From Ableism to Accessibility in the Universal Design University

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Abstract: Educational expansion has reached the tertiary level; however, inclusive higher education remains an elusive goal despite the ratification, in more than a hundred countries, of the International Convention on the Rights of Persons with Disabilities since 2006. The Convention mandates inclusive education throughout the life course and thus increased access to universities. Enhancing accessibility requires us to remove barriers and defeat ableism. Analyzing contemporary trends in Europe and North America, this article compares universities' attempts to implement elements of the "Universal Design University." Because universities serve as role models and provide community services, these organizations can and should implement universal design principles. Universities have myriad opportunities and responsibilities to enhance access to their programs. In embracing social and political paradigms of disability, in giving voice to diverse participants, and in implementing universal design principles, the university can engage and change public awareness and attitudes. Advancing the educational and social inclusion of persons with disabilities in higher education provides benefits far beyond the university campus.

Key Words: university, universal design, accessibility, barrier, disability, education

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Universities have developed innumerable traditions worth maintaining since the founding of the Università di Bologna in 1088. Among these, research and teaching are foremost. Providing models for the betterment of society is another crucial contribution. Despite the popular image of the ivory tower, university members everywhere engage diverse publics in a range of settings. However, outdated customs in higher education hinder the future of science and society instead of fostering their advancement. These customs, often unquestioned, certainly cast doubt on the university's claim to be a continual source of enlightenment and a perennial engine of innovation. Among the most glaring of these are ableism and institutionalized discrimination, manifest in persistent attitudinal, architectural, and social structural barriers that have excluded disabled and disadvantaged people from most universities for most of their history. Nevertheless, we live in an era in which scholars with disabilities routinely make key contributions to science, for example Stephen Hawking (1998) and Temple Grandin (1996), among many others. Despite barriers of exclusion, segregation, and stigmatization, such scientists demonstrate their talents and perspectives, which society cannot live without. Given this discrepancy, we must ask: How much stronger and more prominent could universities be if they would open their classrooms to diversity and make their programs and campuses accessible to all?

Since the student protests of 1968 that aimed to secure civil liberties, gender equality, and environmental sustainability, the future of the university in many democracies has been at the top

of national political agendas. This is especially so today, during the current transformation of the higher education landscape via such developments as the "Bologna process" of Europe-wide standardization of higher education credits and certificates (Powell, Bernhard & Graf, 2012) over the past decade or as a result of the economic crisis since 2008/09, causing drastic budget cuts in higher education systems in the United Kingdom (Head, 2011) and the United States (Kelderman, 2011). Clearly, myriad barriers to full participation and social inclusion of disabled people in universities persist. Thus, the "barrier removal philosophy" (Shakespeare, 2006: p. 44) of design for all emphasizes that these institutionalized barriers require enhanced attention and concrete efforts by all those groups involved in making higher education a force for innovation and mobility-on the path towards the "knowledge society" (Castells, 1996). A significant tool for such change is the International Convention on the Rights of Persons with Disabilities (United Nations, 2006). Mandating inclusive education-at all levels, including tertiary education-this treaty stands to benefit all, not only those persons with currently perceived impairments and disabilities. However, as DePoy and Gilson (2010) argue, while the Convention aims to raise awareness and reduce discrimination and disadvantage, in some Articles it lacks the needed detail and defined mechanisms to reach its policy goals-or to enforce them. Nevertheless, raising awareness about the Convention's principles should explicitly be joined with other on-going reform processes around the world.

In Europe, contemporary initiatives have elaborated a new model of skill formation that derives from durable strengths in education and training systems. Key goals include not only the support of competitiveness in global markets and individual employability or the maintenance and enhancement of the quality and attractiveness of the European Higher Education Area, but also the flexibility of pathways and enhanced permeability or mobility between vocational training and higher education (Bernhard, Graf, & Powell, 2010; Powell, Bernhard, & Graf, 2012). However, the social dimension, including inequalities in access to higher education on the basis of social and ethnic background or individual dis/ability, has less often been discussed in these reforms. Issues of architecture and accessibility in learning environments have hardly been expressed. Yet throughout Europe, as elsewhere, there are lasting disparities among social groups in entering and graduating from higher education (Shavit, Arum, & Gamoran, 2007), and the physical state of university facilities is often appalling. International legal charters, scholarship, and universal design concepts facilitate attempts to address such challenges and improve these systems.

