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## International approaches to disabled student support

University of Worcester



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# International approaches to disabled student support

## Supporting the needs of disabled students in higher education – a comparative study of disability support in international higher education institutes

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### Executive summary

This report details the findings of the research project funded by AMOSSHE, The Student Services Organisation, and conducted by the University of Worcester between January and May 2016, which explored models and methods of delivering disability support in certain contexts within a range of international higher education institutes (HEIs). A range of provision has been explored focussing on in-class and exam support, use of assistive technology and additional academic support for disabled students. This report is intended to help inform practitioners and policy makers as they seek to make decisions about potential changes to delivery of support as the funding environment in the UK changes. As international HEIs operate within different legislative and funding environments, where external funding may in some cases not be available, what solutions, if any, have they found to the issue of delivering appropriate and effective disability support and accommodations?

The research is just a toe in the water of a huge research area. However, the findings are of interest, though perhaps unsurprisingly, no truly innovative or different practice was identified. Some key similarities between disability support internationally have been established, both in terms of the types of support offered and the ways in which students access this support. The research also highlights some areas where support differs or varies, notably in terms of in-class note-taking support and specialist academic support, and regarding the extent of support available.

The research project has resulted in two brief case studies from HEIs in the US. These offer an opportunity to look in greater detail at two institutions approaching disability support in subtly different ways whilst operating within the same legislative environment.

### Background

At a time of considerable change in academic support funding arrangements for disabled students, institutions in England are looking at the pros and cons of different delivery models, the costs involved and how and where to best implement changes to their current provision. There is already considerable best practice and innovation in evidence in the UK, and this is clearly helpful in informing this process. However, as the majority of institutions in the UK operate within the existing funding regime for disability support in higher education, delivered through Disabled Students' Allowances (DSA), it is difficult to gain a clear understanding of the full range of alternative models of support that might be adopted where external funding sources like DSA are more restricted or unavailable. In addition, there is no currently available review of the literature addressing these approaches both

internationally and in the UK. It is therefore advantageous to draw on the experience of HEIs in other countries, which share the same commitment to enabling disabled students to achieve in higher education whilst operating within different financial and policy environments.

## Project aims

Using the University of Worcester's existing contacts with over 39 HEIs internationally, this small research project explored the different models of support offered in a selection of these and other selected institutions to disabled students facing a range of barriers. The project then mapped some of the models of disability support in international HEIs, identifying the similarities and differences in evidence and highlighting some potential ideas for further exploration and development moving forwards.

As a potentially huge research area, it was necessary to try to focus the research on those elements of support that are most topical for the University of Worcester in particular, and other English HEIs more generally, in the light of changes to the funding for disability support in higher education. The study therefore focussed on:

- In-class support and accommodations for students with a disability (including note-taking / lecture capture).
- Exam support and accommodations, and alternative assessment opportunities.
- The use of assistive and other technology to support disabled students in class and examination situations.
- The nature of additional specialist academic support for students who require additional support, including, but not exclusive to, the one-to-one academic support currently funded through DSA.

Though this study only dips a toe in the water of a potentially huge research area, the project aimed to shed some light on some practical ways in which HEIs in the UK might respond to the challenges presented by diminishing external funding for disability support. This is not all about funding, and it is hoped that the study will also help inform disability teams and learning and teaching colleagues about how support and accommodations for disabled students can be further enhanced moving forwards, and some of the challenges and limitations involved in achieving this.

## Research questions

The research questions were refined as themes emerged during the study and as certain aspects of the methodology proved more effective than others. The questions were:

- What types of support provision are in evidence in international HEIs?
  - In-class support for students with a disability (including note-taking / lecture capture).
  - Exam support and alternative assessment.
  - Use of assistive technology to support disabled students.
  - Specialist academic support for students who require additional support (as with the one-to-one academic support delivered through DSA).
- How is this support accessed by students?
- What are the views of the strengths and weaknesses of different models of support from disability teams and students?

- How might the findings inform the development of new models of support for English HEIs in the emerging context?

Due to issues with engaging the student voice and some unforeseen weaknesses in the available literature, further research questions exploring the drivers behind support models and students' views on the strengths and weaknesses of different models have remained relatively unanswered. However, the study still adds an international dimension to some of the current debates around meeting the needs of and enhancing the support for disabled students within a changing funding and policy environment for HEIs in the UK.

## Methodology

The research adopted a multi-method approach using a mixture of literature review of existing relevant studies, a web search and survey of a selection of international HEIs, and interviews and/or online surveys with a number of University of Worcester students who have experienced both models of support.

In addition to the research, there was an original proposal for members of the project team to undertake an Erasmus-funded study visit to a partner institute abroad to explore first-hand how disability support is delivered in an HEI operating in a different cultural, funding and regulatory environment. Though planned, it has not been possible to build this in to the timeframes for this stage of the research.

### Literature review method

For the purpose of the study, the following countries were selected, as the University of Worcester has links with other institutes in these countries: USA, Canada, Germany, Australia, Finland, Sweden, Spain and Ireland. The search also selected Africa for inclusion.

A systematic literature search of each country was undertaken using the University of Worcester's library search function, which searches over 200 national and international databases. The following search phrases were used:

- Models of disability support in universities in... 'country'
- Disability support for students in universities in... 'country'
- Funding for disabled student support in universities in... 'country'
- Accommodations for disabled students at university in... 'country'

The search criteria were restricted to journal articles after 2010.

The articles were then reviewed using the table in Appendix 3 for information relating to any of the points in the table.

### Web review

A web review was undertaken alongside the literature review, and this aimed to act as a precursor to follow up interviews with partner institutions. The web review sought to explore how students are able to access support, identify any information about different support options available and seek information about how support is funded.

The web review searched the websites of selected international HEIs, largely drawn from the list of the University of Worcester's existing international partners. Fifteen websites provided sufficient information to meet the search criteria. These websites were for HEIs in the USA (six), Canada (two), Australia (two), and the Republic of Ireland, Norway, Sweden, Malta and Denmark (see Appendix 4).

