## **Guest Editorial**

## Bringing AT Professionals Together

The papers in this special issue of Technology and Disability were presented at a multidisciplinary UK Conference in November 2001 aimed at bringing Occupational Therapists, Physiotherapists, Speech and Language Therapists, Rehabilitation Engineers, Design Engineers, Computer Scientists and Researchers together to share their experience and knowledge. It was organised by the Centre of Rehabilitation Engineering at Kings College, London and co-sponsored by AAATE and the Institute of Physics and Engineering in Medicine (the professional body for rehabilitation engineering in the UK). The conference was called "Recent Advances in Assistive Technology and Engineering" (RAATE) and included sessions that covered AT current research, professional issues and service developments.

The theme of the conference was "Bringing AT Professionals Together" and reflected two issues of concern in the UK. The first is that AT services in the UK are currently fragmented, which has led to confusion and gaps in provision that can adversely affect the AT user [1]. This is not helped by the many different uses and interpretations of the term "assistive technology" in the UK. The second issue is that of developing user-centred approaches to the design, assessment and evaluation of assistive technologies. The seven papers in this issue of *Technology and Disability* address these two issues in different ways.

The paper by Stead describes the current state of AT services in the UK and attempts to predict where they are going in the future by examining drivers and pressures for change. Part of this examination explores the tension between providing generalist and specialist services. This tension is likely to have an impact on the professional identity of the different professionals who work to deliver AT services [2]. A Hungarian perspective on the need to examine AT service delivery is provided by Laki who presents the results of a survey that aimed to identify the current state of AT provision

within 19 different services for people with learning disabilities. Laki uses the results of his survey to argue for more training for the professionals who work within these services in order to improve the quality of service provided.

The papers by Durkin and Nisbet discuss ways of providing a more user-focused assessment of powered mobility for children in the UK. Durkin argues that The NHS Wheelchair services have inherited a framework of assessment and provision for powered mobility equipment, which has not been designed to meet the needs of young children and their families. She presents a review of the literature on powered mobility studies with children and uses this in conjunction with some preliminary data from her own studies to argue for the development of a child led assessment tool which addresses motor, cognitive and psychosocial aspects of powered mobility. Nisbet reviews procedures for assessing children for powered wheelchairs and like Durkin argues that these procedures need to change. Nisbet makes a case for an extended assessment period and loans for training in order to avoid situations where children are unfairly rejected for powered wheelchairs.

The papers by Lesley and Porter and Gibbs and Hillman focus on presenting new wheelchair designs. Lesley and Porter describe the design of a dual-handrim wheelchair designed for hemiplegic users. This new design combines foot controlled steering and differential propulsion and is argued by Lesley and Porter to be more ergonomic, intuitive and easy to learn. While Gibbs and Hillman outline the design and rationale for an omni-directional wheelchair, which can translate left and right and rotate on the spot. The authors argue that the omnidirectional wheelchair addresses the issue of poor manoeuvrability without using complex or expensive technology. Both wheelchair designs are in the early stages of production and it will be interesting to see how users evaluate these new designs.

Finally, Morrison and McKenna report on the results of a pilot trial, conducted with a user who has cerebral palsy, designed to explore the feasibility of a gesture recognition system. They argue that the system has potential to mediate computer access for users who lack the fine motor control needed to operate a computer keyboard and mouse. It will be interesting to see if there are other applications for this system in the future.

In putting together this special issue of *Technology and Disability*, we have presented seven papers, which represent the work of a multidisciplinary group of UK clinicians, designers and researchers. We are hopeful that our next RAATE conference in November 2002 will continue to facilitate partnerships between these different groups and highlight ways in which AT users needs can best be met.

Jane Seale Alan Turner-Smith Guest Editors

## References

- [1] D. Cowan and A. Turner-Smith, The role of Assistive Technology in Alternative Models of Care for Older People, in: *With Respect to Old Age*, report by the Royal Commission on Long Term Care, HMSO, London, 1999, pp. 2,325–2,346.
- [2] J.K. Seale and A. Turner-Smith, Multidisciplinary Postgraduate Education in AT: Challenges and Opportunities, in: *Proceedings of the RESNA 2001 Annual Conference*, R. Simpson, ed., RESNA Press, Arlington, VA, 2001, pp. 196–198.