
Introduction to Positive Computing – Technology that Fosters Wellbeing

Rafael A. Calvo

Positive Computing Lab
The University of Sydney
Sydney, NSW 2006 Australia
Rafael.calvo@sydney.edu.au

Dorian Peters

Positive Computing Lab
The University of Sydney
Sydney, NSW 2006 Australia
Dorian.Peters@sydney.edu.au

Author Keywords

Design methods, design research, behavior change, self-efficacy, connectedness, emotions.

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Summary

A growing number of HCI professionals are interested in how we might design technology to foster psychological wellbeing. Meeting such an aim will involve a crossing of disciplines, of methods, and a new way of thinking about what technology should be doing for us. By turning to the well-established research and methods available in psychology, education, neuroscience, and HCI, we can begin to cultivate a field dedicated to the design and development of technology that supports wellbeing and human potential, a field we refer to as positive computing [1,4]. In this course we will explore multidisciplinary approaches to evaluating and designing for digital experience that supports wellbeing determinants like self-awareness, autonomy [3], resilience, mindfulness, and altruism [2]. The objective of this course is to provide participants with: a theoretical foundation, a practical framework, a look at the state of the art, and group-generated design strategies to better support wellbeing in their current and future projects.

ACM Classification Keywords

H.5.m [Information Interfaces and Presentation (e.g., HCI)]: Miscellaneous; H.5.2 [User Interfaces]: Evaluation/Methodology, User-Centered Design; H.5.3[group and Organization Interfaces]: Evaluation/Methodology;



Play a casual puzzle game for downtime.

Casual puzzle games teach skills like pattern matching, arranging shapes, and visual logic. They can be played on the web, via social networks, or on mobile devices.



Figure 2 - Handout for group session intended to stimulate thinking around wellbeing impact.

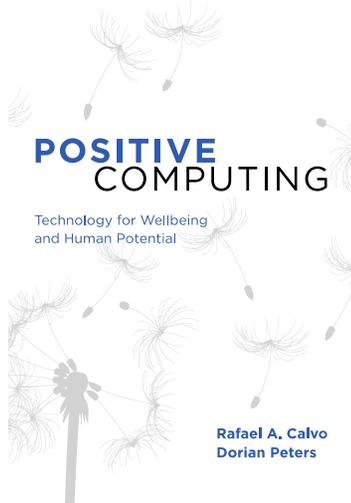


Figure 1 - Textbook

Learning Outcomes

Participants will gain:

- **Theoretical foundation** - Understanding of the relevant literature from multiple disciplines that can inform technology design & evaluation for wellbeing.
- **A theoretical and practical framework** for developing new technologies for wellbeing.
- **A broader, deeper, and multidimensional understanding** of the ways technology use scenarios impact wellbeing.
- **Review of the State of the art** - Exposure to a range of cutting-edge technologies designed to promote factors of wellbeing.
- **Group-generated design strategies** for better supporting wellbeing in your current and future projects.
- **A copy of the resource text** *Positive Computing* for reference.

Instructors

Rafael Calvo is Associate Professor of Software Engineering and Director of the Positive Computing Lab at the University of Sydney. Rafael is the recipient of 5 teaching awards for his work on learning technologies, and editor of the *Oxford Handbook of Affective Computing*. Rafael is Associate Editor of the *IEEE Transactions on Learning Technologies* and of *IEEE Transactions on Affective Computing* and Senior Member of IEEE. He has over 150 publications in the fields of affective computing, learning technologies, and computational intelligence. His most recent book is *Positive Computing: Technology for Wellbeing and Human Potential* from MIT Press.

Dorian Peters is a designer and author who specializes in design for learning and wellbeing. She leads online

strategy at the Faculty of Education at the University of Sydney, is a member of the Centre for Research on Computer Supported Learning and Cognition, and is Creative Leader at the Positive Computing Lab. Her current work explores the use of design to support resilience, autonomy, and compassion in digital experience. Her books include *Interface Design for Learning* (New Riders) and *Positive Computing* (MIT Press).

Acknowledgements

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