

# PAPER

## Design

L. LOISELLE, J. KRUL. *Better together: Enhancing technology through collaborative design. Gerontechnology 2018;17(Suppl):80s*; <https://doi.org/10.4017/gt.2018.17.s.080.00>

**Purpose** As older Canadians are becoming increasingly comfortable with technology and as technologies emerge to help people with dementia maintain their independence, health, and quality of life, how can we ensure that these technologies are usable and enjoyable? How can we engage people with dementia in order to create better, more useful tools for them? This project explored how researchers and entrepreneurs can involve people with dementia in the design and testing of technology intended for their use. Using the data collected, the research team created a set of best practices for engaging people with dementia meaningfully and respectfully in technology projects (Figure 1).

**Method** With funding from AGE-WELL NCE and using a Participatory Action Research (PAR) approach, the research team followed the user experience (UX) research efforts of Emmetros Limited as they developed MemorySparx One, a digital memory aid for people living with memory loss. The research team observed eight usability testing sessions with people with dementia (4 males; 4 females) and multiple product testing meetings with four people with dementia (1 male; 3 females). Additional qualitative data was collected through open-ended and semi-structured interviews with usability testers and product testers about their experiences participating in UX research and through reflections written by the UX researcher from the Emmetros team about her experience planning and facilitating usability sessions and product testing meetings.

**Results & Discussion** Results from the thematic analysis build on, and extend, the existing “Authentic Partnership Model”<sup>1</sup>. The authentic partnership model focuses on including and valuing unique perspectives of all key stakeholders, including people with dementia, in decision-making. The authentic partnership model includes three Guiding Principles (a genuine regard for self and others; synergistic relationships; focus on the process) and five Enabling Factors (connecting and committing; creating safe spaces; valuing diverse perspectives; establishing and maintaining open communication; conducting regular critical reflection and dialogue). In the current research, we identified an additional factor that extends the authentic partnership approach. This factor - Creating Meaningful Opportunity – highlights the importance of creating meaningful engagement opportunities for people with dementia and emphasizes how these opportunities can foster a sense of empowerment and fulfillment. To help researchers and entrepreneurs create meaningful engagement opportunities, the research team developed a set of best practices to consider before, during, and after UX research with people with dementia.

### References

1. Dupuis SL, Gillies J, Carson J, Whyte C, Genoe R, Loisel L, Sadler L. *Dementia*. 2012;11(4):427-452

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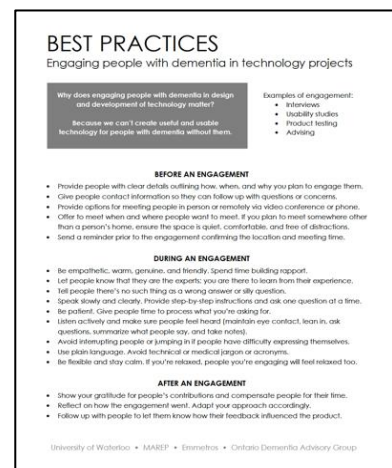


Figure 1. Best practices for engagement