

Transformative Technologies for Children: Going beyond ‘Good’

Hybrid half-day workshop.

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1 MOTIVATION

It is already understood that the COVID pandemic triggered increased depression, anxiety and psychological distress for children and young people [14]. However, even more recent studies, such as the 2023 ‘Good Childhood Report’ [22], have highlighted growth in the number of children that are unhappy, have low wellbeing and are worried about the future. Similarly, bodies such as the CDC in the US are unambiguous that for children aged 6-17 years “Depression and anxiety have increased over time” [3]. There are many prevailing negative factors that link closely with technology usage such as increasing childhood loneliness (e.g. [26]), problematic impacts from social media use (e.g. [2]), and impacts from increasing screen time (e.g. [16]).

Against this general backdrop of negativity around childhood it is time for the CHI community to consider how technology for children can be better than ‘good’ in a more focused way. Academics within the CHI community have already sought to improve the lives of children through their work, this is evident in the work in publications of organizers of this workshop. For example, this has included work to empower children through design [10, 12], tackle bullying in

schools [24, 25], develop online safety [6, 9], understand the problem of deceptive design [7, 8], consider the specific ethical issues of working with children in HCI research [19], and creating design methods which enable children participate in technology design [4, 5, 21]. The goal of improving lives of users is not exclusive to those considering younger technology users, children are of course just one of the many user groups the CHI community considers, and even those considering technology use in a more general sense have much to contribute to the topic of this workshop. One particularly relevant example is the Responsible design process framework shown in Figure 1 which forefronts user wellbeing and arose from consideration of ethical design practice in the context of AI [17].

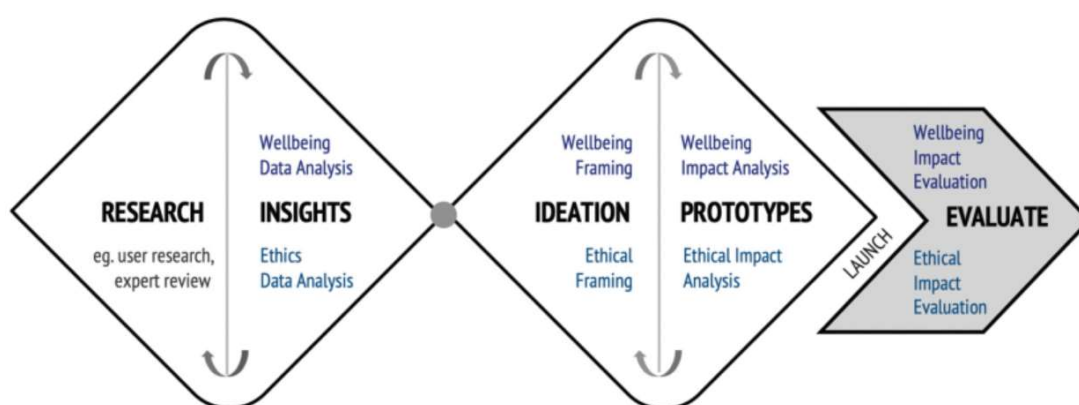


Figure1. Responsible design process framework from Peters et al.

The CHI community has long reflected on what constitutes good design. As early as 2006, the idea of positive HCI is introduced as being around the creation of outstanding quality experiences rather than just the prevention of usability problems [11]. A main theme of the critique by Bødker and Kyng [1] is for HCI design to work harder to bring about real impact against dramatic, potentially negative changes; if children are suffering from decreasing happiness, this sounds like a space for such impact. Change is not always dramatic, some things change over time and the work on slow technologies [18], that emphasizes designs that support mindfulness and less hectic lifestyles may give some ideas for solutions. Slow design, is in direct opposition to the mindset, prevalent in HCI of what Irvine [13] describes as ‘the problem with presentism’, where time horizons shrink and we only see the ‘here and now’. This mindset, especially when we think about children’s technology, will not enable us to take not enough account of the future, even the near present future; so change in thinking, as well as direction, might be needed.

The IDC (Interaction Design and Children) community has not been silent in these considerations, a recent paper challenged the community to take on a more mature approach to its research[23] and the framing of CCI, albeit written several years ago, implored us to design for the rapidly growing and changing child rather than for the child only in the moment [20]. These provide a valuable foundation for this workshop in terms of how to define a research community focused on designing technology for children and how to move forwards effectively within that community.

This workshop aims to explore what better than ‘good’ technology may look like by encouraging participants to bring their work on transformative designs, theoretical positions, measurement and evaluation tools, design techniques, lived experiences to contribute to this timely and important debate. Two key outputs will be constructed through the workshop 1) a manifesto for the CHI community to support the creation of Transformative Technologies for Children, 2) a roadmap

for future research work to explore and develop this space. Resources created and used at the workshop will also be shared (via the workshop web site) to enable other to understand the discussion which took place at the workshop and join us in our mission.

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