A decisive response would be for universities to embrace the principles of *universal design*: the design of services, products, and environments "to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design" (Mace, 1997: p. 1). Seven principles guide universal design: equitable use, flexibility in use, simple and intuitive, perceptible information, tolerance for error, low physical effort, and size and space for approach and use (Mace, 1997; see Preiser & Smith, 2011 for examples). Given exemplary organizations that embrace such admittedly utopian principles, the Universal Design University is no longer just a figment of imagination. Universal design offers useful tools, described below, to help universities meet expectations held for higher education. Yet to be realized throughout Europe, "design for all" must become a fundamental goal for the remarkable diversity of teachers and learners, planners and personnel, who together guide, sustain, and enrich higher education.

The Universal Design University

To explore necessary steps towards the Universal Design University, this article discusses barriers and identifies strategies already in use to increase accessibility on multiple levels. Firstly, around the world, *attitudinal barriers*, from prejudice and negative stereotypes to stigmatization and marginalization, have seriously limited the contributions of people with disabilities to community life. Social, scientific, and legal changes provide increasing opportunities to challenge such views and improve the reactions to and treatment of people with disabilities—gradually shifting from containment and compensation toward care and citizenship (Drake, 2001; Richardson & Powell, 2011). Yet this likely most tenacious barrier of ableism is exemplified in the taken-for-grantedness of meritocratic myths, such as the faulty belief that only those who are "able" should or could access university education and succeed. We simply do not know how many youth with disabilities would succeed in postsecondary education were their aspirations not voided by low expectations and institutionalized discrimination (Powell, 2011). The Universal Design University would open itself to the idea that individuals, previously excluded, could contribute to it as it simultaneously supports them in reaching their learning goals.

Secondly, *social, cultural and educational structures* exhibit institutionalized selection processes and discriminatory practices that reduce the learning opportunities and expectations of disabled children, youth, and adults or those who are socially and educationally disadvantaged. Having negative effects early in the life course, such structural and cultural barriers have often given universities an easy way out: the group eligible to apply for entrance is artificially kept low (Powell, 2011; Powell & Solga, 2011). As we have witnessed, while women once had to battle to gain access to universities, in many countries they have quickly become the majority in participation as well as attainment (Schofer & Meyer, 2005: p. 909). In contrast to strides made toward gender equality, racism and ableism or disablism,¹ they remain pervasive, despite the fact that with each further social group, the extension of learning opportunities has proved successful. The expansion of the quintessentially private *and* public good of education has been self-amplifying. The Universal Design University would identify groups whose contributions have been artificially limited by oppression and selection processes and ultimately supply bridges for these groups to enter—and participate fully.

Thirdly, students with disabilities who do make it onto campus or can use Internet-based learning platforms are confronted with a range of *environmental and communication barriers* that hinder their academic and social participation. Innovations on many campuses range from adapted signage and disability service centers to diversity-oriented instruction and disability studies, a multidisciplinary field of enquiry that sharpens critical dialogue on the social and political constructions of dis/ability and "ab/normality" (Powell, 2011). Universities around the world have directly addressed such known obstacles and, in implementing new principles and programs, provide pathways to the future Universal Design University.

The following sections discuss such barriers and strategies to overcome them, from the global and national to the local. All universities orient themselves to international norms of scientific advancement and professional development. Whereas Internet-based universities serve users in networks varying in size and shape, brick-and-mortar universities also relate to neighboring spatial environments and diverse local communities. In any case, universities serve much larger and diverse groups than current students because the campus is a source of community services. The public expects universities to both guard established knowledge and

search continuously for discoveries that will improve human well-being and enhance capabilities.

