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ahead

This electronic journal is not a newsletter nor is it an academic journal. It is a space for you working out there 'on the ground' to share innovations and your examples of good practices that deserve to be showcased.

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Association for Higher Education Access & Disability

If mental health matters, then what do we wish for?

from Ann Heelan, Executive Director AHEAD

In our college of wishful thinking, there are very few students to be found with anxiety or stress, as colleges actively promote a sense of good mental health and wellbeing. This has not been difficult to achieve as, like everything else in the world, it boils down to awareness and a large dose of common sense.

In University College Dublin, for example, they have a well-designed booklet on mental wellbeing which signposts the importance of creating an environment that supports mental health wellbeing across the whole college. This booklet gives staff clear information in a flow diagram on helping students to cope, and what to do if they are concerned about a student who shows signs of distress.

In examples from other colleges, induction sessions are used to get the message across about services such as Counselling, Disability Support and Chaplaincy. The staff come along and talk to new students about mental wellbeing, what to expect in college, how to cope; they explain their role and the supports available. The students go away knowing that feeling anxious is OK and they have a face and name to go to if there is a difficulty. This normalises the experience of anxiety that new students often feel, but think they are the only ones.

In our college of wishful thinking nothing is assumed. It is not assumed they come as ready-made academic writers. All first year students get instruction in the crucial academic skills such as academic writing, using computers, notetaking and planning. Furthermore, academic staff all attend awareness training on managing diversity, including managing disability, with the result that they have an understanding of the impact of mental health and what to watch out for. Of course in our wishful thinking scenario, the government have seen the light and provided sufficient funding to allow for smaller class sizes, enabling quality interaction with students. Academic tutors have the breathing space to monitor student progress and to give students constructive feedback on their essays and other work in good time.

This college of wishful thinking recognises that within the cohort of students between the ages of 18-25, one in four is vulnerable to experiencing a mental health difficulty. They have introduced specialised services such as UNILINK in Trinity College and Student Central in Maynooth University, designed to address the specific issues of students experiencing mental health issues. Run by professionals with mental health expertise, they support the students to learn to cope, they provide reassurance and a safety net that saves the student from dropping out.

All faculty implement policies on putting lectures online and they use their links with publishers to make e-books available to their students via the library. It is a pity that in our ideal, college lecturers with wild beards are a thing of the past, but then again students who have a hearing impairment and have to lip read prefer the well-trimmed faces on show these days.

Some people in the Department of Education were amazed that the colleges did away with terminal written examinations and opted instead for a broader choice of assessments for students involving presentations to small groups, videos, posters, assignments, projects and some written term examinations.

In these colleges of wishful thinking, students have a great choice of sport and exercise activities to choose from, from weekly yoga sessions, to relaxation, Pilates, and group walks on signposted routes around the college campus or local parks, or in the gym, right up to competitive team sports including football and archery. We think that these physical activities keep students in good mental health.

These colleges of wishful thinking may seem like a dream, but I think we should hold on to the dreams and make them a reality.

Ann Heelan, Executive Director
November 2016

From the Editor

Barbara Waters

I am delighted to bring you Journal no. 4, with some great articles on practice which I hope you will find useful in your day to day work. Ann Heelan raises important current issues regarding students with mental health issues, and Gavin Murphy shares his personal experiences of getting into employment. We bring you part two of Ofiesh and Bisagno's work on exam accommodations, with lots of practical, evidence-based suggestions. We are pleased to showcase articles by colleagues on their specialist interests, such as positive psychology and advice on language learning and students with dyslexia.

We are very excited to have completed the UDLL project and there are two articles, one from the perspective of the students and the other from project participants. Continuing the UDLL theme we have an article on practice in Sweden and a book review which reminds us of the origins and the underpinning principles of UD and higher education.

Last but not least, welcome to our youngest contributor, Sile-Marie, aged 10, who gives us her review of Jacqueline Wilson's 'Katy'. Sile-Marie looks to be well on her way with her ambition to be an author.

I hope you enjoy a good read.

Do keep sending in your ideas for articles, we really enjoy reading them. There is no need to wait - we are happy to hear from you at any time, and to offer help and advice. The initial contact is Lorraine Gallagher, **lorraine.gallagher@ahead.ie**

With best wishes and season's greetings!

**Barbara Waters, Editor
November, 2016**

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Learning Differences, Cognitive Diversity and Examinations in Higher Education: bringing disability services and faculty together

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Dr Ofiesh holds a doctorate in Learning Disabilities from Penn State University, and a Master's degree in Learning Disabilities, Teaching Credential and Educational Therapy Certificate. She has held faculty positions at Providence College and University of Arizona and is Sr. Research Associate at the Schwab Learning Center at Stanford University. She has served as an expert to the U. S. Department of Justice on testing and disabilities. Her research is centered on correlates of test taking behavior, Universal Design, and the science of hope and academic achievement in secondary and postsecondary settings. Most recently she co-authored Teaching for the Lifespan (Corwin, 2015).

Joan M. Bisagno, Stanford University, Schwab Learning Center

Dr Bisagno holds a doctorate in clinical psychology, a Master's degree in learning disabilities and several teaching credentials. She has more than 30 years' experience working in the fields of education and mental health in private practice, clinic, hospital, and school settings. Dr Bisagno is currently the Director of Research and Public Scholarship at the Schwab Learning Center, Stanford University. Prior to this position she served as the Assistant Vice Provost and Director of the Office of Accessible Education and Schwab Learning Center at Stanford. She is a contributing author to Medical Students with Disabilities: Resources to Enhance Accessibility, published by the Association of American Medical Colleges.

In Part 1 of this article, published in AHEAD Journal No 3, the authors covered the cognitive demands of exams and the increase in diversity in higher education. In Part 2 the authors look at how to develop practice based on this knowledge.

Part 2: Putting research to practice: service providers and faculty have the power to change exam design

Creating exams that are accessible to a wide population of learners can be challenging given the rigorous teaching and research demands placed on faculty. In hopes of helping and encouraging faculty members and service providers alike, to embrace creating accessible exams, we pull from and add to recent research related to Universal Design and offer a three-pronged framework which focuses on:

- exam presentation
- exam output
- exam content

Specifically, we offer disability service providers recommendations to ensure that exam presentation and exam output are designed in a manner that maximizes accessibility and ensures that exams are designed in a manner that allows for a more valid assessment of a student's mastery and knowledge. Next, we offer faculty recommendations for designing exams. We conclude with a proposed Faculty Training Series, which disability service providers can offer faculty as a means of encouraging and fostering exam design that is useable for our increasingly diverse postsecondary student populations.

Redesigning exam presentation

Simply put, exam presentation is how exams appear or, better said, how students can take in exam information. Rose and Meyer (2002) suggest 'flexibility in presentation'. Because most exam material is absorbed and processed through visual and/or auditory channels, suggestions are provided to help service providers maximize exam accessibility through effective visual design and auditory design.

Exam presentation and visual design

In this era of ever evolving technology, which is empowering all individuals, service providers would do well to consider ways to offer electronic versions of paper exams to students via computer. Computer-based exams allow service providers to offer exams that can accommodate multiple representations of exam content (Thurlow, Lazarus, Albus, & Hodgson, 2010). Examples of visual design consideration are listed in Table 1 and suggestions are noted below:

- Create exams with digital text, which allows for the altering of font type and font size; the same is true for digital images (Rose & Meyer, 2002). In fact, larger font size (size 14 versus size 12) benefits students with and without disabilities (Fuchs, et al., 2000). While font is routinely adjusted in everyday school, work, and personal tasks, rarely is it offered as a tool to increase access and engagement on exams.

- Particularly for students with low-incidence visual impairments such as blindness, service providers need the technology and equipment to turn text into Braille (Laitusis & Attali, 2011) and tactile graphics. Even in this era of text to speech, there are many Braille users and individuals with low-vision who rely not only Braille, but textured tactile graphics. More research is needed on the use of tactile graphics by individuals with learning differences, however with emerging technologies, more and more individuals may benefit from the use of tactile graphics as a learning tool as well as a way to be access exam content.

- Visual content should be designed so that it is simple and not cluttered. Examples include avoiding using Roman numerals, which can be difficult to visually discriminate, allowing appropriate spacing between questions, and placing keys and legends directly under the text where they are to be applied (Gaster & Clark 1995; Anderson-Inman & Horney, 2007). Perception, engagement, and attention span can be improved by allowing adaptable foreground and background colors.

- The National Center for Supported Electronic Text (NCSeT) has a list of "Typology Resources" (Anderson-Inman & Horney, 2007). Amongst others, they suggest "notational" resources. In other words, if a computer-based exam is being offered, then the student should be able to make notations such as underling, highlighting, or writing notes.

Exam Presentation and Visual Design	
Font Size	cat, cat, cat
Spacing	cat cat cat cat cat cat cat cat cat cat cat cat cat cat cat cat cat cat cat cat cat cat cat cat cat cat cat cat
Organization	Chart with key underneath
Braille	
Highlighting	cat cat **cat**

Table 1: Exam presentation and visual design

As a cautionary note, we cannot assume that all computer-based assessments are universally designed. For example, older students may be less familiar with computers therefore, taking computer-based exams potentially leads to more, rather than fewer barriers for this group of students (Thompson, et al., 2002).

To this end, there can be limitations in the accessibility of certain software and hardware. The above further underscores the need for 'flexibility in presentation', such that computer-based exams should also be able to be presented in paper form. Moreover, older students may benefit from workshops or training in computer usage.

Exam presentation and auditory design

Similar to visual design, new technologies are improving the auditory design of exams. Several examples are provided:

- An accommodation for some students, such as students with learning disabilities in reading or visual impairments, is access to a reader (Sireci & Pitoniak, 2007). It can be costly and time consuming to have a human reader. Recent advances in text-to-speech software and screen readers can be more cost-effective and support student independence. Also, there are software programs that read text aloud and simultaneously highlight the image of text as it is being read.

- Access to text-to-speech software can also be helpful with editing writing samples. For example, poor readers may have difficulty reviewing what they have written in order to make corrections. Similarly, students with limited attention may benefit from hearing and seeing their writing as a tool for editing. An empirical analysis by Garrison (2009) indicates that despite some other limitations, text-to-speech software can facilitate proofreading.

Since most technology uses speech synthesis for either text to speech or speech to text, it is helpful to be cognizant of how to best use synthesized speech when transforming exams. In the postsecondary setting, this would most often occur when a faculty member decides to allow students to take an exam via a computer with speech output. Research from the RNIB Centre for Accessible Instruction, (Cryer & Home 2008) found that the subjective acceptance of synthetic speech may depend on the users' experience, as people were found to 'get used to' synthetic voices.

