevelopment/education/>). Yet, educators and students alike face a number of barriers associated with teaching and learning that interfere with the impact of even the most rigorously validated pedagogical, including digital, educational tools. With the growing range of modes of delivery of education, many of which are new to the majority of educators today, a behavioural approach to optimising teaching and learning is needed more than ever.

Behavioural scientists are concerned with understanding human behaviour, from what prompts an individual to behave in a certain way, to how this behaviour can change, to create better outcomes for people and planet. There are many examples to draw on, where applying behavioural science principles has improved economic prosperity, health, social inclusion and environmental sustainability (including specific reference to Covid-19; Curtis & Smith, 2020). A key premise in this work is that enhancing knowledge and understanding through education is only one of many possible ways to inspire change (Michie et al., 2011). Similarly, we argue that *producing necessary and engaging content to learn is only one of many possible ways to teach*.

#### *Behaviour change tools and methods*

There are many generic behaviour change principles that can be applied to nudge behaviour in the right direction, that are relevant to almost any context. For example, behaviours that are made easy, attractive, social and timely to perform, become significantly more frequent (Behavioural Insights Team, 2014). Likewise, clear and concise instructions, guidelines, or 'calls to action', improve the chances that these instructions will be adhered to (Michie & Johnson, 2004). Finally, setting goals and developing if-then plans can bridge the gap between intentions and actions (Milkman et al., 2011).

There are also systematic behaviour change methods that enable the development of targeted behaviour change solutions, particularly where problems are complex (Curtis & Smith, 2020). A systematic method enables us to follow due diligence and apply an evidence-based approach to better understand the need to change, to gain evidence of the drivers and barriers to behaviour, as well as to identify appropriate intervention types alongside education, and evaluation methods to assess impact and improve it.

### Workshop objectives

In this workshop we aim to demonstrate that producing necessary and engaging content to learn is only one of many possible ways to teach. Our key objective is to collaboratively explore, with expert educators, ways in

which behavioural science can be applied to improve teaching and learning.

We address the conference subtheme “2: deeper partnerships” by bringing together experts across different disciplines (education and behavioural science), by sharing insights between pedagogy and research, and by exploring solutions within the education community, for educators, to celebrate the relationships, collaborations, and connections between the many types of expertise involved in teaching and learning.

We anticipate that the workshop will generate practical solutions grounded in seminal behaviour change theory, to be readily applied to improve educational practice. We also anticipate that the outcomes will inform future educational research into how the behavioural sciences can contribute to education, which is solely lacking.

### **Agenda and format**

We take the opportunity in this workshop to engage with scholars, educators and researchers, in dialogue, to share and explore how behavioural science can contribute new approaches and perspectives. We provide professional development with this aim in mind, and adopt a method of expert elicitation with educators to collaboratively brainstorm practical behavioural solutions.

Sandwiched between participant briefing (10mins), to start, and debriefing (10mins), to end, the body of the workshop will be divided into the following two key phases.

#### *Key Phase 1: Professional Development (25mins)*

The facilitators will offer a range of behaviour change tools and principles, drawn from the discipline as well as preliminary research findings from our own educational research, to create awareness of the potential for applying behavioural science into education practice. In addition, we use our experience in delivering capability building on behaviour change over the years, to offer for consideration new methods of thinking and expanding the education skillset with new tools and techniques.

#### *Key Phase 2: Expert Elicitation (25mins)*

Secondly, an expert elicitation approach will be used with workshop participants to brainstorm practical behavioural solutions. This approach is appropriate for gathering expert judgements or knowledge of novel, complex, poorly understood, or rapidly evolving concepts (Meyer & Booker, 2001). Key questions explored with participants in groups for brainstorming includes:

What does it mean to make learning EASY, ATTRACTIVE, SOCIAL and TIMELY, and what does this look like?

A group discussion will follow the group brainstorming session (20mins), before the workshop debrief.

During the workshop, efforts will be made to adopt inclusive, respectful, and non-judgemental questioning strategies, and facilitators will apply a range of recommendations put forward previously on how to obtain appropriate and reliable expert knowledge (Kynn, 2008). Ethics approval and appropriate informed consent will be obtained, for the use of deidentified data for reporting and research purposes.

To deliver this workshop, supplies including a whiteboard or any blank wall space on which to place post-it-notes, and technology, including a projector on which to present PowerPoint slides, will be needed. Slides will state the session purpose and objectives, research questions, a schedule of session events, and the debrief. The workshop facilitators will provide materials to assist with the moderation of the session, as needed, including explanatory statements and consent forms.

### **Intended audience**

This session draws on the experiences of educators and educational researchers from higher education, qualified with either an interest or background on creating impactful learning experiences. We welcome a minimum number of 30 and maximum number of 50 participants for an in person delivery of the session, and do not restrict participation from particular sectors, levels, or industries. In fact, a broad range of vicarious and lived experiences of delivering teaching and learning will only provide a richer body of knowledge, to generate a broader range of behavioural solutions in education, which have not yet emerged in the literature base (Meyer & Booker, 2001).

## References

- Curtis, J., & Smith, L. (2020). Introduction, Chapter 1. *The Method Book*. Monash University.  
<https://doi.org/10.26180/13412396.v1>
- Kynn, M. (2007). The 'heuristics and biases' bias in expert elicitation. *Journal of the Royal Statistical Society*, 171, 239-264. <https://doi.org/10.1111/j.1467-985X.2007.00499.x>
- Michie, S., & Johnson, M. (2004). Changing clinical behaviour by making guidelines specific, *BMJ*, <https://doi.org/10.1136/bmj.328.7435.343>
- Meyer, M., & Booker, J. (2001). *Eliciting and analyzing expert judgment: a practical guide*. Academic Press New York. <https://doi.org/10.1137/1.9780898718485>
- Michie, S., van Stralen, M.M. & West, R. (2011). The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation Science*, 6, 42. <https://doi.org/10.1186/1748-5908-6-42>
- Milkman, K. L., Beshears, J., Choi, J. J., Laibson, D. & Madrian, B. C. (2011). Using implementation intentions prompts to enhance influenza vaccination rates. *Proceedings of the National Academy of Sciences*, 108 (26), 10415-10420. <https://doi.org/10.1073/pnas.1103170108>

Garivaldis, F. (2023, December 3-6). Workshop Name [Workshop]. Australasian Society for Computers in Learning in Tertiary Education Conference, Sydney, NSW, Australia. DOI: <a href="https://doi.org/10.14742/apubs.2023.478">https://doi.org/10.14742/apubs.2023.478</a>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Note: All published papers are refereed, having undergone a double-blind peer-review process. The author(s) assign a Creative Commons by attribution licence enabling others to distribute, remix, tweak, and build upon their work, even commercially, as long as credit is given to the author(s) for the original creation.

© Garivaldis, F. 2023