Universities as Role Models

Because of both their cultural influence and economic significance, universities are uniquely positioned to be important role models, to set new standards, and to provide community services. As these organizations carry out the tasks of education and training as well as professional preparation, their responsibility to realize both excellence and equity in their programs is heightened by the considerable state and philanthropic support that they enjoy. No longer reserved for a small minority, university studies have become an integral part of lifelong learning for many. Offering cultural events and intellectual resources open to entire communities, universities that improve accessibility can better achieve their extended mission to provide possibilities for learning far beyond the groups of faculty and staff members or currently enrolled students. All the more reason to rethink how the university can better serve *all* citizens—those who have already passed through its doors as well as those who will in future come onto campus.

Inclusive Education for All

Every level of education has expanded in countries throughout the world, including higher education, since World War II (Schofer & Meyer, 2005). Such educational change interacts in myriad ways with broader societal developments, such as shifting paradigms or models of dis/ability (see Pfeiffer 2002). Concrete legal innovations-such as the prohibitions of disability discrimination in dozens of countries (Quinn & Degener, 2002)-were brought about significantly due to the global disability movement's advocacy initiatives (Charlton, 1998; Groce, 2002) and protest activities (Barnartt, 2010) that emphasize the power of new social movements in bringing about change. But before activists and advocates succeeded in securing their rights and gaining access to integrated public schools and inclusive classrooms in the last quarter of the 20th century, they had to survive asylums, eugenic forces, and educational exclusion prior to World War II and in the first decades thereafter (Powell, 2011: p. 36). Aligned with growing citizenship rights and notions of personhood, the past half-century has witnessed an unmistakable shift in emphasis from medical to social and political models of dis/ability, based on the core idea that not individual deficits but rather cultural and structural barriers disable people. This has facilitated a redirection of research and policy initiatives away from the rehabilitation and treatment of individuals and towards contextual conditions and barrier-filled environments, human rights charters and anti-discrimination legislation, and mechanisms of social control and exclusion. Today, the debate about strategies to reduce educational exclusion has been superseded by those to realize inclusive education for all (Richardson & Powell, 2011).

International organizations and especially the United Nations have been influential in both the establishment of human rights (including education rights) and in calling for equality and social justice for hundreds of millions of disabled people worldwide. To reach such overarching goals, education is assumed to be absolutely vital. In the international calls for "education for all" and then for inclusive education—a range of organizations has provided ideas, standards, and legal texts to facilitate such transformation (e.g. Peters 2004).

Rights to Inclusive Education and Access

On December 13, 2006, a quarter century after the 1981 *International Year of Disabled People*, the United Nations General Assembly adopted the *International Convention on the Rights of Persons with Disabilities* (ICRPD) with similar goals: to promote and protect the human rights, dignity, and freedom of disabled people around the world (United Nations, 2006). As did its ancestors, this first human rights treaty adopted in the twenty-first century—since then ratified by one hundred fifteen countries—aims to raise awareness about disability as it insists on the reduction of discriminatory practices and stigmatization that have limited the participation and contributions of disabled people throughout history.

Educational rights extend to the university via the Convention's vision of accessible environments and an inclusive education system. The ICRPD's Article 24 on education clearly states the conditions needed and the extent to which different levels of access to education are to be guaranteed. Education systems that are inclusive are viewed to be of fundamental importance to the development of individuals and community life. Without such inclusive systems, persons will neither be enabled to become fully participating citizens nor individuals who reach their potential and freely develop their personality in order to maximize their capabilities (Nussbaum, 2006). Lacking prior schooling and credentials, individuals who suffer "cumulative disadvantage" early in the life course (Mayer, 2005) are unlikely to access higher education or to find adaptations or accommodations sufficiently compensatory—and thus have limited access to formal learning opportunities in future.