The Centre's research also found that synthetic speech may be less intelligible than natural speech, particularly with background noise, and may need to be presented more slowly to be fully understood. However, measures of reading performance with synthetic speech improve with experience. Finally, some users of synthetic speech prefer less expressive synthetic voices as they felt it helped them to focus on the content of the text. This is important as it tells us an exam may not be the best situation to try synthetic speech for the first time. Furthermore, headsets are warranted when exams are used with speech synthesis to eliminate background noise.

Exam Presentation and Auditory Design	
Speed	The pace at which auditory information is presented to the student
Voice	Male or female, dialect, accent
Volume	Level of sound

Table 2. Exam presentation and auditory design

Exam Output

Exam output refers to how students demonstrate their knowledge in an exam (e.g., handwriting, typing, drawing, or speaking). Exam output is particularly critical because it is what faculty members use to grade and evaluate students. Students should be offered alternate means for demonstrating concept mastery on exams. Examples and considerations are offered:

• Access to a computer for writing limits visual motor integration or graphomotor barriers. Moreover, when working on a computer, students can more easily edit (e.g., cut, copy, and paste) their work versus having to erase and re-write.

- Speech-to-text (dictation) software allows students to dictate responses, limiting graphomotor and visual barriers. Dictation software should be implemented with care. Dictation software includes a learning curve. Advanced planning and practice is needed to ensure that the student has access to a dictation program that has been trained to process his or her voice.

- Text-to-speech (dictation) software is a valuable proofreading tool for many students who benefit from the chance to listen to their writing and catch mistakes, in the same manner that some individuals read aloud their own writing in order to self-monitor their prose.

- Allow students to document answers directly on the exam booklet. Many times exams have separate components: an exam booklet and a response sheet such as a Scantron. Separate components are inherently biased for students with poor visual motor integration (Thompson, et al., 2002). Moreover, students with attention weaknesses may lose their attention set while transferring answers from the exam booklet to the Scantron or other response form.

Recommendations for faculty members

One role of faculty is to facilitate the acquisition of knowledge and skills within a given discipline. The reciprocal role of students is to prove mastery of that knowledge, typically by taking an exam. As the creators and authors of exams, faculty have the power to design exams that accurately measure student knowledge without bias. Several suggestions are provided to facilitate faculty in designing exam content that is sensitive to cognitive diversity within student populations.

Exam content

Exam content refers to the meat or heart of the assessment; it consists of the course concepts that faculty want their students to master. According to Thompson, et al. 2002

> An important function of well-designed assessments is that they measure what they actually intend to measure

Accordingly, faculty should create exams that accurately assess course goals and objectives (Ofiesh, et al. 2006). The following factors should be taken into consideration to ensure that exam content is accessible to as many adult students as possible:

- Avoid using irrelevant graphs or pictures.

- Verbal content should be clear, concise, and specific. Questions should be easy to understand regardless of the student's experience, knowledge or language skills, or current concentration levels. (Thompson & Thurlow, 2002).

- Advanced and technical vocabulary should be used only when it is part of the content to be measured, not as an exercise in verbosity.

- Directions and questions need to be in simple, clear, and understandable language. "Compound, complex sentences should be broken down into several short sentences, stating the most important ideas first... All noun-pronoun relationships should be made clear... When presenting instructions, sequences steps in the exact order of occurrence." (Thompson & Thurlow, 2002; Gaster and Clark, 1995).

- Exam content should not be biased based on a student's socioeconomic status or experience outside of school (Thompson, et al., 2002)

- Very carefully consider the role of timing in an exam. Is the test one of speed or power? It is rare that tests of knowledge require exams to be so tightly timed that all students in a class can't finish the exam. Most exams should test knowledge or skills, not speed.

Gaster and Clark Eight Readability Guidelines (1995)

1. Use simple, clear, commonly used words, eliminating unnecessary words.

2. When technical terms must be used, they should be clearly defined.

3. Compound, complex sentences should be broken down into several short sentences, stating the most important ideas first.

4. Introduce one idea, facts or process at a time; then develop the ideas logically.

5. All noun-pronoun relationships should be made clear.

6. When time and setting are important to the sentences, place them at the beginning of the sentence.

7. When presenting instructions, sequences steps in the exact order of occurrence.

8. If processes are being described, they should be simply illustrated, labeled, and placed close to the text they support.

Table 3. Gaster and Clark - Eight readability guidelines

Faculty training series: a tool for disability services providers and faculty

Faculty and disability service providers have a common goal: educating students. However, each brings different and equally valuable expertise and knowledge to a university. On one hand, a postsecondary faculty member is a master of her subject. She has thorough training in her content area, and, in some cases, less direct training in pedagogy and teaching. On the other hand, a disability service provider has a background in disabilities, including how disabilities can impact learning and assessment of knowledge.

Both faculty and disability service providers are charged with the responsibility of not only offering accessible exams for all students, but also ensuring that exam design is an accurate and valid estimate of a student's true mastery. Furthermore, valid exam results from student exams can better inform a professor's potential need to modify/improve subsequent instruction.

Disability service providers have a wealth of information in terms of disabilities, functional limitations associated with disabilities, and necessary academic accommodations or supports. Dispersing or sharing this information one faculty member at a time during a phone conversation or over a chain of emails can be challenging. Disability service providers must then decide how best to share their knowledge with faculty members. Murray, Lombardi, and Wren conducted a survey on the effect of disability-focused training on university staff members, and their findings are encouraging.

Murray, Lombardi, and Wren's study included two key findings. Firstly, university staff that received 'disability-focused' training experiences in the past report more positive attitudes towards students with learning disabilities.

Secondly, 112 survey participants that had not received prior learning disability training expressed interest in receiving learning disability training and felt that they needed more knowledge in regard to how to support students with learning disabilities (Murray, Lombardi, & Wren, 2011).

The timing for a revised notion of how we assess knowledge in postsecondary settings and inform faculty about our roles is critical. Despite years of research on extended time for example, stigma still exists and faculty remain unclear about why so many students are provided with the more time on exams (Trachtenberg, 2016). The main problem with this question is that it comes from an erroneous frame of reference that imparts the idea that a tightly timed exams is needed to measure knowledge. As disability service providers our roles now require educating many individuals on campuses so that students do not experience fear and stigma in order to demonstrate their knowledge and perform at par with their intelligence. Given the inherent interest and need, we offer a model training series (see Tables 4 and 5).

Faculty Training Series: Designing Accessible Exams Parts 1-3

Part 1	Part 2	Part 3
Introduction to Disability Resource Center	**Accommodations**	**Accessible Exam Design versus Accommodations**
Introduction: Universities can be worlds unto themselves with a breadth of programs and services. Introduce faculty and other staff to the disability resource center, including its staff, supports, and services. Additionally, many faculty and staff would benefit from a basic overview of the variations in learning processes among different types of learners so that they understand why they make accommodations.	**Accommodations:** Briefly review regulations that mandate the delivery of academic accommodations to students who have a disability that obfuscates learning. Reinforce how accommodations, such as extended time or access to a keyboard, serve to level the playing field and provide equal access; they do not offer an advantage or leg-up. **Allocation of Accommodations:** Given a lack of knowledge, some may question the process behind determining who receives what accommodations. Review procedures for determining reasonable accommodations.	**Accessible Exam Design:** Accessible exam design can remove the need for many accommodations. Combat misperceptions, especially the notion that accommodations and universally designed exams lower standards. The article on Promoting Thoughtful Assessment by Ofiesh, Rojas & Ward, (2006) is a good resource for faculty. Two examples of myths that need to be dispelled: Everyone would perform better with more exam time. Universally designed assessments are designed so that all students pass the exam.

Table 4. Faculty training series: designing accessible exams parts 1 – 3

Faculty Training Series: Designing Accessible Exams Parts 4 – 6

Part 4	Part 5	Part 6
Promote "Thoughtful Assessment". Help faculty to understand the relationship between the goals and objectives of the course and, how that translates into exam content.	**Application - Review, revise, and redesign exam content with a hypothetical example.**	**Application- Review, revise, and redesign exam content with a personally created exam.**
*Inquire: Given a hypothetical Science-based syllabus, ask participants what they think students should be able to do by the end of the course?	**Review:** Provide samples of a traditional exam.	***Review:** Ask faculty participants to bring a copy of an exam to share and revise.
Nurture Insight: Now ask what would a student need to show you in order to be able to demonstrate this competence to you? What are the goals and objectives in YOUR class? What would a student need to do to demonstrate competence in those areas?	***Revise:** Revise the exam. Provide a simple, uncluttered, and organized handout with examples and solutions for improvement. Allow participants to these ideas to foster redesign.	**Revise:** Revise non-accessible exam content. Share examples with others in a similar academic domain for input and more ideas.
Application: Given a hypothetical exam from the Science course noted above, ask participants if the exam is a good measure in terms of content and based on the syllabus and what they noted a student needs to show to demonstrate competence. Ask participants: Do YOUR exams match YOUR goals and objectives?	**Redesign:** Redesign exams to include accessible format and content. The challenge is to put research to practice and design exams that are accessible to the diverse population of postsecondary students.	**Redesign:** Redesign exams to include accessible content. Put research to practice and ask participants to consider what else can be done to redesign their own exams that are accessible to the diverse population of postsecondary students.

*Divide participants into small groups for feedback and sharing. |

Table 5. Faculty training series: designing accessible exams parts 4 - 6

There are always cases which engender more questions than answers. In these cases, ongoing collaboration between faculty and disability service providers is needed to ensure that individual needs are met.

Ofiesh et al. (2006) use the term 'thoughtful assessment' to refer to assessments that serve both faculty and students in postsecondary settings. Specifically, thoughtfully designed exams measure intended content, allowing faculty to evaluate their teaching, and create exams that are accessible to a variety of learners.

> A thoughtful, universally designed assessment consists of a multitude of considerations, including, but not limited to, subject content, electronic flexibility, English language usage, format options (e.g., essay, short-answer), time limits, text characteristics, a direct link from the goals and objectives of the course, instruction, and informational delivery system, and more. (Ofiesh et al., 2006).

Researchers at the National Center for Education Outcomes created a list of key elements of assessments that maximize access to a wide range of learners with varying cognitive characteristics (Thompson, Johnstone, & Thurlow, 2002). These elements are:

A. inclusive assessment population e.g. exam design takes into account all types of learners: those who need large font due to aging, users of Braille, individuals with migraines who may want to adjust font and background colors on computer screens etc.

