UNIVERSITY OF AMSTERDAM

UvA-DARE (Digital Academic Repository)

Pushing the Boundaries of Participatory Design for Greater Impact

Korte, Jessica; Boden, Marie; Fails, Jerry; Sim, Gavin; Read, Janet; Constantin, Aurora; Bhatnagar, Sanjana; Good, Judith; Eriksson, Eva

DOI
10.1145/3726986.3727939

Publication date
2024

Document Version
Final published version

Published in
Proceedings of the 36th Australasian Conference on Human-Computer Interaction (OzCHI '24)

License
Unspecified

Link to publication

Citation for published version (APA):
Korte, J., Boden, M., Fails, J., Sim, G., Read, J., Constantin, A., Bhatnagar, S., Good, J., & Eriksson, E. (2024). Pushing the Boundaries of Participatory Design for Greater Impact. In S. Viller, J. Paay, J. Fredericks, J. Turner, N. Vickery, G. Wadley, D. Muñoz, T. Capel, A. Atiq, H. Davis, M. Bodén, J. Hardman, & B. Ploderer (Eds.), *Proceedings of the 36th Australasian Conference on Human-Computer Interaction (OzCHI '24): Meanjin, Brisbane, Australia, 30 November-4 December 2024* (pp. 874-876). The Association for Computing Machinery. https://doi.org/10.1145/3726986.3727939

General rights
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: https://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, P.O. Box 19185, 1000 GD Amsterdam, The Netherlands. You will be contacted as soon as possible.
UvA-DARE is a service provided by the library of the University of Amsterdam (https://dare.uva.nl)

Download date:13 Nov 2026

Pushing the Boundaries of Participatory Design for Greater Impact

Jessica Korte
Queensland University of Technology
Brisbane, Queensland, Australia
University of Queensland
St Lucia, Queensland, Australia
jessica.korte@qut.edu.au

Marie Boden
University of Queensland
St Lucia, Queensland, Australia
marieb@eecs.uq.edu.au

Jerry Fails
Boise State University
Boise, IDAHO, USA
jerryfails@boisestate.edu

Gavin Sim
University of Lancashire
Preston, United Kingdom
grsim@uclan.ac.uk

Janet Read
University of Lancashire
Preston, United Kingdom
jcread@uclan.ac.uk

Aurora Constantin
University of Edinburgh
Edinburgh, United Kingdom
aurora.constantin@ed.ac.uk

Sanjana Bhatnagar
University of Queensland
St Lucia, Queensland, Australia
s.bhatnagar@uq.edu.au

Judith Good
University of Amsterdam
Amsterdam, Netherlands
j.a.good@uva.nl

Eva Eriksson
Aarhus University
Aarhus, Denmark
evae@cc.au.dk

Abstract

Participatory design research has historically been a domain focused on individual projects situated in a specific context. If participatory design research is to have greater societal impact, and enable diverse groups to contribute to solving the "big problems" facing our world, it is essential to develop methods for planning, conducting, and reporting participatory design research that facilitate the comparison and integration of individual projects. This workshop aims to tackle this complex issue and to create guidelines or a framework for understanding participatory design processes and data on a larger scale.

CCS Concepts

• **Human-centered computing → Interaction design theory, concepts and paradigms**.

Keywords

participatory design, co-design, distributed participatory design, design process, user participation, impact, scale, societal issues, societal impact

ACM Reference Format:

Jessica Korte, Marie Boden, Jerry Fails, Gavin Sim, Janet Read, Aurora Constantin, Sanjana Bhatnagar, Judith Good, and Eva Eriksson. 2024. Pushing the Boundaries of Participatory Design for Greater Impact. In *36th Australasian Conference on Human-Computer Interaction (OzCHI '24), November 30–December 04, 2024, Brisbane, QLD, Australia.* ACM, New York, NY, USA, 3 pages. https://doi.org/10.1145/3726986.3727939

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the owner/author(s).

OzCHI '24, Brisbane, QLD, Australia

© 2024 Copyright held by the owner/author(s).

ACM ISBN 979-8-4007-1509-9/24/11
https://doi.org/10.1145/3726986.3727939

1 Introduction

Participatory design (PD) research has historically been a domain of individual projects situated in a specific context [12]. Much of the PD research literature reports on single studies. For PD research to mature, and to have broader societal impact, as a research community we need to push the boundaries to go beyond individual case studies and studies with individual teams [15, 16].