## Initial online survey of international institutions

The literature review and online web review were followed by an online questionnaire (using Bristol Online Surveys) to obtain a mix of quantitative and qualitative data from a range of international HEIs. Surveys were targeted using existing partner contacts and further contacts in disability / welfare teams in 45 international HEIs. The intention was to enable the project team to map different levels of support across institutions and inform the selection of a number of case studies of support models, hopefully representing the diversity of support on offer. Unfortunately, the response was disappointing and only seven responses were received despite repeat mailings and other contact. However, this still produced some interesting findings.

## Interviews with University of Worcester students, either on exchange or having recently returned

A small number of online (three) and semi-structured face-to-face (one) interviews were carried out with disabled students on exchange at international universities.

The interviews aimed to explore in greater depth the student experience of different models of support and ensure the student voice was a key part of the study.

Unfortunately, again the online response rate was low, and due to difficulties with timing, it was not possible to interview any University of Worcester students who had returned already from study. This survey / interview feedback from a small sample of students clearly cannot be deemed to represent the views of a wider cohort of students, but they are still helpful in adding detail to the research and broadening understanding of the impacts of different support models on students.

## Interviews with Disability Services staff in several international HEIs

Two semi-structured Skype interviews were undertaken with Disability Services staff from two selected universities in the US. These, alongside the institutional survey and web review, have been used to produce two case studies (see Appendix 1 and 2) detailing respective models of support provided at these two universities (Ball State University and Arizona State University).

## The project team

The project team leading the research included disability specialists and practitioners with complimentary research experience. Michele Fitzpatrick delivered the literature review and Patrick Clark delivered all other aspects of the research. It was originally intended to involve students as researchers, but due to the timing of the project this proved difficult. However, a student researcher was involved on the project team and gave support and advice throughout.

## Ethical issues

The research was delivered in accordance with the University of Worcester 'Guidelines and Procedures for Good Research Practice' and 'Ethics Policy'. These state some key principles with regard to research ethics:

- Research must be justified.
- Informed consent must be given by participants.
- Participation in research must be voluntary.
- Confidentiality must be ensured.

- Participants and the researcher(s) should not come to any harm during the research.

The project team has followed these principles by ensuring:

- Questionnaire respondents and interviewees are represented anonymously and confidentiality will be upheld at all times.
- Informed consent was sought prior to the interviews, with participants able to withdraw from the research at any stage up to publication.
- The project team critically reflected on the process and has addressed any issues that have arisen throughout the research.
- The project team has met monthly to assess progress.

## Findings

The findings can be broadly categorised as similarities and differences.

### Key findings: similarities

The research suggests that the range of accommodations and support available to students in different countries tends to be broadly similar to those that might be considered common practice in the UK, particularly around in-class support and exam support and accommodations.

In the US for example, accommodations include extra time in exams, quiet environment, access to assistive devices, clinical accommodation, counselling, note-takers, disabled students' programmes, different assignments, help with study strategies, and extra tutoring (Betz et al. 2012; Christopher et al. 2013). The web review of international institutions found a fairly standard set of accommodations being offered to students across international boundaries, including the use of assistive technology, note-taking support and exam / assessment and in-class accommodations.

### In-class support / accommodations

In the seven replies to the institutional survey regarding in-class support, all HEIs were able to put manual note-takers in place and allow for voice recording devices to be used, and all but one could accommodate notes in advance and the use of tablets / laptops in class (see Figure 1). This pattern is replicated in the web review, with all except three institutions mentioning note-taking, for example, on their websites.

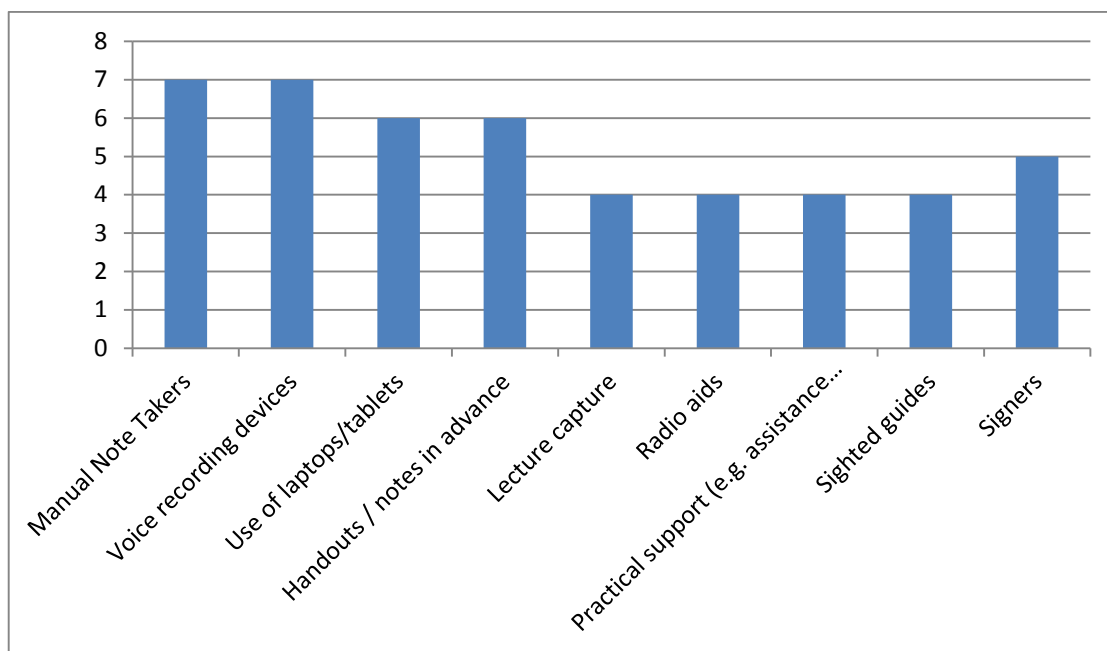
The list of in-class support and accommodations produced by Ball State University includes:

- Manual note-takers (peers)
- Voice recording devices
- Use of laptops / tablets
- Handouts / notes in advance
- Practical support (for example, assistance with setting up equipment)
- Sighted guides
- Signers
- Adjustable height desks for wheelchair users.

This familiar set of accommodations tallies closely with that offered at the University of Worcester and other UK institutions.