B. precisely defined constructs e.g., what the exam is designed to measure in terms of content, skills, knowledge base, and what one is required to be able to do to take the exam are clearly laid out.

C. accessible, non-biased items amenable to accommodations e.g. words with double meanings or that are more readily understood by males or females are eliminated.

D. simple, clear, and intuitive instructions and procedures e.g. understanding how to take the exam should not be part of what is being measured.

E. maximum readability e.g. large font, adjustable foreground and background colors, speech output options etc.

F. maximum legibility e.g. options for use of speech recognition systems, scribe, adjustable font size, different paper options when needed.

What the future holds

Fortunately, research regarding how the brain, learning, and engagement and innovations in the field of computer technology are growing in parallel. Future studies are likely to inform and improve the creation and application of accessible exams, also allowing for greater exam validity. Research tells us that the act of taking an exam or, more specifically, the act of retrieving previously learned information, promotes learning Pastotter, Schicker, Niedernhuber, Bauml (2011). We can't deny exams serve a useful purpose. While the continued development and implementation of accessible exams rests on faculty members and disability service providers, it is equally important that administration provide financial and systemic support (Rose and Meyer, 2002). More than ever, in order to prepare young adults for their lifespan, it will be important to come together across levels of education and within systems of higher learning in order to rethink how we design exams. We have the tools and knowledge to design exams that are flexible, and to simultaneously remain committed to high standards and the goals and objectives of programs of study. Universally designed exams mean making the world a better place by allowing more people to take part in education. In doing so, we will continue to create a world where a greater portion of humanity can participate fully in society through the use of their strengths and talents. Education and training is the catalyst for each of us to fulfill our potential. Disability service providers can help to make the case for change: intellectually, administratively, and economically. This would seem to be a noble goal given all the promise that higher education can hold for so many individuals.

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Positive Psychology: Supporting individuals with disabilities in higher education and in the workplace

Moya O'Brien

Dr Moya O'Brien is an experienced clinical psychologist and co-founder of ICEP Europe. She completed her training in Ireland and the USA. She has over 25 years' experience working with young people with a range of disabilities including Autism Spectrum Disorder. She regularly consults with a wide range of professional groups including teachers, and youth groups, and presents at national and international conferences. Moya's current research interests include the application of Applied Behaviour Analysis, Positive Psychology to enhance learning and the use of technology and online learning environments. Moya has been designing online education modules and training courses since 2001.

Positive Psychology

Positive Psychology focuses on building strengths and competencies rather than merely treating deficits and disorders. It has been defined as the scientific study of optimal human functioning (Seligman, 2009). Positive psychology is concerned with discovering what makes people happier, more productive and more successful (Seligman, 2003). As Boniwell (2012) puts it

> Positive psychology is still psychology- it just studies different and often far more interesting topics and asks slightly different questions, such as 'what works?' rather than 'what doesn't? or 'what is right?' with the person rather than 'what is wrong?

A central goal of positive psychology is to advance our knowledge about how to help individuals improve their levels of happiness and create the conditions that allow people to flourish and thrive (Seligman, 2011). The focus is not on fleeting feelings of pleasure or well-being but deeper reaches of human fulfilment and is fundamentally concerned with harnessing human strengths and virtues and improving the human condition through finding meaning and purpose and increasing happiness.

Authentic happiness is a combination of a pleasurable life, an engaged life and a meaningful life (Seligman, 2003). According to Szymanski (2000) we know that authentic happiness for individuals with disabilities it is related to life satisfaction and a positive self-image.

For any individual, pride, independence and self-respect are all key components of life satisfaction and their sense of self. These areas can be more problematic for an individual with a disability who can feel they have restricted independence, limited control over their life, their choices and the decisions concerning their future. Szymanski (2000) warns professionals against 'over protection'. We have to balance the level of support required with realistic expectations and as with any adult allow the person the right to take risks. As tutors, mentors and supervisors we have to be careful that in our efforts to support these individuals, we do not comprise their feelings of control or restrict their choices because of their disability. We have to strive to create a positive environment where they can make informed decisions.

As professionals we can move to a strengths focus. This approach is very empowering when working with an individual with a disability as it is a move away from a medical model. Taking a strength focus can enhance the person's self-confidence, self-esteem and self-efficacy (Hefferon & Boniwell, 2011). Using this model we can help individuals to explore their strengths and develop an awareness of their limitations. The positive psychology approach does not diminish in any way the impact of a disability or the pain and suffering that any individual might endure (Hefferon & Boniwell, 2011). The aim is to shift the focus onto what works and the strengths that the individual has developed. These strengths can be used to identify future goals and additional supports that might be required to ensure success.

Strength and flow

Identifying a person's strengths facilitates meaningfully engagement with work and allows them to experience satisfaction and flourish. There are formal assessment tools to help identify strengths such as the Gallup's Clifton strengths finder (**www.strengthsfinder.com**) or the Values in Action (**www.positivepsychology.org**) which are available online.

Informal assessment of strengths can be conducted in conversations identifying conditions where the individual has experienced flow (Csikszentmihalyi, 2002). Flow has been defined as

> the intense experiential involvement in moment-to-moment activity, physical or mental. Attention is fully invested in the task at hand and the person functions at her or his fullest capacity (Csikszentmihalyi, 2009, pp.394).

Simply becoming aware of flow can make flow happen more regularly. We can support flow in two ways (Csikszentmihalyi, 2009). Firstly by drawing attention to the concept of flow individuals can discuss their passion, the specific activities that enables flow and the strengths associated with these activities.

Secondly we can examine aspects of the environment to see how we can facilitate flow. We can identify circumstances, task, situations or specific projects where the person can experience flow and make this happen in the workplace or in college. Flow is linked to internal motivation. It is usually associated with a high skill level in the particular activity.

Optimism, motivation and hope

Optimism and hope play a role in enhancing motivation and fostering resilience.

Optimism has been defined as the expectation that good things will happen (Chang, 2001). Optimism frames our world view in terms of hopefulness and confidence for the best possible outcome. Many people are born optimists for those who are not there is good news. We now know that hope and optimism involve a set of skills that can be taught and learned. It is a way of thinking that individuals can choose to engage with and a capacity that can be modelled and taught.

Optimism is not simply a matter of inborn temperament, but also a skill that can be learned by recognising unhelpful thinking strategies and replacing them with positive ones. (Diener & Biswas-Diener, 2008, pp.193)

This optimistic thinking can be a protective factor in the area of physical and mental health. How people attempt to make sense or explain the causes of stressful or adverse life events can undermine psychological and physical functioning.

Our optimism can influence our motivation and our perseverance or grit. This was investigated in a study conducted by Seligman and others (1990). This study involved identifying optimists and pessimist on the university swimming team. They were asked to swim their best event and then given a false time that led them to believe they swam slower than their actual performance. The feedback of the slower time increased motivation for the optimists who did better the next time but decreased motivation which resulted in no improved performance for the pessimists. The optimisms attribute their poor performance to external events, which were temporary and limited to this one swimming event. They had a positive mindset and a belief that they could improve their time, the hope that they would get better in the future.

Optimism and hope for the future are interlinked and impact on resilience.

Hope is like a journey: a destination, a map, and a means of transport are needed. From psychological research on hope, we know that it is important to have a goal and make a plan of the ways to reach that goal. Hopeful people have a clear aim or destination in mind. They also have a clear vision for reaching their goal - a mental map. They also believe that they can do something to get closer to their goal - they are their own means of transport (Snyder, 2000).

Psychologists characterise hope as a human strength which involves the capacities to:

- clearly conceptualise goals (goals thinking)

- develop strategies to reach those goals (pathways thinking -'this is how I'll do it')

- initiate and sustain the motivations for reaching those goals (agency thinking - I know I can do it!) (Snyder, 1994)

Hope is more than an emotion it is an action. Hope happens when we focus on clear goals, when we think about the future we want, and how we can make our vision a reality. When we combine thinking about our goals with a plan to reach them and the energy that goes with motivation and belief, we are at our most hopeful. Hope energises, motivates and leads to behaviour which helps us realise our goals. A goal can be small or large, a lifetime pursuit or a short-term objective.

When working with adults with disabilities we can support them in setting realistic goals.

This can take many forms – written goals, drawings or recordings or even using an app to set and track a goal on a mobile phone. It is important that milestones on the route or short term goals be identified. A clear path or multiple pathways to the goals be identified and numerous pathways be mapped out. A scheduled review of key achievements or activities completed can enhance motivation. Plans for obstacles that might present and strategies for maintaining motivation or enlisting support to enhance motivation be clearly specified. In the work place this might be measured in output for example, the number of words typed per minute or the number of forms or tasks completed independently per day. In the education sector this might be assignments produced or handed in and grades on those assignments towards the final qualification.

Supports that are necessary along the way are put in place. In the work setting it might be a mentor to answer questions and a process for getting "unstuck" when a challenge is presented. In education this might be having a study pal or identifying a support staff member who can assist them in accessing the library and relevant materials required for an assignment in various formats. The underlying theme is that with support you can achieve this if you keep working on each small step you will reach your goal.

Final thoughts

Positive psychology has shifted the focus from the negative to the positive, from a medical model of disability to a strengths based model. It has provided a framework for examining the strengths and challenges of each individual. Here are some of the questions positive psychology attempts to answer:

- What makes an individual happy, more satisfied with their life?
- How can we use strengths to increase happiness?
- How can we promote optimal conditions for flow?
- How do optimism and hope enhance motivation and grit?
- How can we define hope to support individuals to achieve their goals?

All these are very relevant questions when working with any adult to enhance their self-esteem, self-efficacy and self-confidence and give them a sense of control over their own future.

Positive Psychology can give us an additional framework to support individuals with disabilities in higher education and in the workplace. Many of the strategies and techniques are based on research, however more research needs to be conducted with specific populations. It is anticipated in this developing field, more evidence will be gather in the future and this will assist us in identifying more targeted interventions. Positive psychology has more to contribute and we will watch space this with eager anticipation.

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Including People with Disabilities in the Workforce

Gavin Murphy

Gavin Murphy is a Willing Able Mentoring (WAM) intern at the Department of Social Protection where he helps people with disabilities return to work. The Dubliner received a scholarship from the University of Scranton, Pennsylvania, USA where he majored in psychology. Gavin developed a keen interest in writing as he recovered from mental illness and he currently runs a website entitled ilovebipolar.com. He is fascinated by the mindfulness-based practice of contemplative psychology which is gaining momentum abroad. Gavin enjoys running and the outdoors.

