Journal of Applied Research in Higher Education

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Article information:

To cite this document:

Catherine Peck, Frederique Bouilheres, Melanie Brown, Carol Witney, (2018) "Because access matters: an institutional case study", Journal of Applied Research in Higher Education, Vol. 10 Issue: 2, pp.194-203, <https://doi.org/10.1108/JARHE-04-2017-0045>

Permanent link to this document:

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Because access matters: an institutional case study

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Abstract

Purpose – The purpose of this paper is to overview an institution wide accessibility project undertaken at the Vietnam locations of a transnational Australian university, and the significance of this initiative in symbolising the organisation's commitment to inclusion and diversity. The project implemented universal accessibility standards for learning materials across all courses delivered at the university. This facilitated an easier in-class and online learning experience for students with a broad range of print disabilities, visual or hearing impairments, and a range of other learning differences or disabilities.

Design/methodology/approach – The implementation of this project entailed three concurrent streams of activity which the authors describe in this paper. These included development of accessibility standards and processes for conversion of the existing learning materials, a sustained awareness raising campaign for staff and students, and integration of the accessibility standards into induction, support and development activities.

Findings – The process of establishing the technical foundations for inclusion through a focus on accessibility prompted rich dialogue with staff and students around inclusive practices. Many staff working in professional and non-teaching roles voluntarily adopted the standards to promote an inclusive workplace. Capability building activities for high school teachers were also conducted for the Vietnamese Department of Education & Training.

Originality/value – The approach outlined in this case is highly transferable, and provides a practical roadmap for achieving accessibility and promoting an inclusive environment. The strategies described through the lens of Kotter's (1996) process for leading change in this paper can be applied by higher education institutions internationally.

Keywords Inclusion, Disability, Online learning environment

Paper type Case study

Introduction

Access to higher education can be life-changing. In recent years, increasing numbers of students enrolling in higher education with disabilities and learning differences has led to institutions taking a more accommodating stance regarding accessibility in the built environment, curriculum and assessment design (Bruder and Mogro-Wilson, 2010). Disability is understood in this paper as socially constructed by the norms and expectations of society in relation to physical or mental impairments, and therefore defined by the wider environment rather than the individual (Albrecht and Levy, 1981). Students disadvantaged by disabilities or learning differences still face emotional, financial, physical and cultural hurdles, in addition to the challenges of their academic programme in conventional higher education settings. Despite progress, many higher education providers are struggling to achieve the culture shift that embracing widened participation entails, and make the modifications needed to established practices that inhibit inclusivity in the learning environment (Butler *et al.*, 2017; National Centre for Student Equity in Higher Education, 2016). These include defining the inherent requirements of academic programmes and making reasonable adjustments to enable participation (Brett *et al.*, 2016). The US Higher Education Opportunity Act 2008 provides a statutory definition of universal design for learning (UDL) that encompasses

flexibility in the way information is presented, the reduction of barriers, appropriate accommodations and support for all students (www.udlcenter.org/aboutudl/udldefined). To create such a learning environment higher education institutions require not only a strong commitment to equity, but a multi-faceted approach that encompasses technical and systemic changes as well as behavioural and cultural shifts across the organisation.

The use of Information and Communication Technology (ICT) is now commonplace in higher education, and increasingly integral to course and programme delivery and the student experience (Conole *et al.*, 2008; Kirkwood 2009). ICT can provide tools that enable inclusivity, with electronically formatted materials enabling the use of adaptive technologies (Butler *et al.*, 2017; Beacham and McIntosh, 2014). Yet, recent studies have indicated that although online study is a preferred way to access higher education for students with disabilities, these students feel that more needs to be done to allow them to succeed in the online learning environment (Kent, 2016; Roberts *et al.*, 2011). The global push towards increased online learning and interaction in education means that establishing the basic technical conditions of accessibility around the online as well as the face to face learning environment is therefore an important step, and will pave the way for learning being open to greater numbers of diverse students.