Alongside debates at national and local levels about how to ensure democratic participation by citizens and how to secure highly qualified workforces, at the international level, the ICRPD sets a progressive and ambitious agenda of learning throughout the life course. However, the steps necessary to achieve lifelong learning for more than a highly educated few depend on concrete reform processes that will democratize access to learning opportunities. To be successful, such reforms must engage the ideas, norms, and policies evident in institutionalized education systems that continue to segregate or separate, such as those in Germany and the United States (Powell, 2011). Without high quality primary and secondary schooling and permeability between school forms or tracks, learning opportunities at the postsecondary level, whether vocational training or higher education, will be limited. Reflecting the stratified societies and educational systems of which they are an influential part, universities and those responsible for their governance have in fact carefully guarded access to these hallowed grounds, upon which elite civil servants and professionals have been prepared for power. Nevertheless, especially over the past half-century, universities have considerably broadened their missions. Among the common trends that have shaped and influence higher education systems are the evolution from elite to mass to universal participation in postsecondary education, increasing labor market opportunities and rising incomes for highly educated experts, the self-amplifying growth of knowledge, and government patronage and supervision (Clark, 1993). Yet the recent and on-going economic crisis in countries with leading higher education systems in the Anglophone world threatens important initiatives to enhance accessibility and provide services for students with disabilities because universities suffer severe financial austerity measures.

Regardless of the financial constraints, the ICRPD emphasizes investments and adaptations (such as the reduction of architectural barriers) not only in primary and secondary schooling but also in vocational training as well as higher and adult education. Without such modifications, the playing field will not be even for all. Even in the wealthiest European countries, such as Austria, Germany, and Switzerland, education and training opportunities beyond primary and secondary schooling are still seriously lacking for individuals with recognized "special educational needs" (Powell, Felkendorff & Hollenweger, 2008). Thus, the persistence of stratified access to tertiary education and the reproduction of class inequalitiesbased upon elaborate social selection procedures in tracked secondary schooling-is among the most significant challenges facing European universities (Powell & Solga, 2011). Mobility and permeability have become buzzwords of European reform processes in higher education (the "Bologna process") and vocational training (the "Copenhagen process") (see Powell, Bernhard & Graf 2012). But highly stratified secondary schooling and the persistent division between vocational education and training and higher education, in such countries as Germany, determine the life chances of each cohort and hinder higher education expansion (Powell & Solga, 2011). Still, the ICRPD emphasizes that countries:

"..shall ensure that persons with disabilities are able to access general tertiary education, vocational training, adult education and lifelong learning without discrimination and on an equal basis with others. To this end, States Parties shall ensure that reasonable accommodation is provided to persons with disabilities." (United Nations, 2006, Article 24, Section 5)

Progressive policies and practices show the way forward to meet global norms of educational equality. As the ICRPD's mandates are carried out on multiple levels of governance, there is still much to learn from others and to transform university campuses everywhere.

Universal Design Principles Facilitate Access

Youth with disabilities who have obtained the certificates necessary to access tertiary education are often hampered in doing so by the lack of available support services they need. Such services have increasingly been provided on campuses in the United States, supported by codified rights to education and such programs as the "Universal Design Initiative" of the Association on Higher Education and Disability (AHEAD).² Such policies and innovations in a range of organizations show that the previously taken-for-granted boundaries of student dis/ability were illegitimate, as disabled students succeed and contribute to these learning communities. Aiming to extend the above-discussed changes, the ICRPD demands adjustments in education policies and university programs around the world. Yet to surpass compliance and create a truly welcoming community that recognizes and values diversity requires more than rules and regulations. Equally, if not more important, cultural shifts in attitudes, awareness, and analysis are necessary. Indicators of such shifts include the existence of academic offerings that examine disability as a universal human experience that nevertheless exhibits tremendous cultural and policy differences, even within regions. Next to attitudinal and architectural adaptations, innovative instructors implement "universal instructional design" (discussed below) to facilitate the learning progress of all their students. Usually, such adaptations require few additional resources even as they benefit all participants.

In architectural structures and communicative diversity—such as ramps, wayshowing systems (Møllerup, 2006), Braille signage, sign language interpretation, and accessible websites—improvements have been steady, but gradual. Universal design has focused on the built environment, spatial mobility, and product use. Such considerations are particularly important in campus planning, restructuring facilities, and building projects. Just as ramps facilitate access for a wide range of users, from parents with prams to wheelchair users to delivery personnel, signage can assist everyone to navigate both familiar and unfamiliar spaces. For example, the *International Symbol of Access* facilitates individuals' mobility and provides daily interactions with issues of accessibility, even as it represents the most prevalent symbol of disability worldwide (Ben-Moshe & Powell, 2007).