The vision

Launched by the Taoiseach in Farmleigh House on 2nd October 2015, the Comprehensive Employment Strategy for People with Disabilities laid out a 10-year government plan to ensure that people with disabilities who want to work in the open labour market are supported and enabled to do so.

The strategy aims for the employment rate of people with disabilities to increase by 15% from its 2011 level, with an overall increase in the general employment rate from 33% to 38% by 2024. It is expected that the number of people with disabilities in the public sector will increase from 3% to 6% within this timeframe, and I am one of those people.

Developing as a professional in the workplace

In 2014, I applied for Willing Able Mentoring (WAM), a graduate work placement programme run by the Association for Higher Education Access & Disability (AHEAD) where employers are also assisted to integrate disability into the mainstream workplace. A few months ago, an internship for the Civil Service was advertised and so I updated my CV and filled in the application. I was delighted to be called for interview: the WAM team informed me that the panel were a professional body while sensitive to my disability.

I made my preparations which included a list of core competency skills drawn from my work, education, volunteering, and hobbies. Although I hadn't worked for several years, I still managed to nurture these competencies through 4 years at

the National Learning Network in Phibsboro, Dublin, a college for people with disabilities. I was 90% ready when I met with the interviewers and I did my best to connect and to sell myself. Afterwards, I reflected that it was a solid performance but I quickly refocused as there were a number of weeks wait until the next stage.

My university class reunion in the United States gave me a well needed break in the meantime and the can-do American attitude boosted my confidence. I returned home to hear that I had been successful at the job interview and that a suitable placement was being sought. I began to dream of work again: for greater meaning and for family life.

Even though my early career was quite fruitful in counselling and social care, I encountered several months of extreme stress while living in England. This tipped me over the edge into mania and depression, and I was diagnosed with bipolar disorder at 30. I slowly picked up the pieces, until finally feeling that can-do American attitude again.

I was offered a 6 month paid internship in the Department of Social Protection after an informal discussion with a civil servant; specifically I was asked to assist the implementation of the employment strategy. What I find wonderful is that I make use of my talents in psychology and writing as well as my experience with mental illness.

Navigating reasonable accommodations and my own condition/impairment

The AHEAD Journal (January 2015) found that employers can have confidence in workers with disabilities: once supports are put in place, disability essentially should disappear. And I have found this to be very much the case. For example, my manager knows that I require time off to attend medical appointments and that I may need to make telephone calls to my support network during working hours. These reasonable accommodations have increased

my productivity and I consider myself on par with my colleagues.

Moreover, I felt great consolation when my doctor described my mental health as 'stable' because I was deeply aware of great efforts to achieve this state. Doors continue to open up, as I recently moved to a more peaceful dwelling, a place I can call home. I feel pride in doing chores; I feel independence in managing my time; and I feel a sense of purpose going to work in the mornings. I still experience low moods and times of high stress, but, as I'm reminded again and again, so does everyone.

Vision and reality

The Comprehensive Employment Strategy focuses on people with disabilities throughout their lifespan, providing pathways for entry and re-entry into work. If I need to leave my job, the strategy ensures that I will have a streamlined return to disability payments. Research also reveals that prevention is the most effective way to address joblessness, so young people leaving the education system and those acquiring a disability in adult life are top priorities.

I believe that the inclusion of people with disabilities in the workforce will assist to 'normalise' disability. Already, I hear that mental health conditions are to be viewed along a scale of functioning rather than as a black or white diagnosis. We know that depressive and anxiety symptoms are incredibly common in our society and that many people have unusual experiences that mimic psychotic symptoms.

The hugely popular mindfulness movement is part of the solution, "Paying attention in a particular way: on purpose, in the present moment, and non-judgmentally" (Jon Kabat-Zinn). Most of us can pay attention to our thoughts; emotions; feelings; and sensations in order to maintain balance. And, if we ever find ourselves leaning towards a degree of instability, we can always strive to return to a centre point.

Learning a Language with Dyslexia

Valerie Hascoet
Valerie Hascoet is a lecturer in languages and linguistics at Dublin Institute of Technology, Dublin, Ireland. She researches neurodiversity in language learning.

It is commonplace to discourage people affected with dyslexia from learning foreign languages. But the condition occurs on a wide spectrum affecting individuals in unique ways. That is why directing people with dyslexia away from language learning solely on the basis of their dyslexia is scientifically unfounded. In this article, we will take a linguistic perspective on this issue, that is to say that we will present the scientific facts about language learning and dyslexia.

Cognitive challenges to learning a language in the context of neuro-diversity

Dyslexia affects language learning according to four main aspects: orthography, patterns, automaticity and motivation.

Orthography

The primary area we should consider is called **orthographic depth**. That is the degree of complexity with which a single sound (or "phoneme" as linguists call them) is transcribed into a writing system. For instance, an Italian dog is called 'cane' and reads exactly as the suite of (c = /k/) + (a = /a/) + (n = /n/) + (e = /e/): /kane/. This is a shallow orthography where each letter stands for a distinct sound.

So, in weighing the orthographic depth of a target language, one should pay attention to its **granularity**, that is, how many letters are needed to transcribe one sound. One-to-one correspondence is preferable, as with Italian 'cane' /k/+/a/+/n+/e/, Finnish 'koira' /koira/ or Welsh 'ci' /kii/ (with a long i sound), all words for 'dog' in the finest grains observed among European languages.

In contrast, Irish for instance sometimes uses sequences of three letters to transcribe one single sound: 'aoi' for /i/ in 'cathaoir' or 'bhf' for /w/ or /v/ in 'bhfuil'.

More importantly, the target language should display **consistency** in its spelling. Consider the words 'two', 'too' and 'to' in English: they are all pronounced the same way! Such languages present a much greater challenge to a learner with dyslexia.

Selecting a language with shallow orthography can help learners with dyslexia settle in more quickly into their studies. However, some teachers and researchers report that specific and intensive learning of a new orthographic system in the early stages of the process, will help the dyslexic learner overcome most challenges.

Patterns

People with dyslexia may also experience difficulties in **identifying recurrence of patterns** in a language. This deficiency can affect language learning at two different levels.

Firstly, a learner with dyslexia may not immediately spot the repetition of certain sequences in **words**, known as morphemes. The word 'dyslexia' itself is made of two morphemes from the ancient Greek: 'dys' meaning "difficult' and 'lexia', meaning 'speech'. The meaning of the whole word is the sum of the meanings of its morphemes: 'difficulties with speech'. To support dyslexic learners, language instructors need to purposely point out the patterns in word formation: Irish '-ín' means 'small' as in 'blaithín' (little flower); Italian '-accia' shows contempt towards the object to whom it is applied: 'una parola' is a word, 'una parolaccia' is a swear word.

Secondly, dyslexic learners may struggle with how words pattern at **sentence level**. When writing for example, they will generally favour short, declarative sentences and avoid transformations such as questions and passive forms. This is because they may struggle with identifying grammatical functions for words or groups of words like verbs, subjects and objects.

Transformational structures by nature, involve manipulation of word order and other adjustments to a declarative sentence. A typical example would be the handling of object pronouns in romance languages.

Compare the two following sentences in Spanish:

'Yo leí el periódico'   'Yo lo leí'

I read the paper   *I it read   (I read it)

The substitution of the object phrase 'el periódico' (the paper) with its equivalent object pronouns 'lo' (it) triggers a change in word order. Learners with dyslexia could be challenged by this transformation because fundamentally, they might have difficulties identifying the grammatical component which needs to be substituted then moved.

Many learners with dyslexia will strategically compensate the deficiency in patterning language by memorising short sequences of words as whole sentence structures.

Automaticity

But the third source of hardship experienced by pupils with dyslexia in language learning, is the extreme difficulty with which they memorise information.

Most cognitive psychologists acknowledge the model proposed by Baddeley and Hitch (1974) known as **working memory**. It contains:

- **a visual-spatial scratch pad**
- **a phonological loop** for verbal information, made of two units:
    - **the phonological store** (our 'inner ear') processes incoming speech;
    - the **articulatory control process** (our 'inner voice') stores what the phonological store has decoded by repeating it on a continuous loop, and thus work towards a response (speech production).

- a **central executive** directs our limited attention towards useful information stored in the visual-spatial scratch pad or in the phonological loop, or retrieved from our long-term memory.
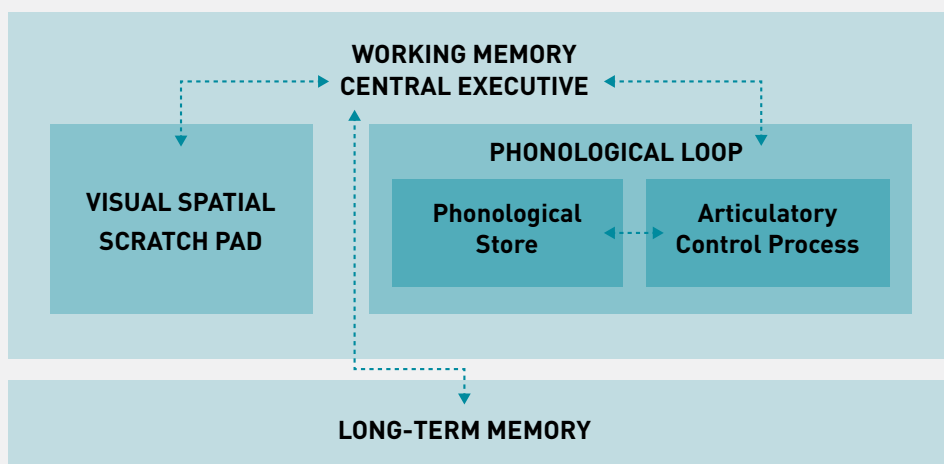
It is the **retention of sounds** that causes problems for a learner with dyslexia. The challenge is to hold those sounds in working memory long enough to manipulate them. These operations are further complicated if the data is presented in written format, leading to more toing and froing of information between the phonological store and the articulatory control process. To help with such complex operations, many people with dyslexia like to read aloud. Recourse to spatial and visual support may also facilitate the recall of information from the visual-spatial store, thus alleviating the burden on the phonological loop.

With conscious learning, repetition and practice, most people will render those complex processes automatic. They will become habitual and operate without much cognitive load on the mind, sometimes even unconsciously. Most of us learn to speak our first language(s) or to ride a bike to the point where we no longer need to think about how we do it: that is automaticity. But for the learner with dyslexia, a stage of **automaticity** can be very difficult to reach and a lot of personal work is needed to compensate this natural deficiency.