The provision of learning materials in either face to face or online learning environments in formats that are accessible enables students with disabilities and differences to use them more easily, and is a measurable step towards the goal of creating inclusive learning opportunities. In practice this often entails appropriate use of digital learning technologies, for example, making sure captions or transcripts are available for audio and video resources so that hearing impaired students can follow them, or avoiding decorative fonts or colours in text that will cause difficulty for students with print disabilities and colour blindness. According to the International Dyslexia Association, between 15 and 20 per cent of the population are now estimated to have some form of language-based learning difference (International Dyslexia Association, 2017), and the majority of students requesting support from university services are reported to be presenting with print disabilities (Beacham and McIntosh, 2014). Print disabilities can include forms of visual impairment, physical disabilities that make reading or turning pages difficult, and perceptual disabilities frequently diagnosed as dyslexia (see Snowling, 2004; Davis, 2016 for detailed discussion of the variance in understandings of dyslexia). It should also be noted here that many students with such learning differences, as well as other medical or mental health conditions may not disclose their condition to university services and specifically avoid registering with disability services due to fear of discrimination (De Cesare, 2014). Witney and Brown (2016) have therefore suggested that, taking other forms of disability into account, it could be anticipated that “20-25% of our class are neurologically and physically diverse and that current approaches to accessibility may not be broad enough” (p. 2). The provision of accessible curriculum materials makes an immediate impact on the learning experience of a significant percentage of the student population with both visible and hidden disabilities or with learning differences. However, it is important to note that accessibility standards also provide widespread benefits to the entire student population; for example, captions and transcripts assist students for whom English is a second language, and the provision of information using clear, legible text is an advantage to all readers. Universally accessible formats therefore facilitate easier access to learning for the entire student population, and act as a foundation to build upon in developing a culture of inclusivity.

This case study outlines an institution wide accessibility project that aimed to achieve that foundation within a 12-month period. The project, known simply as “Access”, was inspired by the initiative of a group of teaching staff who had proactively moved to convert all of their PowerPoint presentations and documents to accessible formats, and was

strongly supported by the institution's leadership. The implementation was managed by a cross-divisional working group, with representation from the Equity and Disability Resource Centre (EDRC), learning and teaching, educational technology, library and student support areas, as well as academic staff who acted as EDRC liaisons to the various faculties. The eight step process for leading change identified by Kotter (1996) provides a lens through which the success and transferability of this approach can be considered. Kotter (1996) identified the need to first create a sense of urgency, build a guiding coalition and form a strategic vision before enlisting voluntary support, enabling through the removal of barriers, and generating short-term wins. Crucially, these steps are followed by the need to sustain and accelerate to institute change.

Context

Vietnam, despite a variance in rates reported, has one of the highest rates of disability in the Southeast Asian region, and figures are expected to rise in the coming years due to a combination of social development, accidents and pollution (Phan, 2017). Despite this, awareness of learning differences and disabilities is still relatively low across the education sector, and resources are lacking. For example, dyslexia is not tracked, despite rates thought to be as high as 15-20 per cent internationally (International Dyslexia Association, 2017).

The Access project detailed in this case study was implemented at the Vietnam locations of a transnational Australian university across a 12-month period. Approximately 6,000 students are currently enrolled at the institution, and study a range of undergraduate and postgraduate degrees, with over 230 courses offered within the degree programmes. Learning remains primarily on site and face to face, but is increasingly complemented by coursework offered in blended or fully online modes. The programmes are offered entirely in English, and, as per Australian requirements, students require a 6.5 International English Language Testing System score to commence their degree studies. A large Centre of English Language therefore also operates preparation programmes in both locations, and provides the first point of contact for many of the students. While remaining part of the significantly larger global network, the two campuses in Vietnam operate with some degree of autonomy. This enables them to localise the curriculum and tailor curricular and co-curricular experiences to the sociocultural context and specific needs of the cohort. This is significant to the case study discussed in this paper, as the small scale enabled the whole of institution initiative outlined in this paper to be implemented at a relatively fast pace. The project was aligned to the global strategy of the university, which lists inclusion as one of its core values, but notably exceeded the scope and pace of initiatives being undertaken at other locations with larger student cohorts and more varied programme offerings.

