Preface

This book contains chapters that report on 15 research projects aimed at improving the educational prospects of disabled people. Recent legislation (e.g. in the UK ‘SENDA’, the Special Educational Needs and Disability Act (2001)), has increasingly focused attention on the rights of disabled people. Much remains to be done to bring this to fruition, however. For example Adams, in the final chapter of this book, points out that official UK figures show that in 2005, 18 year old disabled people in the UK were only 40% as likely to go to university as their non-disabled peers. The inequity of such a position is exacerbated by the fact that it is widely believed that education is a primary means by which disabled people can lead a full and productive life. As Hurst (1996) has argued, when disabled people enter Higher Education they are taking an opportunity to increase their knowledge, to develop social skills, to obtain good qualifications, and to expose themselves to debate and discussion; all of which constitute an important experience for inclusion. It is hoped that this book will contribute to raising awareness of the current inequities, and more importantly, give practical advice on how this might be achieved.

Perhaps the stereotypical view of disability is that it involves a physical impairment such as not being able to walk. Brown and Adams (2006) argue that, at least as far as UK Higher Education is concerned, many of the needs of physically disabled people are successfully addressed. Brown and Adams also argue that the challenge now is to ensure that, having made the physical adjustments to enable disabled people to participate in Higher Education, their educational needs are met. It is this challenge with which the current volume is concerned. Given this, it is not surprising, perhaps, that most (but not all) of the chapters are concerned with what might be called “cognitive disabilities”.

As the book title suggests, three overarching themes are discussed: technology, transition and inclusivity. There can be little doubt that the rapid technological developments that have characterised the decades since the middle of the nineteenth century have given great scope for improving the quality of life of disabled people. William Horwood’s highly recommended novel *Skallagrigrig* (1987) gives a very moving if fictional account of the transformation in the life of its central character, brought about by developments in computing. More recently, Shneiderman and Plaisant (2010, p 49) argue that “the potential for benefit to people with disabilities is one of the gifts of computing”.

For everyone, transition is an important, and often a very challenging, aspect of life in general and of educational life in particular. Key educational transitions are the initial transition from the home to an educational establishment and then, in the UK, from primary to secondary school (in the UK at around the age of 11 or 12), from secondary education to tertiary education or work (in the UK at around the age of 16), from tertiary to Higher Education or work (in the UK tertiary education typically ends at the age of around 18) and finally from Higher Education into work. Not all these transitions apply to everyone, of course, depending on the age at which they leave education and enter the workforce. What probably
does apply to everyone is that each transition, as well as being, by definition, a state of change, tends to represent a particularly challenging period. For disabled people the challenge may be greatly magnified. A person with Asperger Syndrome, for example, may have struggled and worked hard to establish a relatively stable and comfortable life within the social context of their (typically small) primary school, only to have to face the daunting challenge of making sense of the much bigger and more complex social context at secondary school. It is for reasons like this that transition features heavily in this book.

Our final theme, inclusivity, is an important one in education for two main reasons. There has been, certainly in the UK, a debate about whether to integrate disabled people into ‘mainstream’ education or to maintain separate specialist institutions for disabled people. The debate remains a live one, with advocates of both positions much in evidence, but currently in the UK the tendency is for the former position – integration - to hold sway. The second reason for the importance of the theme is that there is a debate in education between an ‘adjustment’ model and an ‘inclusivity’ model. The former, which seems to be currently the predominant one in the UK involves, for example, setting an assignment or examination and then making adjustment for disabled students; a typical example is to give a dyslexic student 25% extra time on an examination, and perhaps a separate examination room and perhaps an amanuensis. Proponents of an inclusivity model, by contrast, argue that if assessments are designed appropriately in the first place, such that all student needs are catered for, there should be no need for adjustments.

These, then are our three themes. As one would expect, the themes interact with one another in interesting ways. Modern advances in educational technology, as discussed for example in Simon Ball’s chapter, give an excellent example of how technology is being and can be used to assist the education of disabled and non-disabled students. But equally the technology can be used to increase inclusivity and ease transitions. Similarly, the chapter by John Gray et al discusses how simulation technology may make educators more aware of the difficulties they may inadvertently cause disabled students in the work they set. We have seen this chapter as part of the technology theme, but it could equally be part of the inclusivity theme, since an awareness of how coursework might be perceived by disabled students should lead to additional inclusivity being built into the work.