Self-esteem and motivation

Sadly, it comes as no surprise that many language learners affected by dyslexia, should suffer from low self-esteem. Relentlessly, their language processing abilities encounter obstacles. They overcome those obstacles only to find out soon that they have forgotten the solutions they had applied. Much repetition and practice is needed to overcome those challenges. Sensitised teachers will encourage this **overlearning** and recommend extra resources for a learner with dyslexia to work with. Learners often locate their own resources through personal initiative, especially in local libraries and on the internet. A supportive network of people can also contribute suggestions and encourage the learner to sustain his/her efforts. Organising such a structure is vital because loss of motivation can strike regularly.

Choosing "the right language" for the learner with dyslexia

From a linguistic point of view, it seems that we should pay particular attention to orthographies and patterns in languages. What should we be focussing in order to assist a learner to choose 'the right one'?

Sounds

Firstly, we should consider the degree of difficulty in processing the new sounds of the target language: how many sounds are similar to my native language(s)? How many new sounds will I be exposed to?
Vowels are particularly problematic because they are less defined than consonants. Consonants are formed by interfering with the airflow in the mouth with any available barrier: the teeth for /t/ and /d/, the lips for /p/ and /b/, the movement of the tongue towards the roof of the mouth for /s/ and /z/, etc. But typically, vowels are

free flowing: they have no borders and one vowel can blend into another as in English diphthongs /ai/ ('buy'), /oi/ ('boy'), */ou/ ('bow'). In acoustic terms, the differentiation between two vowel sounds can be subtle. For instance, French nasal vowels */an/ (as in 'blanc', white) and */on/ (as in 'blond', blond) may become undistinguishable if one has a cold.

So a good question to ask oneself would be: how many vowel sounds are there in the language I am considering taking up? Spanish holds the advantage because it has only five pure vowel sounds against 15 for standard German and 13 for standard French for instance (we are excluding diphthongs here, the combination of two or more vowels). As a way of comparison, British English is said to have 12 vowels, although there are great variations in accents. Moreover, the five pure vowels /a/ /e/ /i/ /o/ /u/ of Spanish are formed at the farther corners of the mouth so as to be as distinguishable from each other as possible.

Reading

Secondly we must consider orthographic depth because, 'poor reading in a foreign language [...] in turn negatively influences listening comprehension, oral expression, reading comprehension, syntax, general knowledge and verbal memory' (Sparks, 1995). Before selecting a language to learn, learners and their parents, with the support of teachers and teaching assistants, should first evaluate a learner's reading skills in their native language: have they reached a level sufficient for them to cope with the demands of a new orthographic system? Success in reading in a second language will rely on the transfer of good reading strategies from their first language. The learner must possess solid **phonological awareness** in their L1, that is to say that he/she can consistently map out letters and sequences of letters, onto the sounds they represent. A learner will only be as good a reader in their L2 as they are in their L1 at that particular point.

In considering the orthography of a language, we should keep in mind that many dyslexic learners adopt a whole word strategy when reading because it fits the global processing approach favoured by their brain. Then they might feel disconcerted by the mechanisms of **agglutination** and **inflection** used in many languages whereby the spelling of words changes.

Agglutinative languages attach grammatical markers to words so as to form long sequences sometimes. Turkish, for instance, is an agglutinative language:

kork	'(to) fear'
korku	'fear'
korkusuz	'fearless'
korkusuzlaş	'to become fearless'
etc.	

Inflective languages modify words, usually at the end. Adding a final -s to a noun to indicate plural is a simple inflection of the English language: 'word'/'words'. The best known form of inflection is probably the process of conjugation affecting verbs in all romance languages, including French, Spanish, Italian and Portuguese. For example, in the Portuguese form 'tocaram' (they rang), the inflection -aram indicates all at once the person who called (they), when the call happened (past tense) and the completion of the process: they have hung up.

Another source of frustration for dyslexic readers might be the presence of **diacritics**, little signs added to the standard letters to modify their role in the phonology of a language. A letter with a diacritic represents a new sound which differs from its base letter. In the Turkish phrase 'korkusuzlaş' (to become fearless), the letter ş is pronounced /sh/ whereas the letter s is pronounced /s/. Many

people with dyslexia have difficulties seeing those subtle add-ons and may mix up the compound sign with its base letter.

However, some evidence has emerged that people with dyslexia may be partial to pointed languages such as Hebrew and Arabic. Pointed languages are languages where vowels are represented by dots carefully placed around the written sequence of consonants.

For example, the word for 'hebrew' in the Hebrew language is תִיַרבַע /ivrit/. It twice contains the vowel /i/ which is represented by a single dot underneath the consonant it attaches to: the silent letter ע at the start of the word (remember that Hebrew and Arabic are written from right to left of the page) and the consonant ר /r/ in third position, giving rise to the syllables /i/ and /ri/.

Since it is the processing of vowel sounds that causes the most difficulties for a reader with dyslexia, this alternative mode of representation may be quicker to decipher.

Other evidence emphasises the positive response that some learners with dyslexia have towards character-based languages, mostly Asian languages like Chinese, Japanese, Korean and Thai. Logography, to give it its proper name, tends to represent whole words, whereas alphabetical systems roughly represent their component sounds (phonemes).

In keeping with their avowed preference for a global approach to language, dyslexic learners may find reading easier with a logographic system. Moreover, many characters seek to represent words pictorially, and although some element of phonetic representation is also used in logographic systems, they require more visual processing which may balance out slow sound processing abilities. Other languages that require heavy visual processing are the sign languages of the world, including Irish Sign Language (ISL).

So, a learner with dyslexia faced with a choice of languages to engage with, should consider their relative merits in terms of sound processing and orthographic depth. Above all, learners should not be afraid to try out what attracts them. Most obstacles can be overcome with targeted pedagogical interventions, regular work and appropriate accommodations. But a natural affinity with the sounds of a language, the shapes of its letters, the cultures that it conveys, can be the most powerful motivator towards success in language learning.

Author's Note

Please note that, in the course of this article, we are using letters from the standard English alphabet to approximate sounds, rather than the International Phonetic Alphabet devised by phoneticians for the transcription of languages. Unscientific transcriptions are marked with an asterisk*. Conventionally, phonetic transcriptions appear between slashes */slashiz/. Illustrations appear between 'inverted commas'. Translations of illustrations in foreign languages into English are freestanding.

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Student Engagement – Sharing Our Learning

Mary Quirke

Mary Quirke, Assistant Director, AHEAD has a keen interest in mentoring and empowering people to attain their personal goals. Mary works with employers on the WAM mentoring placement programme for graduates with a disability, delivery of training and consultative work with employers on disability and inclusion in the workplace.

Stephen Lehane

Stephen Lehane is a recent graduate of Deaf Studies at Trinity College Dublin. In his time as a Project Worker at AHEAD, Stephen worked on a number of different projects promoting access for students and graduates with disabilities, including the "Universal Design for Learning: Licence to Learn" project. Stephen was also responsible for the development of the online resource, StudentToolkit.eu. He is currently working as a Staffing Services Co-Coordinator at Google.

We in AHEAD took part in an Erasmus+ project with partners in Norway and Belgium. It was an innovative and exciting project from the get-go – setting out to establish what Universal Design of Learning (UDL) meant for European higher education institutions and stakeholders. Each partner had responsibility for engaging with one sector of the higher education population; our focus was on the student population. The goal was to develop a toolkit for students, with students.

The challenge, we quickly learned however, was to engage students in the first instance. While the project was focused on UDL, we decided to not just engage with students with disabilities, but also to seek to engage with the student population. Sounds edgy, doesn't it?!

On setting out to achieve our objective we were increasingly being lead to believe 'students don't respond', 'don't engage', 'are too busy'', or just 'aren't interested'. That, we are happy to say, was not our experience. This is our story, and we want to take you on a journey and share what we learned one step at a time.

Step 1 – Identify who you want to engage – and how to engage them

We put out an open call to students with disabilities in universities in Ireland, Norway and Belgium. We wanted to hear their thoughts, learn about their experiences and collect their feedback at focus group sessions. In return, we invited them for 3 days to Dublin with all expenses paid. This was significant. We wanted to show them that although they were students, their opinions and time was just as valued as the other contributors we engaged with over the lifetime of the project (policy makers, university support staff, etc.) To apply, students simply had to fill out an online application with basic personal information. But to make them feel they had something to contribute we asked:

> 'What advice would they give to their younger selves before they started university?'

The application process was simple. It was easy and quick for students to complete, so they were not deterred by a complicated application. Furthermore, the single question application made it simple to filter responses and find passionate people with unique insights.

We had 81 applicants, with some great advice, and from this we chose 9 students to come on board as our student ambassadors.

Make it attractive –let them know at an early stage that they have something of value to offer!

Step 2 – Be clear about what you expect

Prior to the students coming together, we provided very clear information on what to expect not just at the focus group but also what to expect in Dublin in terms of accomodation and entertainment. The AHEAD national conference was running simultanously and so it was important that their voice was not lost in the proceedings. The surrounding was the beautiful Dublin Castle confence centre and this contributed to the work that we did. There was a very clear agenda with facilitation planned for the 2 days. We expected to explore their knowledge about Universal Design of Learning and to realise a plan as to how we could convince all students about the merits of the concept and practices. Very quickly we came to realise that while they were impressed with Universal Design of Learning – they were more interested in sharing their experiences of teaching, learning and assessment. In fact they wanted to know more about being valued as students!

We quickly realised that this was also part of our learning and moved with it. The results were inspiring.

> Listen - even when you don't want to.

Step 3 - And expect it to change!

We also were reminded very quickly that we were working with students! They took the opportunity to check out the Dublin night scene and were a little tardy the second morning! While this was a little frustrating for some initially – it also contributed to the relationship building. Some long lasting friendships were made and this meant for good working relationships on the project.

> Respect their time – both at work and outside of work.

Step 4 - 100 Heads are Greater than One

In the second round of student engagement we partnered with first year Creative Digital Media students at the Institute of Technology, Blanchardstown. These were a diverse group of almost 100 students willing to take part in a half day focus group. The challenge was to develop an online toolkit for students that students could identify with. In the spirit of student empowerment (and UDL principles), we supported the initial group of nine European student ambassadors to facilitate these focus groups. After all – students will understand students.

And what they had to say

As well as directing us in terms of content, some of the main feedback from the student focus groups was:

- It should be useful. Give me the information I need - I'm not interested in a sales pitch.

- It needs to be efficient and straight to the point. I want the information I need quickly.

- It should be simple and easy to use. If the website is confusing or hard to use, I just give up.

- It should be a mobile friendly website. I want to be able to access it anywhere, even on the go.