An EDRC has been established at the Vietnam campuses since 2013. The establishment of the Centre came about due to increased awareness across the institution of numbers of students with a range of disabilities and medical or mental health conditions. Learning skills advisors working in student support roles had also identified the need for more specialised services to support students with hidden disabilities such as specific learning differences (SpLDs), including dyslexia and dyscalculia that can affect the way information is learned and processed (British Dyslexia Association, 2017). The EDRC provides confidential advice and information to students as well as referral to both internal and external services that may be able to offer more specialised assessment, diagnosis and additional support. Students are able to meet with an EDRC Advisor, disclose a disability or condition and benefit from case management and ongoing support. Since its establishment, the number of student registrations with the EDRC has risen rapidly, with 65 per cent of these due to some form of print disability (Witney, 2016). EDRC registered students are provided with an individual access plan (IAP) outlining the adjustments needed to support their learning. Course coordinators and lecturers for the subjects the students are enrolled in also receive

this at the start of each semester and are able to seek clarification or support from the EDRC on how to implement the recommendations.

Prior to the implementation of the accessibility project, a number of recurring challenges that will be familiar to disability support staff elsewhere were evident. First, correctly tracking student enrolments and staff teaching allocations was a time consuming process and further complicated by frequent late changes to student enrolments, teaching staff or both. As a result, the IAP did not always reach the appropriate academic staff member in advance of the semester's commencement. Second, the plan typically requested lecturers provide the EDRC student with access to learning materials (online content, PowerPoint presentations and course readings) in advance, then left responsibility for ensuring the materials were converted to accessible formats with either the EDRC or the students themselves. Academic staff were often unable to provide course materials on time, an issue common in Australian universities (Butler *et al.*, 2017), and the inefficiency of this process was further exacerbated by the limited time available between semesters for curriculum renewal due to a trimester system in operation at the Vietnam locations. Style elements such as the use of overly decorative fonts and colours were also commonly employed by teaching staff, and time would then need to be allocated to have these materials reformatted. In practice, this meant that students who needed longer to read than classmates were not provided with sufficient time, visually impaired students reliant upon screen readers would need several additional hours to work through each class PowerPoint presentation that used visuals, graphs, charts or decorative images without alternative text descriptions, and hearing impaired students were unable to access video materials with captions or subtitles.

A further context-specific complication was that due to the low awareness of learning differences or disabilities in Vietnam, many students struggling with reading and other aspects of learning had enrolled at the university without previously being diagnosed or supported. Students were frequently unaware that their condition had a name, and simply viewed themselves as poor learners, or were reticent to seek support due to a perception of social stigma. This meant that teaching staff delivering English preparation programmes and first year courses often encountered students struggling with issues that would typically have been identified in elementary school in Western contexts, and who were unaware that support for their learning was available.

Approach

As outlined above, an urgent need for action and a strong connection between the initiative and the strategic aims and core values of the institution could be identified, thereby setting the foundation for change (Kotter, 1996). To further progress this change process, a working group with representatives from crucial areas of the institution produced a set of project objectives and these were endorsed by the university's leadership. The main aim was to ensure that all learning materials were available to students in digital and universally accessible formats "by default", following the basic principles of UDL. In doing so, the project's implementation would remove the need to modify course materials ad hoc, in response to students' IAPs, and improve the experience for all learners and staff at the institution. A modest funding request was granted by the university's global executive to support the project implementation, and achievement of the Access project objectives was integrated into the annual key performance indicators for all academic departments. Three concurrent streams of activity were then commenced, detailed in the sections below.

