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Universal Design for Learning:
A website for teachers, trainers and headless chooks

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1. INTRODUCTION

This paper presents an outline of a newly developed site that supports the use and application of Universal Design for Learning principles to meeting the learning needs of students with disabilities. The resource is based on the findings of a literature review and survey of teaching staff and disability officer.

2. SURVEY FINDINGS

The basic findings from the survey of teaching staff in this study indicate that the general move towards more innovative and flexible teaching and learning (FTL) methods has not specifically been connected with the possible benefits or drawbacks that these changes hold for students with disabilities. From the review of literature it is clear that these developments in teaching methods offer many advantages over traditional ways of providing supports to higher education students with disabilities. However, traditional methods of delivering courses are still the common and more systematic and targeted strategies will be required to ensure that the move to flexible delivery is inclusive of students with disabilities.

The experience of students involved in campus-based courses seems to be that they want to retain traditional campus-based delivery methods is understandable when one considers the isolating effects that disability can have on individuals. It is interesting to note that 'flexible programme delivery' and other similar terms, when associated with disability, are often thought of in the context of providing external courses or accessing information electronically. Students with chronic pain, writing management problems, chronic fatigue syndrome, mental illness, or other chronic medical conditions form the majority of students with disabilities and they need flexibility options that address their needs on campus as well as off. The problem for these students is not so much in getting to the campus but in accessing the relevant information once they are on campus and in their classes. Being physically present on campus as part of the university community may be even more important for students with disabilities than it is for the general student population. Disability and long-term illness is often a very isolating experience in itself, and the last thing that students in these situations need is another layer of isolation on top of that. This does not mean that access by correspondence or electronic media to course materials or library resources is not an important option. It simply means that the mechanisms of flexible delivery should be seen as part of the repertoire of supports that students with disabilities could access to supplement, rather than replace, their on-campus activities.

One of the issue needing further clarification that was raised in this study was the attitude of students themselves towards individualised supports versus more mainstreamed FTL approach to disability service provision. It seems that students with disabilities find the more flexible methods of gaining access to course content preferable to the traditional support

systems that disability offices typically provide once they have had experience of these more innovative ways of getting access to course content and materials. Disability staff, however, feel that students with specific needs expect more individualised addressing of those needs when they meet to discuss supports need in a face-to–face situation or when specific solutions to access problems are needed. This means that students themselves may need to be provided with information on how FTL can address their learning needs and how disability staff can assist them through more systemic approaches to service provision.

The possibilities of more flexible approaches are clearly seen with the innovative approach known as Universal Design for Learning (UDL). It appears that this theoretical framework for looking at issues of diversity, difference and individual need has the capacity to address these matters within a context of quality and better accessibility and servicing for all students. There have been several studies that have evaluated UDL and its impact on the learning of students with very positive results. The published literature on UDL strongly suggests that this approach can help all students to select an appropriate form of access and/or learning mode in a particular course of study, thus increasing learners' access to, and control over, their learning environment. There are also significant benefits for teaching staff from the adaptation of UDL principles to the design and delivery of educational and training programmes. However, further evaluations will need to be carried out in the Australia tertiary context before these positive findings can be generalized to local settings.

Some of the papers reviewed concluded that, where there was a focus was on providing flexible learning environments, the needs of students with disabilities were largely met without the need for special support or individual arrangements. The particular access needs of students with disabilities (and of other equity students) can be to a significant extent be catered for through the application of the several core principles of flexibility and accessibility. It should be emphasised however, that students with disabilities may see flexibility as a combination of traditional course delivery with more flexible supplementary means of gaining access to programme materials and information. Hence, FTL is not to be equated with e-learning, distance education or on-line learning methods which simply replace conventional lecture or class–based learning with electronically delivery methods. The results from the teachers' survey indicate that this understanding of FTL, as supplementing the current more conventional methods of teaching, can allay some of the concerns that were expressed in such areas as communicating with students and the possibility of drop off in attendance levels.

The results from the teaching staffs' survey show that FTL methods such as Universal Design for learning area best promoted within the context of quality in teaching and in the benefits that can result from such approaches for all students. Teachers feel they have a part to play in ensuring access and participation for students with disabilities but they are unsure about what to do to provide this support when no individual student case is disclosed to them. They are also prepared to take on innovative teaching methods when they can see the benefits for the general population of students. It is within this more inclusive context that FTL may be successfully promoted rather than as "special supports" that need to be adopted for individual students, as has previously been the case with the promotion of strategies to assist students with disability.