We turn now to give a brief précis of each of the chapters in the book, starting with the technology theme. Simon Ball’s chapter, The Art of the Possible, in many ways sets the scene for the technology section of the book, by giving a very useful overview of the current state of the art of educational technologies that are designed to help disabled students. Ball argues that technology can be utilised in many circumstances in teaching to improve accessibility and inclusion. He presents a number of techniques that teachers can use to make their teaching more inclusive without requiring a high level of technological expertise or indeed a large investment of time input. The chapter also provides some very useful case studies of the successful use of technology in inclusive practice.

Difficulties in communicating can prevent those with profound multiple learning difficulties (PMLD) from fulfilling their needs and ambitions. Tony Renshaw, Brian Boullier, Stuart Geddes and Ailsa Moore describe, in their chapter, An Assessment of Eye Tracking as an Educational Aid for People with Profound Multiple Learning Difficulties (PMLD), how a non-invasive eye tracking technology is used to provide those with PMLD, with a richer way of communicating. This eye tracking technology records information as to where a participant with profound multiple learning difficulties is actually looking, providing a more precise alternative to the traditional method of eye pointing at symbols. The authors argue that the eye tracking system gives immediate feedback on symbol recognition performance which not only enables teachers to adapt their teaching strategies but also facilitates a richer interactive experience between them and their student.
‘Haptic’ or touch-based technologies can assist people with visual impairment in their every-day life, as particularly those who are deaf-blind rely heavily on their sense of touch. While Braille is probably the technology most commonly associated with tactile feedback, the number of its users is falling. Only a small number of touch-based or haptic devices provide assistance to blind or severely visually impaired people. In his chapter *Haptics as an Assistive Technology*, Damian Copeland provides a fascinating background to haptic technologies and identifies how these can be used in educational contexts. This is important not least because the use of haptics within formal education has been limited, particularly in post-primary education. Despite usefully identifying some multimodal devices, Copeland concludes that further research is required to develop an affordable refreshable haptic graphic display.

John Gray, Gill Harrison, Andrea Gorra and Jakki Sheridan-Ross discuss in their chapter, *Using a Computer Aided Test to Raise Awareness of Disability Issues Amongst University Teaching Staff*, the use of a computer aided test that has been developed to help university staff to become aware of issues faced by students with disabilities. This software is designed to demonstrate some accessibility issues associated with a range of disabilities, such as visual, hearing, physical and cognitive impairments. In addition, the test provides advice on good practice and website links to further relevant information. The test has been used to train university staff in disability issues and has proved a successful staff development tool. Staff reactions to the test have been positive and feedback indicates that using the computer aided simulation has generated an increased awareness of disability issues and an understanding by staff of the need to make changes to their future practice to improve the educational experience of disabled students.

Technology in the form of computer-based learning systems can be helpful for people with autism. David Moore argues in his chapter *Computer Based Learning Systems for People with Autism* that there is considerable evidence that people with autism tend to enjoy working with computers, because, for example, they offer a relatively controlled environment where users can progress at their own pace. This chapter not only reviews recent work concerning computer systems for people with autism but most importantly makes a case for the use of autism-specific systems to play a beneficial role in the education of students with autism.

Furthermore, Moore introduces in his chapter software that has been developed as part of a research project and which addresses some shortcomings of existing computer-based learning systems. This system allows users to create their own individualised scenarios for social skills education for those with autism and can be requested free of charge from the author.

Moore argues that there are a number of weaknesses currently in the research concerning computer systems for people with autism. One of these weaknesses is that most work to date has investigated the technology for people with Asperger Syndrome (generally seen as a mild form of autism). Very little attention has been paid to the important issue of whether and how people with severe autism might benefit from the technology. The chapter by Salima Elzouki and Bridget Cooper, *Understanding and Enhancing Emotional Literacy in Children with Severe Autism Using Facial Recognition Software* reports research designed to begin to address this weakness. The research involved an extensive longitudinal study in a unit for children with severe autism and learning difficulties. The authors argue that emotional understanding can potentially be potentially enhanced through computer based activities but that this is uniquely different for each individual.