One approach to broadening the impact of PD is to find ways to make data comparable across multiple projects, teams and/or contexts; to incorporate perspectives of diverse design teams, collected in diverse ways [13]. This would enable PD work to make larger, stronger, more substantial claims, and consequently have greater impact. In one such example [13], six case studies from five countries on three continents were included in a study to explore the feasibility and possibilities of a large, single topic, multi-site DPD project by examining a small set of PD cases constrained by a grounding in a published DPD research protocol [3], and having a common theme (climate change). The cases follow the multi-case notion of differentiated replication [11], and the study design championed differentiated replication by allowing for deliberate and known variations, including ages of children, location of study, tools used, and approaches taken. This design met the aims of multi-site qualitative research which produces findings that are reflective of context, but hold broader applicability across settings [5]. Since reporting differentiated replication in DPD with children is rare, that case contributes a unique illustration of variations in conditions and contexts and how these have influenced the planning, execution and evaluation of the related case. However, this study comes with limitations. For instance, a focus on the Global North put light on the need for making concerted efforts to trial this with researchers in non-WEIRD and Global South communities. If this work is to be fully replicable, it is essential to co-create culturally and contextually relevant approaches to its use, fostering inclusivity and moving towards building ethical, equitable, and effective

HCI solutions worldwide. A second limitation is that they did not consider the 'quality' of design outputs and did not attempt to bring any of these together, locally or as a mass. We would not normally encourage researchers to design for the sake of designing and so we need to consider this going forward. Methods do exist that can be explored in future work [14]. Therefore, future work can consider what to try to keep the same, and what to vary, as well as an exploration of ways in which we can talk about these things. We acknowledge that some level of replication will mature the field, and could increase the potential of qualitative research and support the development of interventions tailored to the populations they are intended to serve.

1.1 Workshop Questions

This workshop seeks to bring together participatory design researchers to address the following questions:

- How can we extend and strengthen the impact of participatory design research beyond one user group or one project?
- How do we aggregate smaller PD projects together to maximise societal impact?
- What are the appropriate ways to integrate data from diverse projects into a single larger project?
- How do we enable multiple diverse participant groups to contribute to a single larger project? This is complicated by the fact that this may mean working with different groups of stakeholders, different research sites, different PD approaches, and/or different scales of contribution.
- How do we evidence contributions from diverse PD projects in the context of addressing larger goals?
- How should PD research data be gathered, shared and described to support greater impact, considering that it consists largely of rich, context-dependent, qualitative data?
- Do we need new approaches, or meta-methods, for comparable PD?
- What do we mean by 'societal impact' in the context of PD research?
- How do we evidence impact and success?

1.2 Workshop Attendees

This will be a hybrid workshop, and we welcome both physical and virtual attendees.

We invite position papers of no more than 2 pages plus references from attendees (using the CEUR Workshop Proceedings template), that discuss one or more of the following:

- Conceptualizing impact at different scales (e.g., large and small);
- Experiences with multi-site and/or multi-team PD projects, or hypothetical approaches to scaling up smaller projects;
- PD projects which aimed to address "big problems" at any scale;
- PD approaches intended to address societal issues, work at large scales, and/or distributed PD;
- Ethical and practical considerations of involving participants in large scale and/or distributed PD projects.

We also welcome workshop observers who do not submit position papers, but who can contribute to and learn from the workshop activities.

2 Workshop Structure

We propose a half-day workshop. The overarching goal of the workshop is to briefly share experiences using participatory design for impact. We plan to spend ample time collaborating to identify unifying processes and best practices to coalesce date from disparate locations to support greater overall adoption and impact of the designs. The proposed schedule for the workshop is:

15 mins Initial introductions and motivations
45 mins Lightning talks by workshop attendees
15 mins Questions, answers, and discussion
30 mins Networking break
45 mins Group work on process
15 mins Share group discussions
45 mins Group work on data (format, gathering and sharing processes)
15 mins Share group discussions

The specific times would need to be decided based on overall workshop timelines.

3 Organisers' Backgrounds

The Pushing the Boundaries of Participatory Design research collaboration began in 2018, and has grown ever since. As the name says, we seek to push the boundaries of participatory design: to be more inclusive, to be more ethical, to survive a pandemic, and to address problems of a larger scale than any one researcher could address alone. We have previously run workshops at INTERACT [8], IDC [3, 4, 10], a Special Interest Group at CHI [2], and a special issue in International Journal of Child-computer Interaction [9]. We have also published: advice on distributed PD [1], a research proposal for a world-wide PD project [3], and a multi-site case study as a first attempt to synthesise diverse PD outputs into a more coherent whole [13]. This workshop is a logical next step in our bid to push the boundaries of PD.