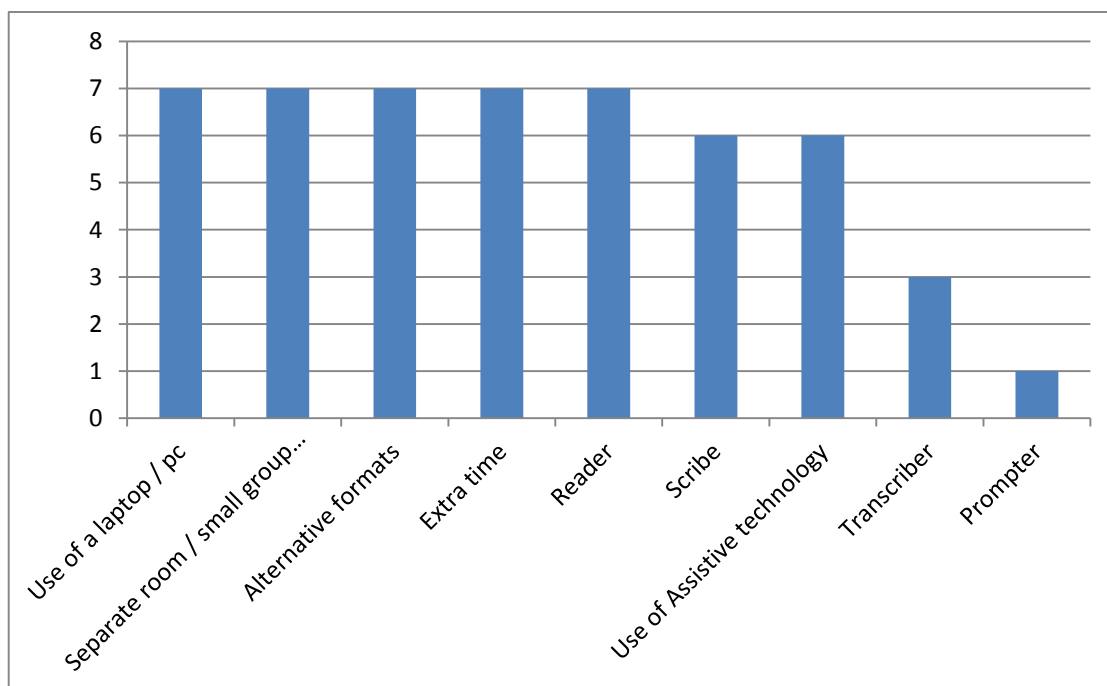
**Figure 1:** Institutional survey – in-class support



**Exam support**

The research findings suggest that, as with in-class support, exam accommodations are fairly standardised across the various international HEIs included in the study (see Figure 2). Survey results included fairly uniform provision of support and accommodations, including extra time, use of a PC or laptop, alternative settings such as separate rooms or small group environments, use of assistive technology, and alternative formats and additional help such as a reader or scribe.

**Figure 2:** Institutional survey – exam support



The familiar model of exam accommodations and support is reinforced by the literature and website reviews. In a Canadian study of 55 students in 2012, Harrison found that most students utilised support including extended time, individual setting, rest breaks, scribe,

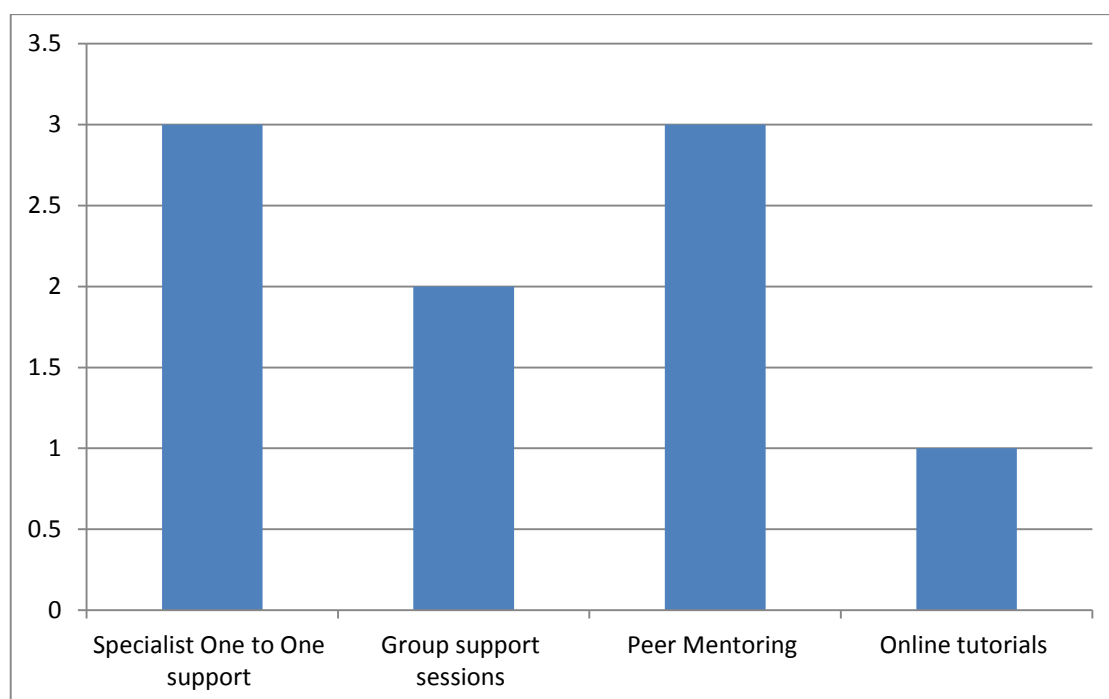
read aloud by a computer and dictation to a scribe. In the US, Arizona State University offers scribes and readers, use of assistive technology and laptops / PC, separate rooms, alternative formats, extra time and access to noise reduction headphones.

Both the survey feedback and interviews reinforce the importance of exam accommodations to students, with one institution regarding this as the single most important area of disability support available to them.

### Specialist academic support for students who require additional support

In this area of support, the research identified some differences between the traditional DSA-funded UK model and other countries, and some additional differences across international boundaries. For example, in the survey findings, though a range of additional academic support is available to disabled students (see Figure 3), with six of the seven HEIs who responded to the survey indicating that students are able to access this, only three responded that specialist one-to-one support is available.

**Figure 3:** How is specialist academic support delivered? (out of seven replies)



These differences are explored in more detail later in this report.