[Insert Image International Symbol of Access (ISO), 1969 about here]

[Insert Image International Symbol of Access (MoMA), 2009 about here]

The diverse local interpretations of this icon mirror the shift from exclusion to inclusion of disabled people in the human rights revolution: whereas the traditional icon displays an object (the wheelchair), newer icons show the human user as an active rider—asserting the primacy of personhood and participation (Powell & Ben-Moshe, 2009). Symbols, buildings, and legal conventions all indicate the significant transformation in disability paradigms from medical to social models and from exclusion to inclusion.

Towards the Universal Design University

To illustrate contemporary trends in Europe and North America, a few universities' attempts to implement elements of the Universal Design University are discussed here. In the UK, education and social policies addressing barriers that people with disabilities face have matured since the 1990s, when almost all British universities were largely inaccessible to students and staff with disabilities (Barnes 2007). The *Disability Discrimination Act (DDA)* of 1995 was a watershed event that, from 2005, implemented a Disability Equality Duty (DED) and a code of practice to ensure disability equality. These laws were recently joined by the *Equality Act* of 2010, which aims to protect disabled people and prevent disability discrimination by providing (1) legal rights for people with disabilities in education and employment; (2) access to goods, services, and facilities; and (3) property rights.³ Higher education access for students with disabilities has moved up the agenda, becoming a major priority for recent governments (Hurst 1998; Harrison et al. 2009). Achieving disability equality demands a proactive approach, effective implementation of legislation, and compliance.

An example of current practice illustrates these issues. An urban campus with a range of building types in the heart of the British capital, the *London School of Economics and Political Science* (LSE) has placed campus maps indicating accessible entrances, installed automatic doors, and provided adjustable computer workstations in the lift-equipped library. Decades ago, when Sally Sainsbury was appointed the first Disabled Students' Advisor, she faced antiquated attitudes of staff who questioned the necessity of even minor changes that would enhance accessibility (personal communication, April 14, 2010). Over a dozen years ago, a *Disability and Well-Being Office* was founded that now provides an array of services to over 900 students a year, from advice and counseling to practical study and social supports to a peer/staff network.

Director Nicola Martin says the *Disability Discrimination Act*, which stipulates how public authorities should act proactively on disability equality issues and tackle institutional disability-related discrimination, was crucial in expanding these services, as the university was required to establish a *Disability Equality Duty Action Plan* (interview, September 2, 2010). While other UK universities, such as Leeds, have well established and internationally-known disability studies research groups, the LSE relies on collaboration among many London universities, made possible through the *Disability Equality Research Network*, to bring disability studies scholarship to campus and to involve students from a wide variety of disciplines and countries.

[Insert Image Access Signage (LSE) about here]

[Insert Image Ramp (LSE) about here]

[Insert Image Automatic Doors (LSE) about here]

[Insert Image Disability & Well-being Office (LSE) about here]

[Insert Image Disability Information Board (LSE) about here]

Good practice in the work of service providers that are "barrier-specific" instead of "impairment-based" are transmitted via the *National Association of Disability Practitioners*, a professional association for disability and support staff in further and higher education. More broadly, the UK's *Equality Challenge Unit* (ECU)⁴ helps higher education institutions promote equality and realize the potential of all staff and students, across boundaries of race, gender, disability, sexual orientation, age or religion and belief. The ECU does so through such mechanisms as dissemination of evidence and distribution of toolkits on how to implement effective practices in governance and management, estates, research and teaching, and staff and student services. Such tools are part of universal design in education, which builds on principles to increase access to universities and guarantee learning opportunities for all participants.

On a much older and traditional campus, Germany's Georgia Augusta University of Göttingen, many of the newer developments found at LSE have been hampered by lack of awareness, legal stipulations, and financial provisions as well as tenacious educational segregation that seriously limits the eligibility of youth with disabilities to attend universities (Powell, Felkendorff & Hollenweger, 2008; Powell, 2011). However, many individuals with invisible disabilities or chronic illnesses do attend, having never been selected out of the general education system during primary or secondary schooling. For many students with recognized impairments or disabilities who do make it to campus against the odds, barriers hamper their learning opportunities and thus limit their success. In a seminar on "Social Inequality and Disability" that I taught there, students developed a project to evaluate, measure, and catalogue the accessibility of their campus. Using checklists provided by the local self-help organization of disabled people, Selbsthilfe Körperbehinderter e.V., that had already measured the accessibility of the old town center during the Expo2000, the World Exposition in nearby Hanover, the students tested key campus buildings and events to provide an accurate and up-to-date picture of barriers—and to encourage their removal. This provided lessons on types of barriers and the multidimensional construction of accessibility and of disability.