- I don't see myself as disabled so when I see that word, I assume the information isn't aimed at me.

Step 5 – Let them lead the way… peer leadership

With the student leaders at the helm, the ITB students felt comfortable in having open and honest discussions as to how they'd imagine this toolkit could be. They discussed possible content, style, ideal platforms etc. They discussed what they were in need of, as well as what they would have zero interest in. We simply observed, and listened with open minds. We left with a clearer idea of what we should do, and what we shouldn't do.

Again, our plans had to be recalibrated, but leaving these focus groups we knew we were on the right track to produce something that students both wanted and needed.

Trust them and their ideas.

Step 6 - Credit where credit is due

At the close of the project, we felt it was important to acknowledge the students' contribution. The end result would not have been possible without them. Moreover the journey and learning would have been so much less.

We added a section on the website entitled **About the Students.**

This gives users the opportunity to see that the student voice was heard and was valued. We of course had included the logos of the partner organisations and funders as is the normal practice, so why not identify with the student contributors? In a sense, by putting their names to it, we were indicating to other student users that this product was student approved!

Acknowledge their work.

Lessons learned

- Be open to new ideas and willing to adapt your plans - Don't force your own agenda.

- Students' time is valuable, so respect that.

- Trust students and how they want to do things – even if it's a little different!

- Use language they will understand.

- Be appreciative.

- Collaborate with students in a manner they can identify with – be flexible, be open, be a student!

So – what was the result?

The student toolkit is an online resource for students. It aims to be universally designed and driven by the advice and experience of students. It includes articles and videos about a range of different topics:

- Taking notes to writing an academic essay.

- How to write an email to a lecturer asking what you can do when you're going through a tough time.

The mobile-friendly website will adapt to a desktop, tablet or phone, meaning the information can be accessed anywhere, even on the go.

The Student Toolkit

The articles also have links to videos, articles, podcasts and apps, so it doesn't matter how you like to learn - it's covered.

Disability or not, all students have questions. The website is focused on common problems and solutions, rather than prescribing a set list of fixes for different types of disabilities. After all, it's not just students with autism who have difficulties making friends, and it's not just students with dyslexia who have problems with how to structure an essay. That being said, students with disabilities do face some additional issues that other students do not, so that is covered too!

Simple, intuitive and easy to use, get from the home page to the information you need within 3 clicks. Straight-to-the-point information students have asked for. When you start at university, nobody sits you down and teaches you how to become a good student so now here's a resource full of the stuff that today's students have said they need.

Look at it now at **https://studenttoolkit.eu/** and spread the word far and wide!

We also made a video about moving on to higher education and the nine students who participated in the project tell you about themselves. Meet the students here **https://www.youtube.com/watch?v=8325nC0nH3s&feature=youtu.be**

They really want you to hear about their lives and what they have to say!

Universal Design for Learning – Licence to Learn (UDLL): a European perspective on UDL

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Introduction

The concept of Universal Design (UD) represents an excellent framework to ensure inclusion for students with disabilities in higher education. The Universal Design for Learning-Licence to Learn (UDLL) project's vision was the inclusion of students with disabilities in higher education through implementing general principles of Universal Design (UD) and practical solutions from the pedagogical concept of Universal Design for Learning (UDL). UDLL addresses challenges highlighted by the UN Convention on the Rights of Persons with Disabilities (CRPD) and also those contained in the "social dimension" of the Bologna process. This project, funded by the Erasmus+ Programme of the European Union, aimed to demonstrate how Universal Design for learning (UDL) can be the best solution to develop an inclusive learning environment, and a higher quality of learning to the benefit of all students. The project is unique in its use of the voice of the learner to set the stage prior to consulting the other stakeholders.

The aims and objectives of the project have been delivered through the project partners developing their understanding of the inclusive learning environment through working with stakeholders. These stakeholder groups – the student/learner, academic staff, higher education policy makers and leaders, and the student support staff – contributed to development of the Best Practice Guidelines. The two outcomes represent a 'Licence to Learn' for students and stakeholders to enhance an inclusive learning environment to the benefit of all students. Students, with or without a disability, should have the opportunity to enter and succeed in higher education, based on their skills and efforts. UDLL offers an inclusive approach.

Project involvement from the partnership perspective

In this article we explore the journey of the partners – Universell, Norway, the lead partner; SIHO, Belgium and AHEAD, Ireland – in meeting the stated objective

> 'to develop a European pathway for the three participating countries on Universal Design of Learning (UDL) and to promote its potential to create quality education for diverse groups of learners. UDL must be placed strategically and be considered as a quality perspective in higher education.'

Introducing the project partners

NTNU-Universell, Norway – Coordinating partner. Universell is a section in the Division of Student and Academic affairs at the Norwegian Technical University in Trondheim (NTNU). Universell works on behalf of the Ministry of Education as the national coordinator for accessibility and Universal Design in higher education. The head of Universell, Kjetil Knarlag, was the UDLL Project Manager.

AHEAD, a non-governmental organisation (NGO) and Irish national organisation, whose mission is to promote full access to and full participation in higher education for students with disabilities.

Support Centre for Inclusive Higher Education (SIHO) / Hogeschool West-Vlaanderen (HOWEST) a higher education institution in Flanders, Belgium. SIHO supports all Flemish higher education institutions in implementing the UN convention on the rights of persons with disabilities.

The project outputs

Best Practice Guidelines

Universell was responsible for producing and publishing the Best Practice Guidelines (BPG) about Universal Design and Universal Design for learning from four perspectives:

- The learner/student
- Academic staff
- Management and leadership
- Student support services

To share knowledge, develop thinking and reflect on the impact of Universal Design in particular areas, four focus group meetings were organised, involving three participants from each country in each category, so that there were nine participants in each workshop. The outputs from these focus groups have been incorporated into the good practice guidelines. The responsibility for organising and recruiting the focus groups was spread amongst the project partners.

The aims of the Best Practice Guidelines are:

- To enable users to embrace Universal Design and Universal Design for Learning as the best concept for a flexible, creative and inclusive learning environment for the benefit of all learners.
- To give users the theory, perspectives and practical tools to challenge and change every day working methods

The guidelines address all the important stakeholders within a higher education institution, who have a role to play in the understanding and implementation of the concept. The guidelines are now published on the project website, **www.udll.eu** and can be found at **http://tinyurl.com/hxjw4zy**

The Student Toolkit

AHEAD had the co-ordinating responsibility for production and publication of a student-oriented output – a digital Self-assessment Toolkit for students developed from AHEAD's student network and the student focus group. The toolkit provides guidance for disabled students through the potential for universally-designed solutions to meet challenges they may face, and provides information designed for students to gain more knowledge about their challenges and needs, as well as appropriate tools to study with their impairment.
See the Toolkit here **https://studenttoolkit.eu/** and meet the students.

Watch the film for students about transition to higher education here **https://www.youtube.com/watch?v=8325nC0nH3s&feature=youtu.be**

The dissemination conference

SIHO was responsible for arranging the final event, a dissemination conference in Ghent at the end of the project in June 2016. With nearly 200 participants from 15 countries, including those who were involved in the four focus groups, this was a great opportunity to showcase the Best Practice Guidelines and the Student Toolkit, and to share experiences more widely. The partnership with Artevelde University in Ghent was very welcome as was the addition of an opportunity to work with the LINK network on the following day, and particularly the organisation Handicap + Studie from the Netherlands.

Partnership working

The project partners were known to each other and had worked together through the European LINK Network, hosted by AHEAD Ireland. The work packages chosen for each partner to deliver were well-suited to their strengths as organisations.

The project was identified as innovative and developmental and this raised issues of cultural differences in the delivery and expectations of higher education in the three countries. These differences emerged at different stages of the project and the project working group decided to meet more often than originally planned to enhance understanding and maintain energy and focus. The partners are very positive that project participation has enriched their own work practices and broadened their knowledge base on UDL and supported policy work. For some it provided greater credibility with national stakeholders and the opportunity to influence thinking in the sector.

Particular issues critical to the development of UDLL which came into focus for the partners are:

- The challenge of influencing HE through a whole-institution approach
- Developing understanding and clarification on curriculum design, teaching learning and assessment in a range of higher education settings
- Supporting the work of student unions/student politicians

National support for partners

Each partner had the backing of a national reference group, whose role was to assist in recruitment of participants for the focus groups, advise on designing the workshop activities and dissemination of the project outcomes and messages through their own institutions and networks. This not only provided much needed backing for introducing change but also to support the centrality

of embedding this change into a range of quality assurance mechanisms. Members of the reference groups in each country attended the workshop on policy and management.

In Norway, the reference group will host a national meeting in November 2016, and then host regional meetings to introduce the project outputs and harmonise the approach to implementing UDLL principles. In Ireland, AHEAD's Board have adopted UDL as a major theme in their latest strategic plan. This will help to create a national impetus regarding changing policy and practice in favour of UDL approaches to curriculum design, learning, teaching and assessment and to upskill staff in how to implement it in a higher education environment. In Belgium the reference group were able to participate in the dissemination conference and plan to carry the messages forward through SIHO's work and the SIHO board members networks in Flanders.

The impact of working directly with disabled students

The project partners reported that working with the larger student group, including those with and without disabilities was a great benefit and provided a lot of learning that can be built on in their own future work. The student participation strengthened their importance as stakeholders and there will be spin-off collaborations including articles about specific impairments and one student is moving on to a PhD on disability and employment. This involvement raised awareness of disability and diversity among staff and students and the outputs will supply student politicians with information for their work in developing good practice in learning environments. This can lead to more involvement at national level both through the partner organisations and in the students' home institutions. The project demonstrates the difference between consultation and real involvement.

The nine students with disabilities who were project participants throughout were a major influence on the development of the toolkit. It is important to note that they did not know each other before the first meeting at the Dublin workshop. They are to be commended on their successful contributions. From the students' point of view, they agreed that they had a better understanding of UDL and were 100% sure that UDL was important to successful participation in their studies and emphasised the importance of the UDL approach which offers something for all students. They found that being able to talk openly in the group had a big impact on them, personally and that they would advise younger students to make use of available resources and share information. **In this edition of the Journal, the AHEAD team describe how the Student Toolkit evolved with the inclusion of a wider group of students.**

The project partners now plan to use the toolkit and the experience of working with students to influence their work with student unions and individual institutions. Ireland has already started on this. In Norway they will use it as a platform for students who want to learn more about UDL and the role they can play in developing inclusive learning environments. It will be promoted through the national Universell network through email, website, Facebook group and Twitter, as well as on the project website. They will consider what needs to be adjusted to the Norwegian context and culture and will draw on students' stories of success. SIHO will use it as a stepping stone to consider what information can be provided in the Flemish context. They have identified links with Belgian students at undergraduate level to review this. They will link to the toolkit on the project website for English speakers. Colleagues from the Netherlands and United Kingdom are already making use of the materials.