We turn now to the transition theme of the book. As argued earlier, disabled people remain disproportionately under-represented in Higher Education. One of the factors behind this is a view sometimes taken by young disabled people that Higher Education is “not for us”. An important aspect, therefore, of transition into Higher Education is to encourage disabled people to apply in the first place. It is this
issue that underpins the chapter by Helen Smith, *Let’s Get Set for University!* Smith argues for the importance of pro-actively engaging disabled learners in events and activities designed to encourage their participation in Higher Education. The chapter discusses the barriers that might be faced by disabled learners and gives a detailed analysis of how a specific regional partnership in the UK has tackled these issues, with a view to making transition to university smoother.

The theme of barriers to entry is also picked up in the chapter by Salima Elzouki, Elizabeth Guest and Chris Adams, in their chapter *Students with Autism in Higher Education*. The authors argue that far fewer people with autism get into university than ought, ethically and pragmatically, to be the case. When students with autism do get to university, they may face many difficulties, and the authors movingly illustrate this through a narrative of two such students and through a case study of a further student as written by his social worker. The authors also provide a case study of how a specific university supports students with autism, and offer a number of important recommendations arising from their empirical work.

The way in which disabled people are treated in education and elsewhere is likely to be dependant, at least in part, on the view of disability taken by their educators and indeed by society as a whole. Until recently the medical model held sway, a model in which disability and impairment are seen as being the same thing and are seen as located in the individual, not in society and structures. In recent decades, however, this has tended to be displaced in favour of the social model of disability; in this model impairment is believed to lead to disability because societal processes and structures are arranged in such a way that some impaired people cannot participate; this is taken to include attitudes, not just physical barriers. Bill Penson, in his chapter *Reappraising the Social Model of Disability: A Foucauldian Reprise*, interrogates the social model of disability from the perspective of the work of the French philosopher Michel Foucault (1926 – 1984), in particular Foucault’s idea of ‘docile bodies’. Whilst acknowledging the hitherto valuable role of the social model of disability, Penson puts forward an argument that the social model has now been assimilated within dominant discourses, and that this has undermined the drive to change the life experiences of disabled people. He cites examples from psychiatry and mental health to support this and suggests, following Foucault, that the disabled body is positioned within medical and legal discourses which maintain the subjugation of that body. This is a thought-provoking chapter which questions our adherence to the social model of disability.

The book’s final set of chapters addresses the issue of inclusivity. The potential dichotomy between striving to make the university experience inclusive for all students, when the existing funding model to support disabled students centres around making individual adjustments, is highlighted in the chapter, *Support for Disabled Students in Higher Education: A Move Towards Inclusion*, by John Reaney, Andrea Gorra and Hanim Hassan. Using Leeds Metropolitan University as a case study, Reaney, Gorra and Hassan discuss recent policy developments in the UK, particularly the introduction of Disabled Students’ Allowances (DSA), and their subsequent impact on the way institutions have organised their support structures and strategies. Additionally, it raises the issue of how the current funding model compels students to take on the identity of a disabled student and discusses the potentially negative connotations associated with this whilst making suggestion for further research.

Ian Clarke, in his chapter *Disabled Students in Higher Education: Lessons from Establishing a Staff Disability Forum* presents a case study of a major UK university and its work to ensure inclusivity for all students. A key aspect of this has been the establishment of a forum of staff and students which works to represent, campaign for and raise awareness of the needs of disabled people in the university. Specifically, the forum has a remit of initiating and monitoring key actions such as reviewing disability education, running major consultation events and organising a Quality Enhancement Audit, which includes
the important issue of seeking to avoid unwitting discrimination in policies or procedures. The chapter contains valuable lessons concerning inclusivity in Higher Education institutes, and the author offers a series of recommendations for other organisations wishing to establish such a forum.