### Use of assistive technology

As in the UK, international HEIs focus on making certain assistive technology available on campus. In Australia, research based on 39 universities carried out by Harpur & Loudoun (2011) indicated that assistive technology is available through multi-user licences and made available on campus PCs and through laptops (voice recognition, screen reader and rule checker software). The institutional survey and interview findings suggested that this model of a variety of assistive technology and technological support being available on mainframe computers or through downloads or short-term loans is replicated with voice recognition, text reader and voice recorders mentioned.

Use of assistive technology by students would also appear to be fairly consistent. A Canadian survey of 1,354 students (Fichten et al. 2012) found:

- 75% students used specialised software / hardware.
- 40% used software to improve writing quality.

- Students ranked types of software, which were (in order): spelling / grammar checker, screen reader, scanning and OCR, dictation, enlarge what's on screen.

This corresponds closely with student feedback on their use of assistive technology carried out by the University of Worcester in 2015.

### **Accessing and evidencing support**

Broadly speaking, students find out what support is available to them in similar ways to students in the UK, with open days, websites and pre-entry interviews / orientation being the main channels.

The research also looked at what information or evidence is used to determine what support is offered to students. Six of the seven institutions in the institutional survey indicated that they required medical evidence to support their disclosure of a disability. Only Arizona State University in the US adopted a different model, with support initially matched against the barriers the student is encountering rather than any medical diagnosis, though even here evidence is still required where there is doubt about whether a requested adjustment is disability-based or a preference.

Most countries in the research operate within a legislative framework, and on disclosure of a disability with evidence mapped against this. For example, in the US documentation will determine if a student's condition is at the level defined in section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act (amended in 2008).

Though evidence is still required, in principle several institutions, particularly in the US, Canada and Australia, are attempting to move away from a medical model of disability and increasingly attempt to base accommodations and support on the needs of the student first, and evidence second. One student in the survey stated that they felt that this was the main positive difference between the support they experienced at the University of Worcester and their exchange university, with a focus first on their needs resulting in the ability to make changes to arrangements quickly. However, they also said that, as a result, the service felt less organised and coherent, and there was less clarity in advance about what support could be offered to them.

### **Inclusive practice and universal design**

Participating universities were asked about universal design and inclusive practice. In the US, universal design is an underpinning concept behind some of this work, with HEIs adopting a proactive approach to ensuring an accessible environment and teaching methods, and thus increasingly removing the need for specialist accommodations. Mention of universal design or inclusive practice is also in evidence in Scandinavian, Canadian and Australian institutions, either through written commitments or through survey and interview feedback.

Feedback suggests that inclusive practice is encouraged and supported in similar ways to those used in the UK. These include staff training and awareness raising events, and through presentations. Only two of the seven HEIs that responded to the survey had inclusive teaching standards in place, though others suggested that inclusive teaching was implicit in their practice rather than requiring specific mention.

Couzens et al. (2015) found that the benefits of universal design were that as web based learning, lecture video capture and PowerPoint presentations became available, the requests for note-takers decreased. However, notwithstanding the promotion of inclusive teaching and universal design, the research also suggests that specialist interventions such as note-taking are still required to support disabled students in overcoming the barriers they face at university.

### Alternative assessment

Alternative assessment is an option in some institutions, with four of the seven HEIs that responded to the survey able to put alternative assessments for disabled students in place, though it was unclear to what extent this is universal practice or merely in response to requests from students. Three of the seven responding institutions responded that students were unable to request alternative assessment options. In a Canadian study, Shah (2010) mentions:

- Altering exam schedules and testing methods.
- Adjusting teaching methods, ways of presenting information, testing methods and the physical environment.
- Adapting course requirements, such as flexible deadlines.

### Key findings: differences

A number of differences emerged from the research in the way the support is delivered to disabled students.

#### In-class support

As in the UK, note-taking is almost universally available to students in HEIs included in the research. However, the ways in which this support is delivered, by whom and how it is funded differs greatly. It is also unclear from the research who qualifies for this support. Though, as in the UK, some of this support is delivered through paid, professional note-takers, internationally note-taking, particularly in the US, appears to be predominantly delivered by peer note-takers who are fellow students rather than professional staff (Couzens et al. 2015). Peer note-takers are in some cases paid for their work (Ball State University) but in others, voluntary schemes are run (Arizona State University), with students instead getting volunteer credits and other unpaid rewards for their note-taking.

Of the paid schemes, though some external funding for note-takers does exist, such as Vocational Rehabilitation funding (VR) in the US, and Special Educational Assistance (SPS) in Denmark, most of the paid note-taker schemes appear to be funded by the institution itself in meeting its obligations under disability legislation. For example, Ball State University quoted an approximate cost of this support alone of \$70,000 per annum.

The research suggests that peer schemes are difficult to monitor and have some inherent weaknesses, not least that the process of note-taking is intrinsically personal and so the usefulness of peer produced notes is potentially patchy and hard to tailor to the particular preferences of the student requiring them. In addition, though the note-taker may have good note-taking skills they are unlikely to be able to combine these with study assistant or practical assistant type roles sometimes undertaken in tandem with note-taking by professional note-takers in the UK, and this needs to be taken into account when considering adopting similar models in the UK.

The literature search and interviews failed to identify any evaluative studies of peer note-taking schemes that would help to shed light on their effectiveness against paid-for professional note-taking services, for example. However, the Disability Resource Centre (DRC) at Arizona State University is currently reviewing its volunteer note-taker scheme in the light of some internal reservations they have about its effectiveness, and it is hoped that this may help inform the development of other schemes moving forwards.

