Participatory design with children: implications for their learning and development

Introduction: Research involving children in the design of technology is scant with limited reporting on the methods used and the success of these methods. There are many and varied frameworks and methods for involving children in design research, some which view children more as objects of study and others as active participants. This raises the question of how to involve children in design in a way which values their opinions and supports their developing autonomy.

Methodology: A review of approaches for involving children in design (Informant Design, Cooperative Inquiry, the BRIDGE methodology) and the merits and drawbacks of these. Exploration of the relationships of these to different theories of child development and the influence on children's developing autonomy.

Results: Participation in design can result in social skill development, acquisition of academic skills and improvement in general design skills (creativity and problem-solving) (Guha 2010 Kafai et al 2012). Focus groups (as used in the BRIDGE methodology) can benefit children by providing them with the opportunity to be involved in decision making processes and to be valued as experts (Race et al 1994). This can lead to enhanced self-esteem and motivation, the development of personal, social and organisational skills, and experience with group and democratic processes (Whitty & Wisby 2007).

Service user involvement: The BRIDGE method of participatory design is founded on a sociocultural view of child development, resulting in children being given opportunities to develop social, academic and design skills and to develop autonomy.

Clear implications for occupational therapy: As occupational therapists, we are bestplaced to bridge the gap between technology designers and service users, facilitating their input in the design of daily living equipment. Using techniques such as the BRIDGE methodology, enables us to ensure the users of equipment are afforded equal credibility in the design process.

References

Guha ML (2010) Understanding the social and cognitive experiences of children *involved in technology design processes*. University of Maryland, USA: Proquest Dissertations and Theses.

Kafai YB, Fields DA and Searle KA (2012) Making technology visible: Connecting the learning of crafts, circuitry and coding in youth e-textile designs. *Proceeding of the 10th International Conference of the Learning Sciences*, 1 (188–195).

Race KE, Hotch DF and Parker T (1994) Rehabilitation program evaluation, use of focus groups to empower service users. *Evaluation Review* 18(6), 730–40.

Whitty G and Wisby E (2007) *Real Decision Making? School Councils in Action*. London, UK: Institute of Education.

Keywords

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