Impact of the project on the partners

Understanding the potential of UDLL

The three partners found that being involved in the project contributed greatly to their understanding of how UDLL might be a driver for changing policy and provision and the greater inclusion of disabled students in their own countries. They identified supporting their further work plans with different groups within higher education, for example teaching staff, policy makers including senior civil servants. They identified that each partner was at a different point in the implementation of UDLL, that there was a cultural perspective of higher education to consider, and that the project outputs would enable them to demonstrate that this was a Europe-wide movement. They also benefitted from the further reading they needed to do to prepare papers and the additional output of the literature review. Meeting the different stakeholders and sharing their experience and ideas, combined with the discussions and network meetings outside the project provided the information needed to take the work forward using the project outputs.

The project fully recognised the importance of gaining the backing of senior staff in HEIs and national organisations. The presence of a senior staff at the management workshop was a major achievement and raised the profile of the UDLL work and its potential within higher education policy and strategy and quality assurance.

Moving forward

Each partner is developing national plans for using the project outputs in their work and to disseminate the project messages. The dissemination conference was attended by delegates representing the full range of project stakeholders and others from the European LINK network (**www.thelinknetwork.eu**) on higher education and disability. Participants were inspired to offer more variety and flexibility in their teaching and evaluation/assessment methods.

Emerging issues conference identified to take forward included:

- The understanding that UDL is a shared responsibility across an HE Institution, to be implemented with co-operation at different levels, for example:

  'Universal Design for learning is first and foremost about a mind-set, and all agents can reflect upon UDL and explore and develop it together, from their different positions, roles and tasks in higher education – including the students.'

- The importance of a clear high level strategy and policies to support it

- The project output of Best Practice Guidelines were seen as a good tool to convince managers about what UDLL has to offer

- The importance of engaging students in developing UDLL practice

- The importance of identifying early adopters, for example

  'Find sympathetic academics to act as first stage line of attack'

The project partners report significant impact on their future work programmes, including:

- using the BPG in developing national conferences, training and coaching opportunities (all partners)
- working with European partners to develop native language versions (Belgium and The Netherlands)
- using some of the techniques and extending them to the whole transformational process in an HEI (Belgium)
- working with disability officers and access staff on implementation through concrete examples in the BPG (Norway, Ireland)
- raising the awareness of student diversity and UDL and providing the tools for institutions to meet this diversity through UDL (Norway)

Each project partner will contact their national Ministries and student organisations providing the opportunity to discuss the next steps in policy development around Universal Design within higher education. The partners identified the potential for future research and projects on pedagogical practice.

Universal Design for Learning – a Swedish programme for widening participation

Pia Häggblom works at Kristianstad University in Sweden as a coordinator for students with disabilities. She has a BA degree in language education and a Graduate Diploma in special education. Currently she is working towards an MA degree in special education and has 25 years of experience working in the field of education. Partly because of her work promoting and implementing Universal Design for Learning she was elected board member of Include, a Swedish national network which focuses on widening participation in higher education.

Introduction

For a number of years there has been focus on welcoming a broader spectrum of students to higher education. But we sometimes leave students in the hallway. As the Eurydice Report 'Modernisation of Higher Education in Europe: Access, Retention and Employability 2014' (European Commission/EACEA/Eurydice, 2014) states:

> What we do is not enough. We have to improve our work with widening participation.

In other words, we have to give them the tools necessary to be successful students, and of course we have to give faculty the tools to be successful teachers. In March 2013 I had the privilege of attending AHEAD's international conference in Dublin,' Is Universal Design in Education Any of My Business?' We were presented with a concept that made my work as a coordinator for students with disabilities so much easier. The possibility to work proactively for and with faculty with regard to widening participation in my institution took a great leap forward.

Initial steps

During spring 2014, 2015 and 2016 I had the opportunity to teach on a course in pedagogy for lecturers working in higher education. Since the topic at hand was diversity in theory and practice, and having attended the conference in Dublin, I saw the opportunity to try to use the concept of Universal Design. I introduced the lecturers to Universal Design for Instruction (UDI), as presented by Dr Joan McGuire in her keynote at the conference in Dublin. The idea of taking the principles of Universal Design from architecture and product development and implement the concept into teaching and learning in higher education found fertile ground with the lecturers. UDI adds two principles to the original seven principles of Universal Design so that the framework consists the following nine principles, the last two added by Dr McGuire and her colleagues (Roberts et al, 2011):

1. Equitable use
2. Flexibility in use
3. Simple and intuitive
4. Perceptible information
5. Tolerance for error
6. Low physical effort
7. Size and space for approach and use
8. A community of learners
9. Instructional climate

It is difficult to learn to swim on dry land, so my task was to try to make the lecturers want to use the principles in their own courses, preferably courses they were responsible for or courses on which they were lecturers. This is the background to a project on Universal Design for Learning (UDL) on which I am writing my Master paper. For the project I chose to concentrate on CAST's model of UDL (CAST, 2011) quite simply because I found so much more material on UDL. The CAST UDL guidelines (CAST, 2011) are divided into three main principles. The first emphasises providing **multiple means of engagement**. The second focuses on providing **multiple means of representation** and the last on providing **multiple means action and expression**.

The Quality Improvement programme

In 2015 when the University of Kristianstad here in Sweden asked faculty to hand in applications for quality improvement projects I applied and got the go ahead. 10th March 2016 was the start of the first of six three hour workshops where seven (originally eight) lecturers were able to learn about UDL and also tried to adapt the framework on parts of a course.

The lecturers got 25 hours each to take part in workshops during approximately a two-month period. We met every second week for the workshops, and as part of the project, the lecturers also agreed to be interviewed individually after the workshops were done. That left six hours in all for the lecturers to study and prepare for each workshop. Most of the participants said that those six hours did not cover the amount of time they used, and it was evident to me that a lot more time was given by the participants.

Since one objective with the project was to spread the concept, the participants selected mostly teach at various programmes and departments at the university, but some of them did work on the same programme. The experience of doing a project like this together with colleagues, most of them from different programmes and departments, was one of the most beneficial factors. This was later emphasised in the interviews. That being said, I also see how it might be easy for colleagues who work in the same department to take UDL one step further, without delay, directly into the work of the next semester.

The participants applied to take part in the project with the understanding that the focus was to adapt parts of a course, a curriculum for which they were responsible, to the framework of UDL. I thought it was important for the participants to have a thorough knowledge of the course they worked with, and thus hopefully had the ability to work with details as well as the course as a whole.

My approach

The core of the project was the UDL guidelines (CAST, 2011) and the participants were asked to take a small part of their course and analyse it using the guidelines. The next step was to develop ideas about how to meet the guidelines. During one workshop the focus was information. During another workshop the focus was a lecture and a third had the focus on examinations. We concentrated on making one part of the course or one class at a time aligned with UDL.

Just as the lecturers themselves worked with trying to build scaffolds for their students, I tried to build scaffolds for them. Just as they emphasised on engagement and motivation, that was also my priority. I did not put any demands on the participants but I had high expectations. In the beginning I left them to figure out for themselves how much they needed to adjust the curricula. We are all creative people, and UDL is a scaffold which asks us questions all the time, which in turn take us one step further to widening participation.

The guidelines themselves can perhaps seem a bit much at first, and perhaps make one reluctant to change from working the same way as yesterday. I tried to let the participants individually experience UDL as a tool, and bit by bit see the next step without me having to give them an answer. All I had to do was show them the scaffolds. They are the experts on teaching their subject matter so they are of course the experts on how to make their courses universally designed. The lecturers had to mould UDL to suit their particular class or exam.

All the good teaching and experience they brought with them flew around the room as the participants discussed their courses and UDL during workshop after workshop. At every workshop they presented ideas to one another, either in front of the whole group or in smaller groups or pairs. The reason why I chose to let the project last approximately two months was that I wanted them to have enough time between each workshop to do some work on their own, but at the same time I wanted them to meet regularly, in order to form a well-functioning group, since their discussions during workshops would be a vital part of the project.

Feedback on the programme

All participants were, to various degrees, positive about using UDL. A majority of them took action during the course of the project to continue to work with UDL and/or to implement UDL in their department. UDL was seen, for example, as a means to bridge the gap between faculty and students, as a way of improving teaching methods and creating better contact with the students. The pros and cons for the students, according to the lecturers' thoughts, were the same thing, the approach to diversity that UDL brings. When it comes to the negatives for teachers using UDL the answer was clear, UDL takes time, at least in the beginning. This being said, the results showed a very positive attitude towards the concept. Lecturers told me during the workshops that they were beginning to align other courses as well to the UDL concept.

Moving forward

What I learnt from the project is the need to be concrete as early as possible. We all have different learning styles. Some people might prefer to have the whole picture before wanting to dive into the actual work at hand. So when I tried to use learning by doing, at the end of the first workshop there were, of course, questions and feelings that they did not know enough. I then recalled an art teacher a few years back telling us to hang our coats on a chair in

front of us and put our shoes on the chair, and then start to sketch and paint. I used the same technique, I gave them examples but not in excess, rather to a minimum, but in various formats such as a lecture, a text and a film. I tried not to limit them with anybody's ideas. They are the experts on what is possible and I wanted them to find ways of their own to make their courses universally designed. Balancing a project is related to balancing a course. Leading a project such as this one might be the perfect time to try to use the UDL principles yourself.

I am very grateful that the lecturers invested so much time and effort in the project, both in their individual work learning about UDL and adopting its principles. Now there are tools for lecturers in higher education to consider how they approach students' needs. When we go into a lecture hall, we switch on the light. When we plan a course or a class it could be just as obvious to use the UDL concept. We have the concept for faculty to widen participation and become even more successful teachers. I am happy to be part of an international network cooperating in meeting our students – at the door.

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Eye Opener - How can teacher trainers coach students during internships taking the diversity of students into account?

Katrien Durinck

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An Standaert

An Standaert has a Master of Science in Educational Sciences with main subject: Special Education, Disability Studies and Behavioural Disorders and an additional teaching degree. She previously worked as a special educator in different primary schools for special education and as a practice teacher in a secondary vocational school. She is a lecturer at the Department of Orthopedagogy – Special Education at the University College Ghent (Flanders – Belgium). She is involved in different educational projects such as the Eye Opener project where she took the role of process manager.