#### Use of assistive technology

The research suggests that the use of and support for students with using assistive technology in some international HEIs has a greater emphasis than in the UK. One student

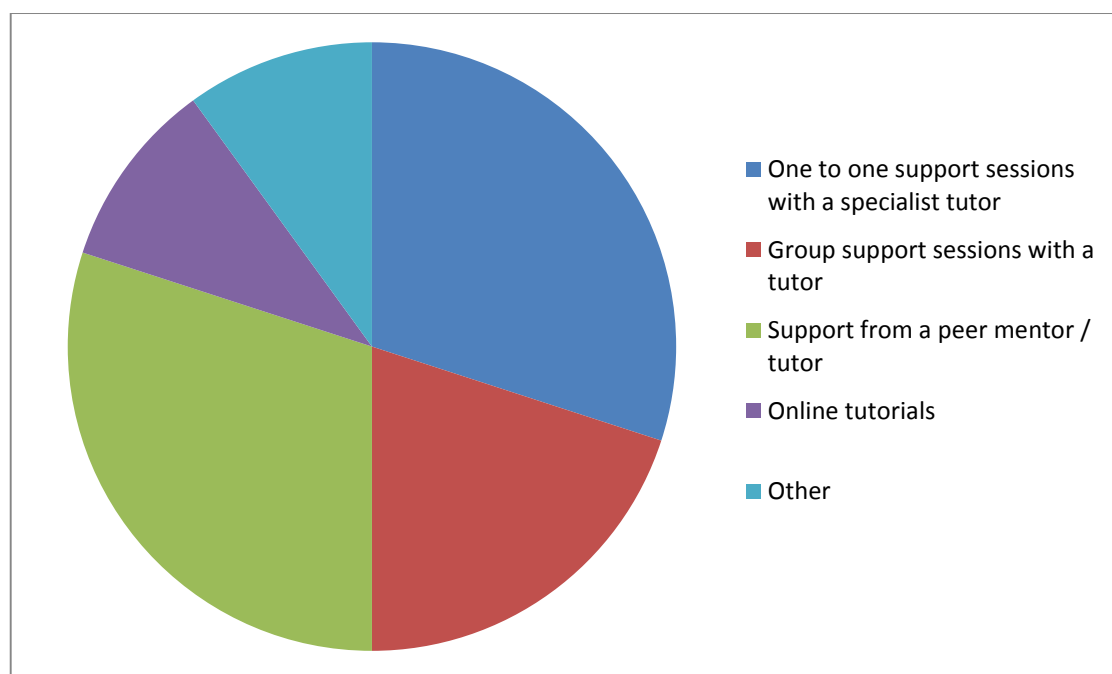
interviewed said that though they had not noticed any other differences between the support they have received at Worcester and their exchange university, the impact of Kurzweil software they had been provided with and supported to use had been the single best aspect of their support during their exchange. The provision of Assistive Technologists and technology specialists (Brock, Canada; Ball State, US) offering training, advice and support in the use of assistive technology are felt by disability practitioners to be significant contributors to student support. Some institutions also actively promote free and paid-for apps and software for access by the students themselves, and encourage them to access and use these as a key part of the offer for disabled students.

In Denmark, students at the University of South Denmark are offered an IT starter kit, a study course and membership of NOTA (Danish Library and Expertise Center for people with print disabilities), which enables them to access for free over 50,000 audio and ebooks. Though it is unclear whether this is funded wholly through the SPS (Special Educational Assistance) funding available to students in Denmark, it is an interesting package of initial support for students all the same.

#### Specialist academic support for students who require additional support

As discussed earlier in this report, additional learning support for disabled students is available to students in the majority of HEIs included in this study, but the ways in which this is delivered and the funding for this is very different from institution to institution. The institutional survey suggested that six of the seven institutions provided additional learning support, but that only three of these delivered this through specialist one-to-one support sessions (see Figure 4). The web review broadly reflects these findings, with only four of the eleven institutions to which this applied explicitly stating that they deliver one to one sessions, with others predominantly offering programmes through more general learning support programmes.

**Figure 4:** How is specialist academic support delivered? (out of seven replies)



Though university- or externally-funded Specialist Academic Support does exist internationally, it appears from these findings that the general model of delivery can be summarised as either being delivered through generic extended study and learning skills

provision open to all students, or through student-funded programmes of more specialist support.

The influences on how support is delivered appear to include the extent to which external funding may be used to fund this, the culture of the organisation, and the preferred method through which this support is delivered. Survey and interview responses indicate that concerns exist in some institutions over the capacity of teams to meet the demand from students for these types of services.

Again, the ways in which this support is delivered and by whom differs from institution to institution, but the model of regular specialist funded support deemed so important by many SpLD students in the UK is not replicated elsewhere (University of Worcester student feedback 2015).

### **Other models of and approaches to support for disabled students: an international picture**

Over and above the models of support outlined previously, a range of other practice was identified through the research, which differs from those standard models of support offered in the UK through DSA or the HEI's own resources. It is accepted that some or all of these may already be being adopted by different HEIs in the UK, or may have originated here in some form or other. Nevertheless, the fact that some of these exist where funded one-to-one support (for example) does not, may indicate some of the alternative routes through which support can be provided moving forwards.

#### **Peer support and mentoring**

In the US it is suggested that some students should have access to like-minded peers and role models (Banks 2013), and in Finland peer support is made available through sharing stories collected through student questionnaires (Korhonen, 2016).

#### **Academic mentoring**

In the US, academic success programmes and academic mentors (Plotner and Marshall, 2014) can provide valuable support for students, with Timmerman and Mulvihill (2015) implying that faculty mentors can develop close friendships with students, helping not only with motivating, checking on grades, assignments and tests but also potentially with doctor appointments and shopping. This model is exemplified by Ball State University, which operates a Faculty Mentoring scheme where new students with disabilities are supported in year one by an experienced member of staff. Around 50 staff take part in the total scheme and they meet up two to three times a semester to discuss areas of interest in an informal setting. This service was developed in response to concerns that one of the main barriers to disabled students was access to faculty, and is felt by Disability Service staff at the university to be one of the most effective interventions for disabled students at the university. This belief is supported by O'Keeffe (2013), who found that a sense of connection can emerge if the student has a relationship with just one key person within the institution, and that this relationship has a significant impact upon the student's decision to remain at college, which highlights the importance of facilitating students forming such relationships.

#### **Tailored support programmes / semester reviews of support**

In Australia, Couzens et al. (2015) provide examples of a support model where students tailor their own support package. The Disability Service makes contact with individuals once a semester, or more frequently when required to discuss their progress and barriers to learning. The service is based on the 'student lifecycle model', with proactive programmes established to support different aspects of students' support needs at the relevant phases, such as transition. They run programmes to develop self-advocacy and self-management,

and students are able to choose their own combination of general academic skills and finer English skills, individual and group sessions. All services are then individually and systematically reviewed and revised each semester with the students. Through individual consultations, the students are supported to become increasingly responsible for accessing and arranging services they require.