Such insights and empirical findings have been collected and reflected in disability studies, a burgeoning multidisciplinary field with its own journals, conferences, and courses of study.⁵ The development of this field of study itself must be considered both an indicator of shifting paradigms of dis/ability as well as a facilitator of such change within the university, even if debates about the utility and potential of universal design and of social model thinking that advocates a barrier-free utopia are on-going (e.g. Shakespeare 2006). The availability of disability studies in the official curriculum facilitates the broadening of learning opportunities and critical reflection of issues of inclusion/exclusion and ableism.

Even where courses of study exist, disability studies courses are regularly offered, and disability services offices have gathered years of experience, such as at Syracuse University in New York, cooperation among administration, faculty, staff, and students is needed to take accommodations and services "beyond compliance" and to build "pedagogical curb cuts" (Ben-Moshe et al., 2005). Applying universal design principles to teaching and learning, scholars at the University of Washington have adapted the original principles developed at the Center for Universal Design at North Carolina State University, conceptualizing "Universal Design of Instruction" (Burgstahler, 2005; see also Bowe, 2000; Burgstahler & Cory, 2008). Colleagues at Canada's University of Guelph have developed the similar "Universal Instructional Design" concept.⁶ Such principles reorient the original tenets of universal design (mentioned above) to the specific interactive situations of teaching and learning: (1) accessible and fair (equitable); (2) flexibility in use, participation and presentation; (3) straightforward and consistent; (4) information is explicitly presented and readily perceived; (5) supportive learning environment; (6) minimize or eliminate unnecessary physical effort or requirements; and (7) learning space accommodates both students and methods. As ideals, universal design concepts provide a utopian vision. However, they also serve as important guidelines for restructuring that have been applied and implemented broadly.

Conclusion

Coming full circle, universal design principles emphasize that on multiple levels and in a range of contexts, universal design fosters progress in universities. Given the rise of education for all and inclusive education, the numbers of university students who consider themselves to be disabled or are in need of individualized support to succeed in their studies has also grown rapidly (Powell, 2011). Thus, universities must address the issues discussed here—for current students—even as the population of recognized and socially validated disabilities, and policies and programs to provide support and services, continues to vary considerably across societies.

As generators of knowledge and as centers of community life in towns and cities, universities have an extraordinary chance—and responsibility—to enhance access to the learning opportunities they offer. As they do so, they show their communities how possible it is to remove barriers and the advantages that accrue to all. In embracing paradigms that extend beyond the clinical to include social-political, minority group, and human variation models of disability (see Scotch & Schriner, 1997), in giving voice to diverse participants, and in providing prototypes for the implementation of universal design principles, the university can engage and change public awareness and attitudes. Advancing the educational and social inclusion of persons with disabilities in higher education provides benefits far beyond the university campus. Justin J.W. Powell, Dr. phil., is Professor of Education at the University of Luxembourg.

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References

- Albrecht, G., Seelman, K. D., & Bury, M. (Eds.) (2001). *Handbook of Disability Studies*. Thousand Oaks, CA: Sage.
- Barnartt, S. (2010). The globalization of disability protests, 1970–2005. *Comparative Sociology*, 9(2), 222–240.
- Barnes, C. (2007). Disability, higher education and the inclusive society. *British Journal of* sociology of education, 28(1), 135–145.

Barnes, C., Barton, L., & Oliver, M. (Eds.). (2002). Disability studies today. Oxford: Blackwell.