The study has also pointed to some drawbacks in FTL that have not been emphasised before in the literature dealing with disability and FTL. It is well known that access to materials presented via electronic information and communications technology can be very problematic for some groups of students with disabilities. The findings from the survey of

teachers also found that that more general impact of FTL on students with disabilities with particular disabilities is not considered in the design of the course and in the presentation of things such as multimedia materials or on-line recordings. Disability services have an important role to play in assisting teaching staff to development flexible teaching methods and materials that are accessible and inclusive of this groups of students. The great variety of developments currently taking place in the area of flexible course delivery within many tertiary education institutions University means that there is considerable variation in those programmes that might be considered as flexible. While the lecturing staff own educational, training and teaching objectives will understandable result in a great variety of learning experiences there needs to be some basic level of convention on the means by which those objectives are mediated through the delivery of the programme. The findings indicate clearly that both students and staff recognise the potential benefits that will flow on to them from flexible delivery methods. There appears to the promise of substantial benefits in teaching and learning opportunities and in the efficient delivery of supports to students with disabilities through these new methods. There are also significant potential drawbacks facing both students and academic staff that will need to be addressed if the move to more accessible educational opportunities is to be successfully negotiated.

The results suggest that disability services heavily favour the adoption and utilisation of more systematic and design based methods to meet the learning needs of tertiary students with disabilities. They see the commonality in the functional barriers that students encounter in the classroom, lecture room, computer and science laboratory and feel that the majority of these needs can best be met through the delivery of course and programmes that employ flexible teaching and learning methodologies. However, they also recognise that there are students with some types of disabilities and medical conditions that do require specific and individualized supports and that the needs of these students cannot be adequately catered for through FTL methods. The strong support of disability staff for more systemic and accessible service provision was clearly indicated in the options they chose for the allocation of additional resources. Disability staff are currently required to service ever increasing numbers of student with increasingly significant levels of disability and the allocation of resources is becoming an ever more important issue in responding to the needs of these students. That such a heavy weighting should be placed on the allocation of additional resources to raising the awareness and utilisation of FTL methods is indicative of the importance that staff in this area place on more efficient and effective ways of meeting the demand for services.

The key issue identified through the survey findings is that, while disability staff recognise the potential benefits of flexible and inclusive teaching methods, they also feel that their institutional plans, policies and service delivery culture in which they operate do not support the move to these more innovative options for addressing the learning needs of students with disabilities. Many of the disability policies, strategic plans and disability policies that are currently in effect in tertiary institutions were developed and endorsed during the early to mid 1990's. While the importance of a mainstream approach to physical access has been recognised for a considerable period, it seems that the value of a more systemic approach to academic, learning and training needs has only more recently come to the fore within disability and student equity services.

The disability survey phase of this study gave a general indication of the attitudes of operational staff to such issue as the effective and efficient use of funds, a more systemic approach to service provision, the implementation of an inclusive model of disability support provision, and the barriers that might be encountered in implementing such approaches. Further research is needed to investigate these matters and to see how they can be further

supported by governments, institutions and professional groups. There are also well known disadvantages of FTL in that it can have a significant negative impact of the participation and access of student with various sensory impairments, particularly when internet-based resources are not designed to ensure disability access. These matters also need to be investigated within the context of the dramatically increased use of flexible delivery by educational and training institutions and the numbers of important innovations that are happening in this field.

There are a number of innovations currently proceeding both in Australia and overseas that are directly targeted at enabling greater access to course materials and lecture-based information. These new approaches offer a better quality of service to students that does not require disclosure. They also open up further opportunities for the general population of students. It is within this context of that the great potential of FTL methods can be fully exploited for the benefit of all students. Disability supports have often been seen as an additional burden on teaching staff and not as an opportunity for improving the quality of teaching for all students. In the end it is this incentive, that of improving the quality of the learning experience of all students, that will be the most important factor in the take up of FTL. As this movement expands and becomes more widespread disability staff will need to ensure that the disadvantages that often accompany electronic forms of information delivery do not become another source of disadvantage for tertiary students with disabilities.

3. THE ON-LINE RESOURCES

The information and data from the literature review, the survey of teaching staff, and the survey of disability services staff provided a basis for the development of on-line resources to be used to raise awareness among teachers, students and disability staff of the benefits and potential risks of flexible teaching and learning methods.