Universal standards

Institutions seeking to implement basic accessibility standards can look to a number of well-established centres of expertise for guidance, for example, the DO-IT Centre at the University of Washington (www.washington.edu/doiit/), the European Agency for

Special Needs and Inclusive Education (www.european-agency.org/agency-projects/ict4i), or the Centre for Applied Science and Technology: UDL (www.cast.org/) to name a few. The Access working group drew upon such readily available guidelines in defining six specific accessibility measures outlined below, to be implemented across the curriculum in every course and programme offered over a 12-month period.

All PowerPoint slides to use a new, accessible template

Recognising the need to respect the university's branding guidelines, the Access working group engaged a designer with knowledge of disability and universal design to produce a new PowerPoint template. The template integrated web content accessibility guidelines (www.w3.org/TR/WCAG21/) for colour, contrast and fonts while remaining sympathetic to the established visual identity of the institution's brand. The resulting template used a colour palette more accessible for students and staff that were colour blind, in addition to using fonts recommended for readers with a range of print disabilities. This was somewhat of a challenge as the established colour palette had featured a bright red and clean white that would no longer be usable. The new designs were created using accents of a deeper red against black and stone, and then circulated to staff alongside guidelines for minimum font size and approved fonts. An innovative conversion tool was developed as a plug in by the e-learning support team, and this enabled a relatively fast and easy process for switching existing materials to the new template. The plug in also automated a check for use of minimum font sizes, supporting users with visual impairments as well as promoting general readability. The new template then replaced an established institutional design and became the default design on all networked computers within the institution.

All audio/audio-visual material in the online learning management system (LMS) to be accompanied by a transcript

As the university encouraged a media rich online learning environment a substantial amount of content was presented in audio or video formats, and much of this was provided without captioning or a transcript. A semi-automated process using Google voice was developed by the e-learning team to generate transcripts for such items until captioning software became available at the institution.

All reading materials to be available in an accessible digital formats

A transition away from the use of hard copy textbooks to the use of 100 per cent digital resources in the curriculum was spearheaded by the library services. Providing reading materials in digital formats enables students using assistive technologies such as screen readers to readily access the information they need for their studies. Subject librarians were available to support academic staff in finding alternative reference materials where needed to achieve this goal.

All images in the LMS or on Powerpoint slides to be accompanied by a text description

Images were commonly used by teaching staff in both PowerPoint presentations and the LMS. These were frequently essential to the learning goals (graphs, charts, illustrative visuals), but sometimes purely decorative. Regardless of purpose, images needed to be accompanied by alternative text (alt-text) descriptions to enable visually impaired students to understand the nature of the visual information. While technically simple to insert, alt-text was considered time consuming to produce when it involved description of complex charts or graphs, or in cases where a visual was used to illustrate an abstract or complex point.

All LMS course materials to use default page formatting to avoid conflicts with assistive devices and browser extensions

Standard accessibility features were built in to the university's LMS, but as they were not widely understood these had been undermined by content being placed onto the platform using decorative fonts and colours. The features required use of default formatting to avoid interference with assistive devices or browser extensions that allow students to adjust the interface to their needs. Accordingly, much curriculum content already on the LMS needed to be reverted to the default formats.

All course reading materials to be routinely provided in a timely manner following EDRC processes

While timeliness in provision of course reading materials was frequently a challenge for academic staff due to ongoing review and restructuring of the curriculum, the Access project raised awareness of the rationale for this. A greater understanding of the needs of EDRC registered students led to improved communication between the academic departments and the EDRC.

Although guidelines and templates were generated for academic staff to use independently on an ongoing basis, it was recognised that the conversion of legacy materials for all courses represented a significant and time consuming amount of work. Given the ambitious 12-month timeline, a high level of practical support was provided for staff to enable their adoption of the six measures across two consecutive semesters. Students were employed on a part-time basis over two semesters as Access representatives. The representatives received an induction to the project, disability awareness training and technical training that enabled them to work effectively on the banks of existing learning materials for courses and programmes in each faculty. They were directly supervised by staff from the educational technologies and learning and teaching teams and worked in shifts from a room allocated to the project. In addition to providing a high level of support to academic staff in achieving the objectives of the Access initiative, the students acted as ambassadors for the project. Their role included assisting at awareness raising events and spreading knowledge of the rationale and objectives of the project among their peer groups. The enthusiasm and drive of the student representatives provided the rallying force advised by Kotter (1996), while their conversion work was crucial in removing a barrier to the envisaged change.