The nature and level of support that might be expected to be provided by universities and colleges to their disabled students is examined in the specific case of Northern Ireland in Pauline Dowd’s chapter, Supporting Learning in Further and Higher Education in Northern Ireland. Dowd argues that while much progress has been made across both Further and Higher Education sectors in Northern Ireland, in terms of physical accessibility, much work is still required particularly across the Further Education sector to establish a strategic approach to the provision of a high quality service which meets the requirements of the recent disability legislation in the UK. Dowd’s chapter offers important practical insights into the demanding challenge of inclusivity in a complex Further and Higher Education system.

Dyslexia is the most prevalent disability in terms of student numbers in Higher Education in the UK. This makes the research study described in Tim Deignan’s chapter Modeling and Developing a Dyslexia Support System particularly important. Deignan’s exploratory study investigated the views of dyslexic university students and their learning support staff concerning the provision that is made for dyslexia support in Higher Education. He considers the implications of the study findings for policy and practice, and suggests how the views of diverse stakeholders might be better used to improve learning support provision for dyslexic students.

Hayley Fitzgerald, Anne Jobling and Annette Stride, in their chapter Inclusivity and Research: Capturing the Lived Experience of Young People with Disabilities, argue powerfully for the use of an ‘inclusive research’ approach in general, and in particular when researching disabilities. They also advocate the use of ‘narratives’, ie stories based on research data. They provide two very moving narratives in the chapter, and demonstrate their use in a seminar designed to promote student thinking about the meaning and experiences of education for people with disabilities. The focus in the chapter is on physical education and the ‘lived experience’ of this by young people with disabilities. However, the narrative-based approach is likely to be very powerful in other areas of education also.

A vitally important aspect of the success or otherwise of disabled students is the ability of their teaching staff to cater for their specific needs; as with all students, their day to day educational experience in the tutorial room or lecturer theatre is of paramount importance. This suggests that staff training may be crucial, a theme that is discussed in Alan Hurst’s chapter Reflections on Personal Experiences of Staff Training and Continuing Professional Development for Academic Staff in the Development of High Quality Support for Disabled Students in Higher Education. Hurst provides compelling evidence of the need for more and better training, by examining students’ issues, staff concerns, and aspects of institutional policies. He goes on to discuss important practical issues such as what staff development sessions should contain, how they should be presented and who should be involved. Hurst also gives some very useful examples of tasks that have been found to be valuable in disability education sessions.

Finally, Mike Adams and Sally Brown round off the book by discussing the advances, and the many inhibitors to advance, that have occurred in the years between this current volume and their earlier book in a similar area (Adams & Brown, 2006). Adams and Brown also argue for a ‘narrative for the future’ that has ‘disabled people at the heart of solutions’.

These, then, are the chapters. As well as the unifying themes of technology, transition and inclusivity, discussed earlier, there are other themes common to several chapters. Much of the book is concerned with what are sometimes called ‘hidden disabilities’, in particular, in the current case, dyslexia (chapters by Deignan, and Gray et al) and autistic spectrum conditions (chapters by Moore, Elzouki & Cooper,
and Elzouki et al). This emphasis on hidden disabilities is in part a response to a concern that such disabilities have been under-researched hitherto. Another common theme arises from a belief that the success or otherwise of disabled students depends in large measure on the educational practices of the educational institution that they attend. Thus several chapters are case studies of specific organisations, namely those of Smith, Reaney et al, Clarke, Dowd, and Hurst. An important corollary to such a case study approach is insights into the ‘lived experiences’ of the students themselves. Two of the chapters, by Haley et al and by Elzouki and Cooper, give illuminating and moving portraits of such lived experiences, in very different educational establishments. A final common theme to many of the chapters is that they give practical advice and recommendations to administrators, practitioners and students, in particular, perhaps, the chapters by Ball, Elzouki et al, and Hurst. Similarly, Moore’s chapter discusses software that is available for readers to request, and Gray et al’s chapter refers readers to a website that enables readers to use their simulations.

As Mike Adams and Sally Brown argue in the final chapter of the book, many challenges remain to be addressed before disabled students have the equality of educational opportunities that, in both a pragmatic and ethical sense, they should have. We hope that this book will play some part in starting to meet these challenges. We anticipate that the book will be of interest to disabled students, their parents and teachers, and the people who run, and set policies for, their educational providers, and would welcome feedback from any reader on any of the issues the book raises.

REFERENCES


