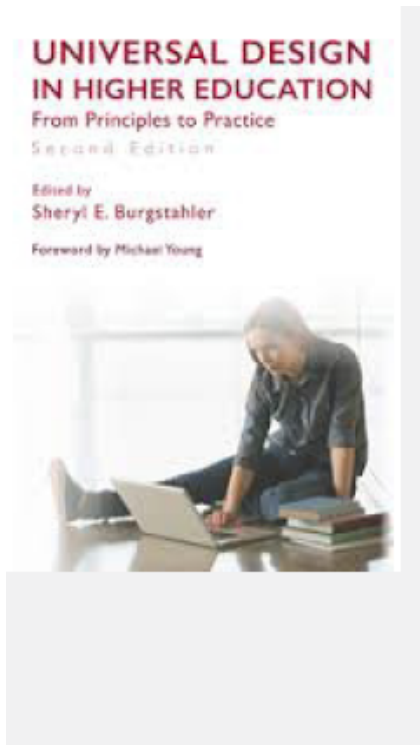

Universal Design in Higher Education Book Review by Alan Hurst

Opening comments



The concept of Universal Design (UD) originated outside of education and was related to architecture and interior design. One of the founders, Ronald Mace, defined it as 'the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialised design'. In recent times, the concept has been adapted and used in higher education as a fundamental strategy underpinning policy and provision directed towards improving the learning experience of students with a wide range of impairments.

In many countries, its adoption has been aided by the implementation of anti-discrimination legislation. As this collection of papers demonstrates, the concept began to gather momentum in the USA about twenty years ago and it has been somewhat slow to spread to other countries. Some early interest in Europe can be detected in projects such as 'Teachability' (2000) which, in its efforts to persuade teaching staff to identify core requirements and then explore ways which would enable disabled students to meet them, was arguably ahead of its time.

Currently, AHEAD is in the final stages of participation in the UDLL project working alongside SIHO in Belgium and under the leadership of UNIVERSELL based at the Norwegian Technical University in Trondheim. Given this growth of interest and the development of what might be described as a new orthodoxy, it seems appropriate to question whether there is evidence to suggest that the approach is successful and whether the need to make 'reasonable accommodations' will disappear. Reading and reviewing this updated edition of the collection of papers compiled by Sheryl Burgstahler, one of the key figures in the UD movement, offered me the opportunity to explore this and other questions.

Structure of the book and sequence of content

The book comprises five parts: an introduction and overview, UD in higher education (10 papers), UD of student services and physical spaces (4 papers), UD of technology (4 papers), and promotion and institutionalisation of UD (6 papers). Each part opens with a useful and helpful paper by the editor in which she comments on progress and outlines some key issues. For example in the first paper in Part Two, she draws attention to the variations in terminology and the potentially different implications of UD, UDI (Universal Design of Instruction), UDL (Universal Design of Learning) and UDfL (Universal Design for Learning). Before considering each part in more detail, attention must be drawn to the preface which contains a really clear diagram on the relevance of UD to STEM (Science, Technology, Engineering, Mathematics) subjects. It also identifies several important web-based resources to which readers can refer for further information, most notably the DO-IT site. A third valuable aspect of the preface is a table (page xv) which indicates which papers are of greater interest for specific groups of readers such as tutors, disability services staff, IT providers, et al.

The content of the book is very detailed and comprehensive and it would be easy to write a very lengthy review. This could become tedious for readers and so I have chosen to discuss in detail only the first part of the book and to provide a brief indication of what the other parts cover. In fact, as a teacher and as someone with an interest in staff development, it is this section which perhaps is of greater relevance for me.

Research evidence on the effectiveness of UD for disabled students

In opening the section on UD in higher education (Paper 2), Burgstahler considers various definitions of the concept, making distinctions between barrier-free and accessible design, usable design, and UD itself. This leads into the identification of the seven principles and guidelines: equitable use, flexibility in use, simple and intuitive use, perceptible information, tolerance for error, low physical effort, and size and space for approach and use. She acknowledges the need to move from a deficit model to a social model of disability and to viewing it as just another characteristic of diversity. The paper ends with a list of questions such as how UD can be applied to assessment, to e-learning, etc. with a list of which papers are most relevant.

One section of this paper was of considerable appeal to me since it reviews a number of empirically-based studies of UD. My own concern re. the implementation of the concept has been about whether there is evidence to demonstrate its effectiveness in terms of the inclusion and successful outcomes for disabled students. On the basis of this account, the evidence is mixed, although there are grounds for optimism as shown by the statement that 'reports of research that compare student outcomes of the same course taught with and without the application of UD are beginning to appear in the literature.' (page 55).

I share Burgstahler's view that

without a strong research base, practitioners will continue to identify 'promising' practices rather than 'research-based' practices with respect to the application of UD in instructional settings. (page 57)

Additional research-based evidence is cited in the paper by Spooner, Davies, and Schelly (Paper 8) in which they

evaluate the effectiveness of UD. I liked the use of a comment made by David Rose, another key authority on UD, who asserts that

UDL puts the tag 'disabled' where it belongs – on the curriculum, not the learner. The curriculum is disabled when it does not meet the needs of diverse learners. (Council for Exceptional Children 2011)

Returning to the evaluation of the two studies, which is the main focus, many points are made regarding the validity of the research, for example, the difficulties of working with control groups. In a study where it became possible to identify a control group as a result of some students being taught by course tutors who had some awareness-raising re. UD and some who had not, 94% of the students in the group whose tutors had not been exposed to UD completed the course successfully whilst in the group with tutors who had been exposed to UD, the figure rose to 96%.