Communication and raising awareness

From the outset of the project the need to have a clear and sustained communications strategy was apparent. While committed to student welfare and the notion of inclusivity, many academic and professional staff across the institution lacked awareness regarding the various types of disability common in the student population, and the numbers of students potentially impacted, a challenge common across higher education institutions (Butler *et al.*, 2017; Australian Department of Education and Training, 2015) and compounded in this context by the previously discussed poor awareness of disability in Vietnamese society. Staff in teaching roles often had limited understanding of how adjustments could be made to learning and assessment tasks to allow students to demonstrate their achievement of learning outcomes through alternative means, and had struggled with implementation of IAPs. Unsurprisingly, many academic staff also felt concerned by the workload implications of the project as they attempted to balance teaching, research and service obligations to the institution.

To address this, early communication highlighted statistics on disability and brought individual student stories to the fore through production of short video pieces featuring students sharing their experience of learning with a disability. Students with visual

impairments as well as conditions including dyslexia and Irlen Syndrome described their experiences alongside footage of them engaged in study and learning, often using assistive technologies. These stories were distributed via e-newsletters and also played on large screens around the campus. EDRC supported students also appeared at launch and promotional events and demonstrated the assistive technologies such as screen readers or colour filters that they used to help them access learning materials. A slogan, “Because Access to Learning Matters”, was developed for the project, capturing and communicating the essence of its rationale and objectives. All communications were presented using the darker red from the colour palette developed for the new PowerPoint, which was unveiled at a launch event for all staff and students. Throughout the year, regular news stories were shared featuring academic staff who had successfully worked with the Access team to convert their learning materials and the perspectives of student ambassadors working on the project thereby celebrating the short-term wins that could maintain enthusiasm and commitment (Kotter, 1996). Regular events, including launches, afternoon teas with student Access representatives, and pop-up displays were facilitated with games, activities and giveaways. Staff working in professional areas of the institution in roles that were not student facing were not required to use the new template, but many began to adopt the accessibility measures voluntarily to promote an inclusive working environment. Around campus, staff and students wearing Access T-shirts became an increasingly common sight and a video communications piece was produced for both internal and external audiences featuring the university’s president that celebrated the project’s achievements.

Integration to “business as usual” practices

The institution offers new academic staff an induction to learning and teaching practices, as well as an orientation to the online learning environment. The online induction modules are supplemented by regular meetings with academic developers and fellow new staff during the first semester, and by individual support from the e-learning team either in person or via screen sharing and teleconferencing. Upon completion of the mandatory induction modules, staff can elect to commence a Graduate Certificate in Tertiary Teaching and Learning (GCTTL), an award qualification taught through the learning and teaching division.

Much of the visible activity during the initial 12 months was focussed on managing the conversion of existing teaching materials and raising awareness of accessibility measures among the academic staff. However, sustaining the achievements of the Access project depends upon the integration of the standards and principles into “business as usual” across the institution (Kotter, 1996). Accordingly, information on the Access initiative and guidelines for creating accessible learning materials are included in the six hour online module created for mandatory completion by all incoming academic staff. Additionally, an in-depth module (approximately ten hours of study) that expanded the focus from purely accessibility to approaches to inclusive practice was integrated to one course of the GCTTL. Staff working in e-learning support roles in the educational technologies area also integrated training and support for accessibility into their scheduled and on-demand support activities. After the 12-month project period concluded, reminders were sent to all staff at the beginning of semesters and ongoing communications reinforced work still to be done.