Jessica Korte is a Senior Lecturer at Queensland University of Technology's School of Computer Science. She is passionate about PD's potential to empower individuals and communities. She developed a PD approach for designing with young Deaf children [6], and her major research focus is the participatory design of sign language technologies with the Australian Deaf community [7].

Marie Boden is an Interaction Design researcher and educator at the University of Queensland. Marie collaborates closely with users in co-design and participatory design projects. Her main research interest is in social robotics and design of technology to support teaching and learning.

Jerry Alan Fails is Department Chair and Professor of Computer Science at Boise State University in Idaho, USA. He has designed technologies with and for children using participatory design methods for more than twenty years. He currently is focusing on supporting children: as they search for materials online, to better understand and more safely navigate online spaces (security and privacy), and as they interact with others in extended reality.

Gavin Sim is a Reader in Human Computer Interaction. He has worked at UCLan since 2002. His research interests are in the area of HCI and educational technology, in particular usability / user experience evaluation methods. He is an active researcher within the ChiCI group, where his focus has been on evaluating user experience and usability within games and educational technology. He has written method papers for IDC, and has worked with the BBC.

Janet Read is a pioneer in the research area of Child Computer Interaction. She currently directs the UCLan Research Centre for Digital Life and leads the Child Computer Interaction Research group.

Aurora Constantin is a Lecturer at the University of Edinburgh School of Informatics, UK. Her research focuses on designing technology for individuals with special needs (e.g. children with autism), and employing participatory approaches with various stakeholders. Currently she is working on designing an Artificial Intelligence-based tool to help children with autism understand social situations.

Sanjana Bhatnagar is an Associate Lecturer & Researcher at the University of Queensland, Brisbane, Australia. She has experience in Design Thinking, Human Computer Interaction, Graphic Design, and Interactive Technology.

Judith Good is Professor of Human Factors in the Internet of Things, University of Amsterdam, Netherlands. Her research interests focus on the co-design of new technologies for children, with and without disabilities. She is also interested in developing new participatory methodologies for typically marginalised populations to have greater involvement in both the design and evaluation of new technologies.

Eva Eriksson is an Associate professor in Interaction design at Aarhus University in Denmark. Eva specializes in developing technologies through participatory design in the field of human-computer interaction with a focus on public learning institutions.

4 Post Workshop Plans

Submitted position papers will be published on the workshop website.

Workshop attendees will be invited to expand their position papers for inclusion in a workshop proceedings in https://ceur-ws.org/, using the CEUR Overleaf template.

Additionally, the workshop authors are planning a large scale project focused on a 'big problem' (e.g., climate change) and all attendees will be encouraged to participate. They are expected to conduct ethically-approved PD using the generic protocol and report back with design data and/or adaptation data.

5 Use of Generative AI

Generative AI has not been used in the creation of this workshop proposal.

References

[1] Aurora Constantin, Cristina Alexandru, Jessica Korte, Cara Wilson, Jerry Alan Fails, Gavin Sim, Janet C. Read, and Eva Eriksson. 2021. Distributing participation in design: Addressing challenges of a global pandemic. *Int. J. Child-Comp. Interact.* 28, C (jun 2021), 14 pages. https://doi.org/10.1016/j.ijcci.2021.100255

[2] Aurora Constantin, Jessica Korte, Jerry Alan Fails, Cristina Adriana Alexandru, Mihaela Dragomir, Helen Pain, Judith Good, Franca Garzotto, Eva Eriksson, and Annalu Waller. 2019. Expecting the Unexpected in Participatory Design. In *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems* (Glasgow, Scotland Uk) *(CHI EA '19)*. Association for Computing Machinery, New York, NY, USA, 1–4. https://doi.org/10.1145/3290607.3311758

[3] Aurora Constantin, Jessica Korte, Judith Good, Gavin Sim, Janet Read, Jerry Alan Fails, and Eva Eriksson. 2022. A Distributed Participatory Design Research Protocol for Co-designing with Children. In *Proceedings of the 21st Annual ACM Interaction Design and Children Conference* (Braga, Portugal) *(IDC '22)*. Association for Computing Machinery, New York, NY, USA, 510–516. https://doi.org/10.1145/3501712.3535286

[4] Aurora Constantin, Jessica Korte, Cara Wilson, Cristina Adriana Alexandru, Judith Good, Gavin Sim, Janet Read, Jerry Alan Fails, and Eva Eriksson. 2020. Planning the world's most inclusive PD project. In *Proceedings of the 2020 ACM Interaction Design and Children Conference: Extended Abstracts* (London, United Kingdom) *(IDC '20)*. Association for Computing Machinery, New York, NY, USA, 118–125. https://doi.org/10.1145/3397617.3398066