A number of institutions in the US (Maryville and Berkeley) follow a similar model, with students expected to take the lead in liaising with faculty and disability services. This ensures that appropriate support is put in place for them based on where they are in their studies, using the class schedule and the nature of assessments planned for these as the basis for discussions.

Arizona State University adopts a slightly different approach, with the student also encouraged to experience classes for a few weeks before contacting the Disability Resource Centre (DRC). As Arizona State places a strong emphasis on universal design concepts, it is suggested that support should not be predicated according to disability, but should instead be focussed on overcoming the barriers that a student faces where teaching style or mode of assessment is unable to accommodate or remove the particular barriers of that student.

### **Group support**

The research identified a number of interesting group support models that may have some application in the UK.

In Finland, different models of group sessions are used. There are examples of an optional course of 'Learning how to learn' provided (Myohanen 2016), and groups run by teachers that focus on studying and developing a sense of community and sharing mutual support (Puupponen 2016).

In Sweden there is also an example of the use of a group session model, suggested to be the most important part of a support project. It took the form of a learning clinic held ten times in autumn. Participants must always come, and there are five to eight students per group. The group discusses students' obstacles and issues, like stress management (Novia University accessibility project, no date).

At New Jersey City University (NJCU) in the US, students are invited to meet in an informal group setting called a Learning Challenges Support Squad. This weekly group, which is facilitated by professional staff, gives students the chance to discuss and share problems and concerns and make new friends and contacts.

### **More from the literature**

Some supplemental findings arose from the literature.

#### **Recruitment, retention and attainment**

From the literature review it was found that in Spain 8.5% of the population have a disability, yet only 0.53% go to university (2005 to 2006 figures), and 43% of the disabled students study from home (Dotras & Riera 2012), implying that the percentage of students with disabilities attending university is low. The institutional survey suggested that percentages of students disclosing a disability at international universities might be lower than that at institutions in the UK, with Ball State University (with a similar reputation for inclusivity and disability support as the University of Worcester) having 5% of their students registered disabled (as opposed to 10 to 11% at Worcester). Concerning though this may be, the reasons for this are complex and may relate as much to issues with disclosure (see below) and the learning and teaching environment as to a genuinely reduced level of attendance by disabled students.



### Disclosure and accessing support

Four of the six institutions that responded to the survey indicated that non-disclosure or a concern about disclosure were the main barriers to students accessing the support available to them, so the continued reliance on evidence has some implications.

The literature review implied that in the US relatively few disabled students access support in higher education, as they do not disclose that they have a disability (Betz et al. 2012; Christopher et al. 2013; Banks 2013). According to Quinlan et al. (2012), 35% of students have a learning difficulty, yet only 0.7% of students with learning disabilities disclosed, and Timmerman and Mulvihill (2015) state that 37% of students with disabilities who identified at school disclose at higher education, and only 24% of those who disclose access support services or accommodations. As a result, only a small proportion of students with learning disabilities use support services, which is concerning, as receiving accommodations is predictive of success for students with disabilities (Christopher et al. 2013). Furthermore, Timmerman and Mulvihill (2015) suggest that students with disabilities tend to have lower attendance and graduation rates than students without disabilities.

These issues with disclosure identified in the literature were replicated in the institutional feedback, with four out of the seven institutions suggesting that student non-disclosure or late disclosure is the biggest barrier to them accessing necessary support.

The literature review highlighted some interesting findings relating to the reasons behind not accessing support and non-disclosure. Barriers to accessing support include: avoiding personal questions asked by academic staff (Barnard-Brak et al. 2010), avoiding negative social reaction, disappointment in the quality, usefulness and timeliness of services, and the negative experiences of peers (Timmerman & Mulvihill 2015).

Morina et al. (2014) questioned 44 students from one university, with findings implying that more barriers than support existed for students. For example, course materials are not adapted in advance as part of inclusive practice, and IT tools were not used frequently or effectively despite students' perceptions that they are essential to meeting their needs. Additionally, Banks (2013) suggests that students with disabilities have limited self-advocacy skills, are unaware of their rights and responsibilities, and lack access to documentation of their disability when entering post-secondary institutions, all of which contribute to the barriers to accessing support.

In Australia, a case study by Couzens et al. (2015) of a university of 40,000 students suggested that the largest frustration reported by students was the inability to get adequately targeted support for their specific issues, and poor dissemination of information about the support available at the times they needed it. Additionally, students reported limitations in the one-to-one English support available. The study found that the university failed to keep pace with the changing needs of the students, and teaching staff generally had little understanding of the nature and impact of the learning difficulties. For example, when the Disability Service ran training for staff, it tended to be attended by those staff who were already on board in this area, and did not attract the staff who most needed the training. They also suggested that students with hidden disabilities required differing and targeted supports, but the study found that they do not want to seek it from the Disability Service, instead finding most effective support from friends and family. This could indicate that those students without adequate support from friends and family might be disadvantaged. In terms of solutions, in Finland, Korhonen (2016) discusses the implementation of a service using a voucher process to address the issue of tutors not having time to give additional support to students. This may encourage tutors to provide the extra time to support students, but might not address the issue of some staff not having the understanding of the



impact of learning difficulties. Harrison (2012) implied that in Canada students felt there was a lack of available accommodation and funding.

## Analysis

### How might the findings inform the development of new models of support for HEIs in the UK in the emerging context?

The research suggests that where accommodations can be made at relatively low cost, the nature of disability support tends to follow broadly similar lines, notwithstanding international boundaries and cultural and legislative differences. In addition, the ways in which students are informed about and access support services has some broad similarities, regardless of the country in which they operate.

The research suggests that where support needs to be funded, such as in the case of in-class note-takers and specialist academic support tutoring, differences begin to emerge and availability of funding, alongside organisational culture and business priorities, is potentially a factor within this, with HEIs making a judgement on appropriate levels and models of support based on these factors.

In-class note-taking and other support work roles, which are particularly high on the agenda in the UK, are almost universally provided in the institutions included in this study. This suggests that notwithstanding developments and variations in the application of assistive technology and inclusive teaching practice, there is still an accepted role for human support workers for disabled students in class and exam and assessment situations.