Discussion (outcomes and challenges)

Achieving accessibility across the curriculum provides a strong foundation for approaching the far more complex challenge of creating an inclusive learning environment. The practical nature of the Access project outlined here has enabled a significant change to be achieved at an institutional level, and is highly symbolic of the commitment from leadership and key stakeholders to better enabling widened participation and diversity. From the author’s perspective, the process of shifting an entire institution to a policy of accessibility in the

curriculum has also sparked important conversations with staff and students about disability, diversity and inclusion. This has meant that in the process of achieving the comparatively straightforward requirements of the Access project, knowledge and awareness of inclusive practices has increased and the opportunity has arisen to encourage greater mindfulness of diversity in the practice of learning and teaching.

While acknowledging the broad achievements of the Access initiative for the institution, it is important to note that a number of challenges remain. First, a consistent and ongoing communication strategy, endorsed by leadership, is essential to achieve the attitudinal shift required to maintain the standards established by the project. Awareness of the significant percentages of students impacted by visible and hidden disabilities and SpLDs remains poor among academic staff, alongside limited understanding of the positive implications of accessibility for all students. Successfully embedding the accessibility requirements in ongoing practices at the institution therefore requires shifting beliefs and building a positive culture around inclusiveness. This will require a sustained commitment from stakeholders and leadership to the objectives of Access over a longer period than the initial 12 months of the project. Second, inherent in the strong emphasis on accessibility is a danger of becoming reductive in defining inclusion. While establishing the technical conditions of accessibility for learning materials is a significant achievement, it is essential that consideration also be given to teaching, feedback and assessment practices that foster achievement for diverse students. As a result, during the implementation of this project it has been necessary to frequently remind staff and students across the institution that inclusive practices in education extend beyond the technical requirements of the Access initiative. When reviewed through the structure provided by Kotter's (1996) model for change, the initiative engaged most of the process; however, the acceleration needed to cement the change and propel it forward will be crucial to sustaining the early achievements of this institutional case study.

The authors believe that the approach used in this case study is readily transferable to other higher education institutions seeking to make tangible achievements in promoting access and inclusion. It is hoped that the use of a well-known process for leading change (Kotter, 1996) strengthens this by providing a readily identifiable structure for the description of the initiative. External stakeholders in Vietnam have shown significant interest in the implementation of this project, which was initially focussed internally to the institution. Requests for training in the strategies employed were made by representatives of the Vietnamese Government's Department of Education and Training in Ho Chi Minh City. As a result, information about the project was translated to the Vietnamese language for local dissemination, and the institution also facilitated a number of training sessions for Vietnamese secondary school and university teaching staff in inclusive and accessible practices in Ho Chi Minh City and regional areas.

However, resource and scale implications should be noted. The objectives of the Access project were achieved within a 12-month period at the author's institution due to provision of internal funding. This enabled employment of student representatives, and their work in converting the existing learning materials contributed significantly to timely achievement of the objectives. The student representatives greatly reduced the workload implications for academic staff, with the remaining requirement to observe accessibility guidelines in production of new materials a significantly less onerous task. The funds also allowed for production of Access slogan T-shirts and other promotional materials that greatly enhanced the visibility of the project across both campuses. The relatively small scale of the Vietnam locations of the university additionally contributed to the capacity to achieve the objectives within 12 months. This refers to the difference in size between RMIT Vietnam and RMIT global with the former having far less programs than the latter and so connections within RMIT Vietnam being made easier.

Conclusion

Accessibility provides a concrete, measurable target for an institution to use as the foundation for a broader shift towards inclusive practice, and has become increasingly achievable due to the broad uptake of digitised learning materials and platforms across higher education. As demonstrated in the project discussed here, this means that significant improvements can be made to the accessibility of the curriculum within relatively short periods of time, while concurrent activities are undertaken to raise awareness, increase knowledge and shift outmoded beliefs among staff. This case study has outlined in practical terms how the implementation of accessibility standards can be achieved at the institutional level in higher education, and provides a set of strategies that the authors believe can be readily transferred to technology enabled higher education institutions elsewhere.

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