Editorial

Welcome to edition 2 of volume 11 of the *Journal of Enabling Technologies*. We hope that the four articles in this edition will be of interest to our readers. They cover a diverse range of issues: the first two relate to neurodiversity and autism. The first of these is a paper offering an account of the ways in which two autistic teenagers collaborated in developing an interactive game and the second a shorter commentary structured around the proceedings of a seminar series. The third paper in this issue offers an interesting exploration of factors that shape professionals' choice of graphic symbol sets commonly used to augment, or act as a primary form of communication for people with learning disabilities, and the fourth is another interesting paper documenting the design and evaluation of a self-transfer device for wheelchair users.

Editorials usually try to whet the reader's appetite for the contents of the edition by describing in a little more detail its contents. This one is no exception. We recognise that most of our readers will have specific research or professional interests and that not all of our papers will interest all our readers. However, it is also true that sometimes papers offer insights that can be applied in other contexts and fields. While the studies published here are small-scale and therefore not formally speaking generalisable, they nonetheless offer interesting observations that may be of inter-disciplinary interest.

The first paper by Bossavit and Parsons is a small-scale investigation of how two teenagers with autism participated in the development of a computer-based collaborative game. The paper demonstrates the potential of younger people with autism to participate, problem-solve and programme a computer game, but found that though they interacted via the computer and were inventive and creatively involved in its construction, they did not tend to interact with one another, but with adult professionals who supervised the project. The authors nonetheless make the insightful claim that even though peer-to-peer interaction was indirect, interactive games such as the one used, can help disengaged students develop new skills though they caution that collaborative learning is unlikely through an interactive game alone. The study concludes with some insights into the potential of interactive games to support learning amongst other people on the autism spectrum.

The second paper by Brosnan and colleagues is a shorter project report based around a seminar series: Innovative Technologies for Autism: Critical Reflections on Digital Bubbles. The paper explores implications for neuro-diverse populations for technology developed to support people with autism and their families/friends. Examples are offered of how everyday technologies can support families who have a child who has autism, and how changes in design and functionality can cause distress to children: a graphic example is offered of a favourite media player used by a young woman with autism that malfunctioned and could not readily be replaced. Key principles on which participants of the seminar seemed in agreement were of the need for deep engagement with neuro-people when developing new or existing technologies, the inter-disciplinary nature of such development, the importance of addressing individual needs in highly person-centred ways, and for technologies to offer practicality.

The third paper by Pampoulou focusses primarily on professionals rather than disabled people themselves, and looks at factors that determine which graphic symbol sets are used by them to communicate with disabled children and adults. The topic is an interesting one, and, as the author points out, one that is often overlooked by researchers. This means often tend to be guided – by what is available to them, and their own experience and familiarity with particular forms of graphic symbol set, rather than by evidence. The factors that support the choices made are the availability of some symbol sets (but not others), iconicity (the extent to which the symbol represents what it

refers to), and pre-existing policies within schools and other institutions. The authors correctly draw attention to the importance of this: assessments and planning depend on effective communication and Pampoulou calls for more research in the field of augmentative and alternative communication.

The fourth paper is another really interesting read. Pugazhenthi and Hari Krishnan offer a fascinating account of the development and trial of a robotic self-transfer device for wheelchair users. As the authors point out, much existing technology to support safe transfer is designed for use by carers rather than for self-use, and a self-operated device supports both goals of empowerment and independence. The authors also suggest that by being designed to attach to a wheelchair, and its small size, would make it suitable for most ordinary domestic environments as well as institutions. Its "frugal" design would also make it inexpensive to manufacture, in contrast with self-transfer devices that are currently available. The authors report on a very small-scale evaluation of the effectiveness of the design which produced positive feedback from disabled participants. This paper should be of particular interest to manufacturers and researchers: there should be an enormous untapped market for a device of this kind providing larger trials confirm its reliability.

As ever, we would like to thank our reviewers who continue to offer timely, insightful and constructive comments to our contributors and to the contributors themselves for their interesting and useful papers.