More significantly, looking at those who had disclosed a disability, only 80% successfully completed the course taught by those not given UD awareness, whilst 95% succeeded when taught by UD-aware tutors. The results of this study suggest that students with disabilities in a course where the instructor receives UDL training are more likely to successfully complete the course than students with disabilities in a course where the instructor did not receive this training (page 147). This seems to offer a clear message to staff working in pre-service and in-service continuing professional development.

A further paper (Paper 3) by Roberts, Satlykgylyjova, and Park continues with the theme of research evidence in that it is a literature review of empirically-based published papers. These are summarised in tables which consider each one in terms of objectives, methodology, and findings. The authors suggest that the evidence about disabled students specifically is limited, but that a positive impact is reported by all students experiencing courses devised using UD principles. The paper closes with an extensive list of recommendations based on the review of the studies with comments too on the limitations and the possibilities for further research.

The CAST resources and the work of David Rose are at the heart of Paper Four which contains reflections on the principles and their application. The CAST guidelines centring on multiple means of representation, multiple means of action and expression, and multiple means of engagement are listed (page 83) and then applied to a post-graduate course taught at Harvard. As a longtime believer in the work of Donald Bligh in the UK and his book 'What's the Use of Lectures?' (1971) I was heartened to read that 'one of the most obvious changes in the last two years has been a reduction in the centrality of lectures as the core of teaching the course.' (page 86) Hurray!!!

Discussion of other topics in Part Two of the book

The next paper (Paper 5) in this part of the book considers how UD principles were applied to a particular first year course. The author, Jeanne Higbee, makes considerable use of a scheme devised by Chickering and Gamson in 1987 which identifies eight points to which attention should be directed in terms of UD. These are creating a welcoming classroom, determining the essential components of a course, communicating clear expectations, providing constructive feedback, exploring the use of natural supports for learning including technology, designing teaching methods that consider diverse abilities, learning styles, previous experience etc., creating multiple ways

for students to demonstrate their acquisition of knowledge and skills, and promoting interaction between learners and teachers.

Each of these is explored with practical examples of their application. Really, these are simply the practices associated with good teaching for all students.

The four remaining papers in this section of the book cover other aspects of UD. One outlines the reflections of five disabled students (Paper 6), and one considers the benefits of UD for students with psychological disabilities (Paper 7). The number of students disclosing this type of impairment has grown, but also there is evidence that many decide not to disclose. Implementing effective UD should allow the latter to experience no disadvantage stemming from their decision.

The penultimate paper (Paper 9) looks at UD in an administration course and is really a personal account of the situation in a very specific context. I would have liked to know more about the content of the course, for example in the Disability in Higher Education and Society module.

Closing the section is a paper on assessment and UD (Paper 10) which Ketterlin-Geller, Johnstone, and Thurlow contend is a neglected aspect of the implementation of the concept. They identify two major concerns: validity and accessibility. There is a very useful checklist of questions relating to assessment (page 169) which is followed by suggestions for steps to be taken when moving to assessment based around UD principles. In the final paragraph, the authors continue the important theme that I have been concerned with throughout my review – the need for more research.

Parts Three, Four and Five

As I said earlier, really I can only summarise the remaining parts of the book. Part Three on the UD of student services and physical spaces includes papers based on the experiences of staff working in student services and in campus estates offices.

Part Four on UD of technology in higher education looks at the history of assistive, accessible and universally designed technology as well as two papers each with a narrower focus (on use of video and on blended learning). The final part is about the promotion and institutionalisation of UD. It includes papers on general themes such as what helps and hinders the successful implementation of UD and some which are more narrowly focussed e.g. incorporating UD principles in an engineering course, using case studies to promote UD, and cross-campus collaboration and wider partnerships working to facilitate UD.

Closing comments

To conclude, this is an important book and should be essential reading for many staff working with disabled students in post-secondary education. In particular, given the growth in implementation of UD, the role of those working in disability services will have to change from being reactive in terms of making reasonable adjustments to becoming proactive and working strategically at the design stage of study programmes, services etc.

This book would be an extremely sound beginning in terms of getting to grips with taking on the new role having

acquired a good working knowledge of UD. The book has plenty of very useful tables and practical suggestions. It is not without its shortcomings.

For me, it was disappointing in terms of its coverage of staff training and continuing professional development, especially in the final section on promotion and institutionalisation. However, the merits and positive qualities far outweigh the weaknesses.

I recommend the book wholeheartedly and with no qualms.

I can do no better than to finish my review by quoting the final remarks of Michael K. Young, president of Texas A & M University in his foreword to the book

The authors of this book make a compelling case for adopting Universal Design in all postsecondary offerings in order to support a diverse educational community and an inclusive approach to academic excellence. There is something here for everyone.

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Alan Hurst was Professor of Education at the University of Central Lancashire. He has published books and articles, lectured and led workshops throughout the UK and in many countries overseas, been a member of several significant and influential policy groups, chaired consultative groups for a number of research studies and projects, and been the recipient of a number of awards for his work on the creation of inclusive education for disabled students in universities. He was also a member and subsequently a trustee of Skill: National Bureau for Students with Disabilities until its closure in 2011. He continues to be a member of the Editorial Boards of the journal 'Disability and Society' and is a free-lance consultant contributing to conferences and staff development programmes in a number of institutions.

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