The On-line materials include the development of a staff development model to support the implementation of alternative modes and practices that increase flexibility in the learning environment. The key findings from the project have been developed into a staff development package that will raise awareness of these issues and provide information and practical support for teaching staff wanting to explore further the potential benefits offered by FTL methods such as Universal Design for Learning.

The site is entitled, " Universal Design for Learning: Inclusive resources for flexible teaching and learning" is nearing completion. This site will be a major practical resource for teaching staff and disability service staff in universities and TAFE colleges in Western Australia. It might also be adapted to the needs of service providers and teaching staff in other states and territories. It includes practical information on Universal Design for learning and flexible teaching and learning as well as a reading room, staff development resources, case studies, checklists, and web-development guidelines.

The site also includes best practice examples of delivery models to assist course designers and teachers in the structuring of their program delivery methods. This outcome will also form part of the on-line resources available to teaching staff as well as course designers and CIT resource personnel. This part of the web site is still in development phase but it will form an important element of the on-line resource.

These outcomes will have an important state and national significance in that they will stimulate and support the move to a more equitable and efficient delivery of educational services to tertiary students with disabilities. They will also raise awareness about some of the dangers of flexible delivery for students with particular disabilities. Instead of students needing to accommodate inflexible teaching practices (a state which the current model of service delivery supports) it is hoped that the results and resources developed through this project will assist in the move towards more flexible and accessible academic and educational programmes. This approach will have application in areas such as staff development, teaching and learning strategies, and policy and planning considerations, e.g. those sections of disability action plans dealing with communication and the delivery of information.

Some core section of the Universal Design for Learning site.

- Awareness and Education on Disability and Quality in teaching and learning
- Resources available
    - Money, People, IT, Disability Officer
    - Institutional Links
    - Reading Room
    - Literature Links
    - Legislation and Policy
- Links and info
    - Myths and Realities of disability in educational context
    - Benefits to all student
    - Teaching and learning Issues
- Web Accessibility
    - IT Issues
- The Benefits to Teaching Staff
    - Inclusive Course Design
    - Universal Instructional Design
- Checklists
    - Course materials
    - Websites
    - Delivery Methods
    - Specific practical Recommendations
    - Follow checklists
- Resources
- What to do when designing a course
- Transition from School to Higher Education
    - The differences
    - What this means for teaching
    - Disability specific issues of support and independence
- The Benefits for Students with Disabilities

4. SOME KEY POINTS IN PROMOTING THE RESOURCES

The following are some key points that can be used in promoting the use of UDL or in answering the problems raised by teaching staff on implementing UDL principles in their programmes.

4.1 Disability and learning environments

- In being aware of disability issues, it is vital to understand that the functional severity of the disability depends on environmental factors and not on the disability itself. The most debilitating types of disability for student usually affect their ability to write or to concentrate for long periods.
- It is the physical, informational, attitudinal and learning environment that creates the functional impact of a disability. When environments are flexible the functional impact of the disability is greatly lessened or fully overcome. This is just as true for learning environments as for physical environments.

4.2   Student with disabilities in your class

- Do you have a student with a disability in your class? Most disabilities are not apparent and most students with disabilities don't disclose their conditions to teaching staff. Consequently, you will probably not be aware of any students facing significant disability and health issues in your classes.
- However, with 500 students on campus having disabilities it is likely that you will have someone in your class who has a disability during the year. If this is the case, the disability office may be able to provide you with some support to improve the flexibility of your programmes.
- To assist students with disabilities, first look at is the flexibility of the teaching and learning environment. It is also a good idea to pro-actively let students know that they can disclose their disability needs if they choose to. This can be done on course outlines, unit web pages, or during introductory lectures.

4.3   Quality and Inclusivity through flexibility

- In general, if an educational programme is provided in a flexible manner the needs of most students with disabilities will be met automatically (students with high needs may need additional supports). This also means that the quality of the learning experience for all students will improve.
- Improving the flexibility of the learning environment will help all students including those with disabilities and medical conditions. The disability office can help you in very practical ways to move towards more flexible methods of teaching learning.

4.4   Disability office supports for teaching staff

- The Disability Office provides financial and other supports to departments and staff members to enable students with disabilities to access course content, educational materials and learning environments.