[5] Emily K. Jenkins, Allie Slemon, Rebecca J. Haines-Saah, and John Oliffe. 2018. A Guide to Multisite Qualitative Analysis. *Qualitative Health Research* 28, 12 (July 2018), 1969–1977. https://doi.org/10.1177/1049732318786703

[6] Jessica Korte. 2022. YoungDeafDesign: Participatory design with young Deaf children. *International Journal of Child-Computer Interaction* 34 (2022), 100542. https://doi.org/10.1016/j.ijcci.2022.100542

[7] Jessica Korte, Axel Bender, Guy Gallasch, Janet Wiles, and Andrew Back. 2020. A Plan for Developing an Auslan Communication Technologies Pipeline. In *Computer Vision – ECCV 2020 Workshops*, Adrien Bartoli and Andrea Fusiello (Eds.). Springer International Publishing, Cham, 264–277.

[8] Jessica Korte, Aurora Constantin, Cristina Adriana Alexandru, Jerry Alan Fails, Eva Eriksson, Judith Good, Helen Pain, Juan Pablo Hourcade, Franca Garzotto, and Annalu Waller. 2019. Pushing the Boundaries of Participatory Design. In *Human-Computer Interaction – INTERACT 2019: 17th IFIP TC 13 International Conference, Paphos, Cyprus, September 2–6, 2019, Proceedings, Part IV* (Paphos, Cyprus). Springer-Verlag, Berlin, Heidelberg, 747–753. https://doi.org/10.1007/978-3-030-29390-1_74

[9] Jessica Korte, Gavin Sim, Aurora Constantin, Eva Eriksson, Jerry Alan Fails, Cristina Adriana Alexandru, Janet C. Read, and Cara Wilson. 2023. Editorial: Pushing the boundaries of Participatory Design with children. *Int. J. Child-Comp. Interact.* 35, C (mar 2023), 3 pages. https://doi.org/10.1016/j.ijcci.2022.100547

[10] Jessica L Korte, Aurora Constantin, Cara Wilson, Cristina Adriana Alexandru, Gavin Sim, Janet Read, Judith Good, Jerry Alan Fails, and Eva Eriksson. 2021. Participatory Design of the World's Largest DPD Project with Children. In *Proceedings of the 20th Annual ACM Interaction Design and Children Conference* (Athens, Greece) *(IDC '21)*. Association for Computing Machinery, New York, NY, USA, 687–691. https://doi.org/10.1145/3459990.3460514

[11] R. Murray Lindsay and A. S. C. Ehrenberg. 1993. The Design of Replicated Studies. *The American Statistician* 47, 3 (Aug. 1993), 217. https://doi.org/10.2307/2684982

[12] Claus Bossen Rachel Charlotte Smith and Anne Marie Kanstrup. 2017. Participatory design in an era of participation. *CoDesign* 13, 2 (2017), 65–69. https://doi.org/10.1080/15710882.2017.1310466 arXiv:https://doi.org/10.1080/15710882.2017.1310466

[13] Janet Read, Gavin Sim, Jerry Alan Fails, Marie A Boden, Jessica L Korte, Sanjana Bhatnagar, Lilly Hope Borchardt, Aurora Constantin, Dina Gavrilescu, Cara Wilson, Judith Good, Valentina Andries, and Eva Eriksson. 2024. Exploring Similarities and Differences in a set of Linked Multiple-site Design Sessions with Children. In *Extended Abstracts of the 2024 CHI Conference on Human Factors in Computing Systems (CHI EA '24)*. Association for Computing Machinery, New York, NY, USA, Article 519, 9 pages. https://doi.org/10.1145/3613905.3637143

[14] Janet C Read, Daniel Fitton, Gavin Sim, and Matt Horton. 2016. How Ideas make it through to Designs: Process and Practice. In *proceedings of the 9th Nordic conference on human-computer interaction*. 1–10.

[15] Rachel Charlotte Smith and Ole Sejer Iversen. 2018. Participatory design for sustainable social change. *Design Studies* 59 (2018), 9–36. https://doi.org/10.1016/j.destud.2018.05.005 Participatory Design.

[16] Olof Torgersson, Tilde Bekker, Wolmet Barendregt, Eva Eriksson, and Christopher Frauenberger. 2019. Making the Child-Computer Interaction Field Grow Up. *Interactions* 26, 2 (feb 2019), 7–8. https://doi.org/10.1145/3310253