- Ben-Moshe, L., Cory, R. C., Feldbaum, M., & Sagendorf, K. (Eds.). (2005). Building pedagogical curb cuts: Incorporating disability into the university classroom and Curriculum. Syracuse, NY: Syracuse University Graduate School.
- Ben-Moshe, L., & Powell, J. J. W. (2007). Sign of our times: Revis(it)ing the International Symbol of Access. *Disability & Society*, 22(5), 489–505.
- Bernhard, N., Graf, L., & Powell, J. J. W. (2010). Wenn sich Bologna und Kopenhagen treffen.
 Erhöhte Durchlässigkeit zwischen Berufs- und Hochschulbildung (Bologna and Copenhagen meeting. Increased permeability between vocational and higher education).
 WZB-Mitteilungen, 130, 26–29.
- Burgstahler, S. E. (2005). *Universal Design of Instruction*. DO-IT, University of Washington (Retrieved from www.washington.edu/doit).
- Burgstahler, S. E., & Cory, R. C. (Eds.). (2008). *Universal Design in Higher Education*. Cambridge, MA: Harvard Education Press.
- Bowe, F. G. (2000). Universal Design in Education. Westport, CT: Bergin & Garvey.
- Castells, M. (1996). *The Rise of the Network Society, vol. 2: The Information Age.* Oxford: Blackwell.

- Charlton, J. I. (1998). Nothing About Us Without Us: Disability Oppression and Empowerment. Berkeley: University of California Press.
- Clark, B. R. (1993). *The Research Foundations of Graduate Education*. Berkeley: University of California Press.
- DePoy, E., & Gilson, S. (2010). Disability by Design. *The Review of Disability Studies*, 6(3), 53–62.
- Drake, R. F. (2001). Welfare States and Disabled People. In G. L. Albrecht, K. D. Seelman, & M. Bury (Eds.), *Handbook of Disability Studies* (pp. 412–429). Thousand Oaks, CA: Sage.
- Grandin, T. (1996). *Thinking in Pictures: And Other Reports from My Life with Autism*. New York: Vintage.
- Groce, N. E. (2002). From Charity to Disability Rights: Global Initiatives of Rehabilitation International 1922–2002. New York: Rehabilitation International.
- Hawking, S. (1998). A Brief History of Time. New York: Bantam.
- Head, S. (2011). The Grim Threat to British Universities. *The New York Review of Books*. January 13, 2011. Retrieved from www.nybooks.com/articles/archives/2011/jan/13/grimthreat-british-universities
- Harrison, M., Hemingway, L., Sheldon, A., Pawson, R., & Barnes, C. (2009). Evaluation of Provision and Support for Disabled Students in Higher Education. London: Higher Education Funding Council for England (HEFCE). Retrieved from http://www.hefce.ac.uk/pubs/rdreports/2009/rd24_09
- Hehir, T. (2005). *New Directions in Special Education: Eliminating Ableism in Policy and Practice.* Cambridge, MA: Harvard Education Press.
- Hurst, A. (1998). *Higher Education and Disabled Students: International Approaches*. Aldershot: Ashgate.
- Hurst, A. (2011). Universal Design and Disabled Students: From Inclusion to Excellence. Paper presented at the Conference on Universal Learning Design, February 9, 2011. Retrieved from http://www.uld-conference.org/paper.php?p=91&l=en
- Imrie, R. F., & Wells, P. E. (1993). Disablism, Planning, and the Built Environment. Environment and Planning C: Government and Policy, 11(2), 213–231.
- Kelderman, E. (2011). Recession Pushed State and Local Higher-Education Spending to 25-Year Low in 2010. March 8, 2011. Retrieved from chronicle.com/article/Recession-Pushed-State-and/126647