However, in the US in particular, peer note-taking prevails for some of these support worker roles, with fellow students (peers) rather than professional support workers taking on these roles, both in paid and voluntary capacities. In addition, though the note-taker may have good note-taking skills, they are unlikely to be able to combine these with the study assistant or practical assistant type roles sometimes undertaken in tandem with note-taking by professional note-takers in the UK, and this needs to be taken into account when considering adopting similar models in the UK.

## Summary

This project and the findings from it constitute just a toe in the water of a vast topic and as such, though the authors feel that the findings have some merit, there is still a long way to go in truly exploring the pros and cons of various alternatives to the current fairly standardised model of disability support in higher education in the UK. There is some commonality of approach, but where access to external resources to fund support is an issue, differences begin to emerge in both the type and scale of support options, seemingly based on the particular ethos and priorities of the institution. This has implications, and poses questions for HEIs across the UK moving forwards.

## Recommendations

Individual Student Services departments and disability teams should:

- Note the findings and contribute to the further investigation and evaluation of some of the models identified within it.

- Carry out a more extensive online survey of disability support in international HEIs, to build on the initial findings from this research.
- Engage in further research to engage students with experience of disability support in the UK and abroad to better understand how students feel about the different models of support available and what impact this has on their studies at university.
- Undertake further research to explore in detail some of the themes emerging from this project. This should include further exploration and evaluation of peer note taking schemes (both voluntary and paid).

## Appendix 1: case study A – Ball State University, US



### What drives the way disability support is delivered at Ball State University (BSU)?

It is the culture of the institution that has developed a reputation for being accessible and inclusive and has attracted disabled students as a result of this. Legislation has been a driver as well, particularly more recently with the emphasis placed on this by the Obama administration.

#### Accessing support

Disabled students find out about the support that is available through a number of routes. This includes our website, open days, pre-entry interviews, direct contact from the Disability Team (email / letter) and course materials.

Disability support is evidenced through medical evidence and/or an assessment by a disability advisor or welfare support staff.

#### In-class support

The range of in-class support and accommodations is broadly similar to that at other institutions. This includes:

- Manual note-takers
- Voice recording devices
- Use of laptops / tablets
- Handouts / notes in advance
- Practical support (for example, assistance with setting up equipment)
- Sighted guides
- Signers
- Adjustable height desks for wheelchair users

For those students with disabilities for whom note-taker services are appropriate, the Disability Service office can assist in the recruitment and/or referral of note-takers. Note-takers are hired from within the class to take lecture notes and share them in an accessible format.

Online training is provided for note-takers and the Disability Team gets feedback from disabled students on the quality of the notes and whether they get them or not.

Vocational Rehabilitation funding covers some signing and note-taking support for qualifying students (tends to be for visible disabilities rather than learning disabilities like SpLDs).

### Exam accommodations

The range of in-exam support and accommodations is broadly similar to that at other institutions. This includes:

- Scribe
- Reader
- Use of assistive technology
- Use of a laptop / PC
- Separate room / small group environment
- Alternative formats
- Extra time

### Additional specialist academic support

Students are able to access free additional learning support through The Learning Center. The services provided by the centre are free and available for Ball State students for general courses they are currently enrolled in at BSU as well as for new students who are preparing to study at BSU. Though run by tutors, the sessions are delivered by Ball State students who meet certain academic requirements. Sessions are available through one-on-one or small groups depending on what the topic is (for example “Success strategies” works best in a group). Online tutoring is also available.

Though disabled students are able to access this support and the Disability Service refers students for one-to-one tuition, this is not delivered by specialist SpLD tutors. Whereas other institutions may also offer student-funded programmes of specialist support, this is not the model adopted by Ball State.

### Assistive technology

The university has an Adaptive Computer Technology (ACT) lab specifically designed for users with disabilities and is part of Information Technology Services. Lab attendants are available to help students learn any of the computer technologies available in the lab. The ACT lab has many different types of technology for use by students with disabilities, including speech-to-text programs, text-to-speech programs, screen magnification, textbook scanning, Braille transcription, and tactile graphics. This is funded out of the technology fee charged as a part of the total student fee.

Exchange students from the University of Worcester were particularly impressed by the functionality of Kurzweil text-to-speech software, which is available to all BSU students.



Assistance is available through the Disability Service for converting class materials to an alternative format or copying textbooks into an accessible format. Free downloads on mainframe PCs and short-term loans.

Web-based video training tutorials are available free to all Ball State students.

### Funding for human support

The university spends approximately \$70,000 per year on note-taking, paying fellow students to produce notes for qualifying students. In addition there is a contingency fund set aside for ADA-related expenses. Disability Services are trusted to make the correct judgements on behalf of the institution and the student.

### Universal design / inclusive teaching

This is promoted primarily through presentations about universal design, offered through both the Disability Service and the Educational Excellence team (faculty training office). No inclusive teaching standards are in place and alternative assessment is not an option.

The Disability Team also partners with academic affairs and different faculty. The team delivers training where they talk about best practice, and has also helped with the design of new classrooms.

The university offers a Faculty Mentoring scheme, where new students with disabilities are supported in year one by an experienced member of staff. Around 50 staff take part and they meet up two to three times a semester to discuss areas of interest in an informal setting. This was developed in response to concerns that one of the main barriers to disabled students was access to faculty.

The team has recently recruited a Disability Careers Specialist to work with students in their transition into employment.

### What do you consider to be the most effective interventions for disabled students?

1. The personal touch – meet with students at least once a semester.
2. The Faculty Mentoring programme.
3. Use of and support for students with using technology (for example Kurzweil).
4. Testing / exam accommodations are the most frequently requested accommodations by students.

### Challenges and opportunities

The changing demographic of students, and in particular growing numbers of students requiring social and/or mental health and counselling support, are particular challenges for the institution and for the Disability Service.

Students not wishing to disclose a disability due to fear of stigma is a barrier facing students.

**Contact:** Larry Markle, Director of Disability Services (lmarkle@bsu.edu)

**Website:** www.bsu.edu

**Number of students:** 20,000

**Disabled students:** 5% registered disabled

## Appendix 2: case study B – Arizona State University, US



### ARIZONA STATE UNIVERSITY

#### What drives the way disability support is delivered at Arizona State University?

The Disability Resource Centre (DRC) was set up in 1970 by a disabled student as a part of his PhD, so predates the Americans with Disabilities Act (ADA) of 1990 by 20 years. The university has aimed to adopt a progressive approach to working with disabled students ever since then.