- Mace, R. (1997). About Universal Design. Center on Universal Design, North Carolina State University. Retrieved from www.ncsu.edu/www/ncsu/design/ sod5/cud/about_ud/about_ud.htm
- Madriaga, M. (2007). Enduring Disablism: Students with Dyslexia and their Pathways into UK Higher Education and Beyond. *Disability & Society*, 22(4), 399-412.
- Mayer, K. U. (2005). Life Courses and Life Chances in a Comparative Perspective. In S. Svallfors (Ed.), *Analyzing Inequality* (pp. 17–55). CA: Stanford University Press.
- Møllerup, P. (2006). Wayshowing: A Guide to Environmental Signage Principles and Practices. Baden, Switzerland: Lars Müller Publishers.
- Nussbaum, M. C. (2006). Frontiers of Justice: Disability, Nationality, Species Membership. Cambridge, MA: Harvard University Press.
- Peters, S. J. (2004). Inclusive Education: An EFA Strategy for All Children. Washington, DC: World Bank.
- Pfeiffer, D. (2002). The Philosophical Foundations of Disability Studies. *Disability Studies Quarterly*, 22(2): 3-23.
- Powell, J. J. W. (2011). *Barriers to Inclusion: Special Education in the United States and Germany*. Boulder, CO: Paradigm.
- Powell, J. J. W., & Ben-Moshe, L. (2009). The Icons of Access: From Exclusion to Inclusion. Stimulus Respond, "icon" issue, 90–95. Retrieved from www.stimulusrespond.com
- Powell, J. J. W., Bernhard, N., & Graf, L. (2012). The Emergent European Model in Skill Formation: Comparing Higher Education and Vocational Training in the Bologna and Copenhagen Processes. *Sociology of Education*, 85(3), 240–258.
- Powell, J. J. W., Felkendorff, K., & Hollenweger, J. (2008). Disability in the German, Swiss, and Austrian Higher Education Systems. In S. Gabel & S. Danforth (Eds.), *Disability and the Politics of Education* (pp. 517–540). New York: Lang.
- Powell, J. J. W., & Solga, H. (2011). Why are Participation Rates in Higher Education in Germany so Low? Institutional Barriers to Higher Education Expansion. *Journal of Education and Work*, 24(1), 49–68.
- Preiser, W. F. E., & Smith, K. H. (Eds.). (2011). *Universal Design Handbook*. New York: McGraw-Hill.
- Quinn, G., & Degener, T. (2002). Human Rights and Disability: The Current Use and Future Potential of United Nations Human Rights Instruments in the Context of Disability. New York: United Nations.

- Richardson, J. G., & Powell, J. J. W. (2011). *Comparing Special Education: Origins to Contemporary Paradoxes.* CA: Stanford University Press.
- Schofer, E., & Meyer, J. W. (2005). The Worldwide Expansion of Higher Education in the Twentieth Century. *American Sociological Review*, *70*, 898–920.
- Scotch, R. K., & Schriner, K. (1997). Disability as Human Variation: Implications for Policy. Annals of the American Academy of Political and Social Science, 549(January), 148–159.

Shakespeare, T. (2006). Disability Rights and Wrongs. London: Routledge.

- Shavit, Y., Arum, R., & Gamoran, A. (Eds.) (2007). *Stratification in Higher Education*. CA: Stanford University Press.
- United Nations (2006). International Convention on the Rights of Persons with Disabilities. December 13, 2006. A/61/PV.76. New York: author.

Notes

¹ Without reviewing here extensive debates within disability studies, both ableism and disablism have been used

² AHEAD's Universal Design Initiative aims to promote universal design concepts in higher education and to identify useful and achievable strategies to promote universal design concepts that will facilitate access to the curriculum for diverse populations as well as reconceptualize disability. See www.ahead.org/resources/universal-design

³ See www.equalities.gov.uk/equality_act_2010.aspx

⁴ See www.ecu.ac.uk/heifunctions

⁵ For example, the Society for Disability Studies, the Nordic Network of Disability Research, and the Center for Disability Studies at the University of Hawai'i organize conferences in the Americas, the Nordic countries, and in the Pacific rim. And seminal publications have reviewed accomplished scholarship (e.g., Albrecht, Seelman, & Bury, 2001; Barnes, Barton, & Oliver, 2002).

⁶ See www.tss.uoguelph.ca/uid, accessed December 3, 2010

Images and Captions:



Figure 1. International Symbol of Access (ISO), 1969



Figure 2. International Symbol of Access (MoMA), 2009



Figure 3. Access Signage (LSE)



Figure 4. Ramp (LSE)



Figure 5. Automatic Doors (LSE)



Figure 6. Disability & Well-being Office (LSE)



Figure 7. Disability Information Board (LSE)