Most recently the focus has been on moving from a medical model of disability towards a social model, adopting universal design concepts to underpin this. The DRC has focussed on reframing how people think about disability and focus on the student experience, removing the barriers and hoops that they face. The approach is to focus on the student story first, though support needs still have to be evidenced in some cases - but this is not the prime focus.

6% of students are registered with the DRC. Other students may identify as disabled but do not register for a number of reasons.

#### Accessing support

Disabled students find out about the support that is available to them in a number of ways including website, open days, course materials, orientation and admissions processes, and staff and departmental referral.

Arizona State University does not require third party documentation as a rule. Instead, staff meet directly with students and have a conversation about the barriers they are encountering. If the request is consistent with the reported disability, no additional documentation is required. If the request is not consistent, or a disability connection is not evident, additional documentation may be requested.

#### In-class support

The range of in-class support and accommodations is broadly similar to that at other institutions. This includes:

- Manual note-takers (Voluntary Peer Note-taking scheme)
- Use of voice recording devices
- Lecture capture
- Accessible furniture
- Use of laptops / tablets
- Handouts / notes in advance
- Practical support (for example assistance with setting up equipment)
- Flexibility to sit / stand / leave class as needed.
- Computer Assisted Real-Time captioning (CART)

The DRC runs a peer note-taking scheme, where volunteer note-takers are recruited and provide notes to qualifying disabled students. Promoting the volunteer scheme and getting

volunteers has not been a problem previously (working through faculty and fraternity and sorority). However, increasingly the DRC have got reservations about the effectiveness of the scheme. Reservations include:

- It has been hard to monitor its impact and uptake.
- Evidence suggests that it is sometimes used as a revision / study aid rather than aide-memoire.
- It is unclear to what extent it is needed – if you can hear and record and get notes / slides online, is note-taking also required?
- Note-taking itself is a personal experience and should be individualised to the student. Therefore taking your own notes where possible is desirable. So peer note-takers should first and foremost take their own notes, which may mean that they are not appropriate for the student who has requested them.

### **Exam accommodations**

The range of in-exam support and accommodations is broadly similar to that at other institutions. This includes:

- Scribe
- Reader
- Use of assistive technology
- Use of a laptop / PC
- Separate room / small group environment
- Alternative formats
- Extra time
- Use of noise reduction headphones

Technology is most regularly used instead of human support in exams.

### **Additional specialist academic support**

The DRC does not deliver this aspect of support itself. The campus has a variety of offices on campus that provide such support. This includes:

- Online tutoring
- Tutoring Center (available online too)
- Writing Center (available online too)
- Graduate Writing Center (available online too)
- Supplemental Instruction (SI) – peer support
- Academic mentoring

Disabled students can be referred for generic study skills and time management support as can any other student. However, personal tutoring by a specialist tutor is regarded as non-mandatory and is therefore self-funded by the student. This also applies to purchase of personal technology and software.

### **Assistive technology**

The campus has a site license for Read/Write Gold - all university students, faculty and staff can access this technology. The DRC is able to provide assistive technology for use when taking tests at the office.

## Funding for human support

Less and less is funded through Vocational Rehabilitation funding and this is mainly for traditional disabilities. DRC focuses on mandated services – tutoring is not mandated, so it is funded by other sources. DRC only refers students to these services.

Funding:

- Academic Aids funding, which offers specialist support for students in some circumstances.
- Pool Fund for unforeseen expenditure (for example, signing).
- Universal design / inclusive teaching.

Though the university does not have inclusive teaching standards, the Disability Resource Centre (DRC) staff work closely with the Office of Instruction and Assessment (OIA) to influence course design to meet the needs of disabled students from the outset. The OIA works with instructors on general good course design, and they also promote both inclusive and universal design strategies. As staff work with individual faculty, they also discuss and promote universal design options.

Alternative assessment is not viewed as an accommodation, but rather as something that can be considered on a case-by-case basis, taking into account essential requirements such as core competencies.

## What do you consider to be the most effective interventions for disabled students?

1. Interface with faculty – in terms of course design.
2. Working with IT on IT Accessibility Guidelines to ensure no new IT is purchased without being tested for accessibility.
3. Accessible campus – social model rather than deficit / medical.
4. Using faculty as champions to other faculty.

## Challenges and opportunities

Particular challenges facing the DRC in working with colleagues are:

- Attitudes. Challenging old school thinking – working with new faculty has proved far more successful.
- The need to do more engagement with colleagues.
- Funding.

The biggest concerns of disabled students cited by staff were:

- Not wanting to identify as disabled.
- Accessing extended time on exams.
- Note-taking.

**Contact:** Cheryl Muller, Assistant Director, Disability Resource Centre

**Website:** [eoss.asu.edu/drc](http://eoss.asu.edu/drc)

## Appendix 3: web review websites

Sites were accessed between 29 January 2016 and 23 March 2016.

- University of Agder (Norway): [www.uia.no/en](http://www.uia.no/en)
- Arizona State University (USA): [www.asu.edu](http://www.asu.edu)
- Ball State University (USA): [cms.bsu.edu](http://cms.bsu.edu)
- Bishop's University (Canada): [www.ubishops.ca](http://www.ubishops.ca)
- Brock University (Canada): [brocku.ca](http://brocku.ca)
- Dundalk Institute of Technology (Republic of Ireland): [www.dkit.ie](http://www.dkit.ie)
- Federation University (Australia): [federation.edu.au](http://federation.edu.au)
- Lund University (Sweden): [www.lunduniversity.lu.se](http://www.lunduniversity.lu.se)
- University of Malta (Malta): [www.um.edu.mt/sas](http://www.um.edu.mt/sas)
- Maryville College (USA): [www.maryvillecollege.edu](http://www.maryvillecollege.edu)
- New Jersey City University (USA): [www.njcu.edu](http://www.njcu.edu)
- South Denmark University (Denmark): [www.sdu.dk](http://www.sdu.dk)
- University of Tennessee (USA): [www.utk.edu](http://www.utk.edu)
- Unitec (New Zealand): [www.unitec.ac.nz](http://www.unitec.ac.nz)
- Worcester State College (USA): [www.worcester.edu/Student-Services](http://www.worcester.edu/Student-Services)

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