Introduction

The Expertise Network of teacher training of the Ghent University Association (ENW AUGent) funded the Eye Opener project. The main goal of the project was to support teacher trainers in adequately addressing the diversity of students during their internships. During the academic year 2014-2015, six teacher trainers of three different teacher training institutes in Ghent (University College Ghent (HoGent), Ghent University (UGent) and Adult Education Center Kisp (CVO Kisp)) participated in an inter-vision group guided by two process managers.

One of the inspiring frameworks that was used to improve the quality of student coaching was Universal Design for Learning (UDL; Rose & Meyer, 2002). Other frameworks that were used were Solution Focused Coaching (SFC; de Shazer, 1985) and Core Qualities (Ofman, 2007).

This article will focus on the concept, the process and the product of the Eye Opener project. In addition, three good practices will be discussed in-depth.

The concept

The Eye Opener project used inter-vision as learning method. By using this structured method (Terpstra, 2010), the teacher trainers reflected within the group on how they could coach their students during internship, taking the diversity of students into account. The inter-vision group consisted six teacher trainers, and was organised five times in one academic year. Two process managers stimulated the process of inspiring, motivating and activating each other. The strength of the Eye Opener project was the co-creation of new ideas and actions, and to develop a broader vision on diversity of students. In the following sections, the three guiding frameworks will be discussed.

Universal Design for Learning (UDL)

The first framework used in the Eye Opener project was UDL (Rose & Meyer, 2002). During the first session, an expert explained the UDL vision and principles, and provided different examples of UDL implementation in (higher) education. The teacher trainers were asked to discuss in groups the extent to which they had already realised some UDL principles in the coaching of students. Furthermore, the teacher trainers mentioned challenges for further implementation of UDL in their coaching of students in internships.

For the Eye Opener project, the UDL principles (CAST, 2016) were transformed into **questions** which activated the teacher trainers:

- The **why** of learning: How do you stimulate interest and motivation for learning?

- The **what** of learning: How do you present information in different ways?

- The **how** of learning: How do you differentiate the ways that students can express their skills?

Solution Focused Coaching (SFC)

In contrast with a problem-focused approach, solution-focused thinking focuses on the future. Critical to SFC is to identify the goal to move toward, to discover strengths and capacities, and to identify and take small steps toward the solution. During the sessions, the process managers used solution-focused questions to coach the teacher trainers. They asked about solutions, strengths and actions (Caufman & van Dijk, 2011; Visser & Schlundt Bodien, 2009).

Core Qualities

Each teacher trainer had their own strengths, own preferences and own experiences. By using the framework of Core Qualities (Ofman, 2007) during the sessions, the teacher trainers became more aware of their own qualities, pitfalls, sensitivities and challenges. These aspects of the identity of the teacher trainer have a substantial impact on their professional relationship with the students.

Process

Inspired by the cycle of action research (Ponte, 2006), the teacher trainers were encouraged to investigate and to improve the way they coach their students during internships. The starting point of the sessions was to share and reflect on each teacher trainer's own experience in coaching students. In the next step, the teacher trainer formulated at least one personal learning goal. Then followed a brainstorm in the inter-vision group of possible actions according to the personal goal. At the end of the session, the teacher trainer chose a corresponding action fitting their own professional identity which was carried out in their own coaching of students. This resulted in new experiences which created a new starting point (Van de Putte, et al., 2010).
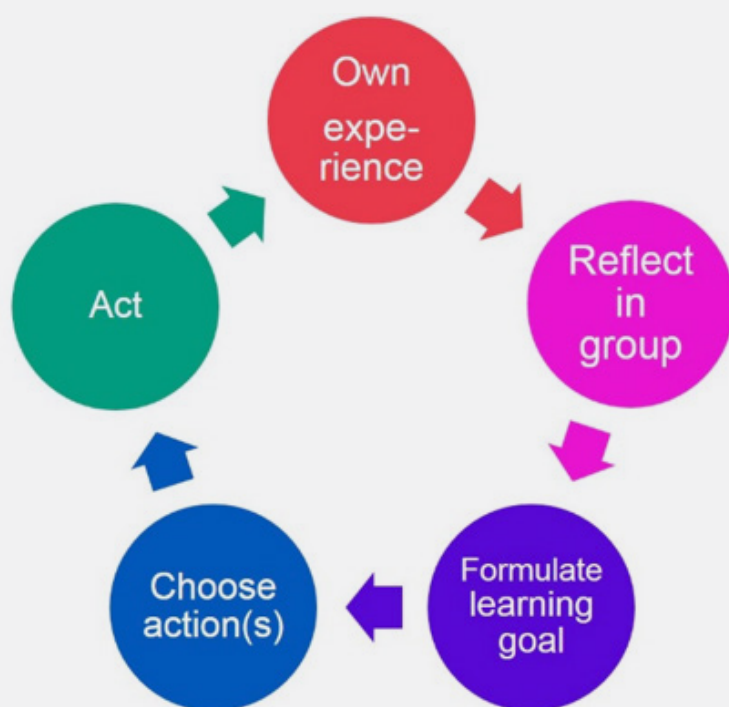
Figure 1: The cycle of action research used in the Eye Opener project

Three examples of good practice

Each of the teacher trainers in the group of Eye Opener carried out different actions during their own coaching of students in internships. Following the process inspired by action research, this resulted in a number of good practices. In this article, three good practices are illustrated and linked with the UDL principles.

Good practice 1: How to activate students?

The first good practice focuses on the coaching session, which takes place after a lesson taught by the student. This session involves a conversation and reflection between the student and the teacher trainer. The goal of the first good practice is to reinforce the input of the student during this coaching session.

The coaching procedure created in the Eye Opener project involves different steps. In step one, both the student and teacher trainer write down three positive experiences about the lesson on three yellow post-its. In step two, both the student and the teacher trainer write down three ideas to improve the lesson on blue post-its. In step three, the student starts a conversation with the teacher trainer about the lesson, using the positive experiences he has written down on the yellow post-its. These experiences are compared to the ones written down by the teacher trainer. At the end, the student receives all the post-its generated during the coaching session.
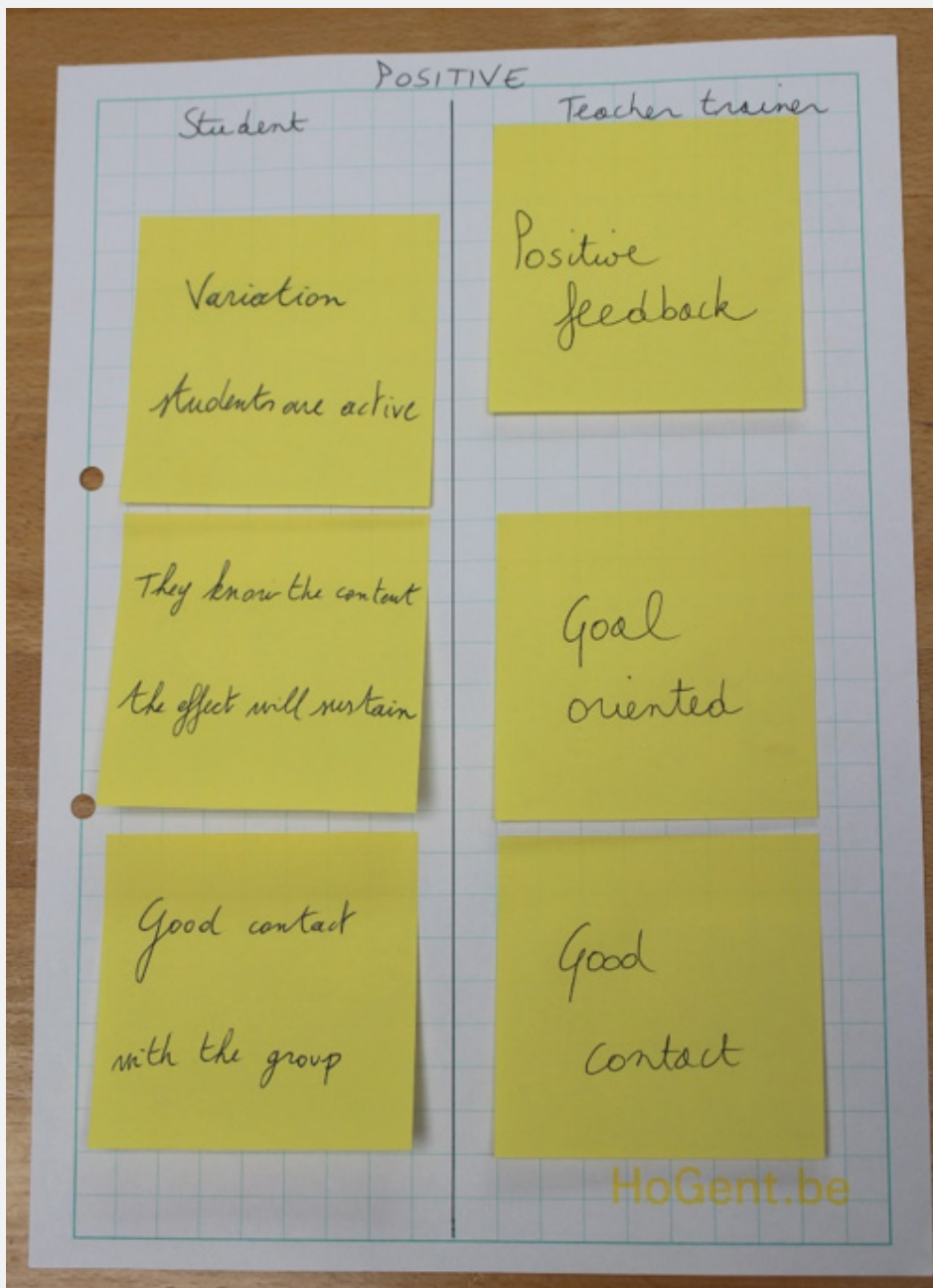
Figure 2: Example of the use of post-its in coaching (translated in English)

Link to UDL principles

This first good practice can be linked to all the UDL-principles. The **why** of learning is met because the input of the student is clearly recognised. The student does not only listen to the findings of the teacher trainer, but also contributes actively in the conversation about his performance. The **what** of learning is met by giving oral and visual feedback. The visual feedback is reinforced by using keywords on the post-its and using different coloured post-its. The **how** of learning is that the post-its help the student to reflect on his/her own performance and to formulate priorities.

Good practice 2: How to make information accessible

The second good practice focuses on the application procedure for an internship. In Flanders (Dutch speaking part of Belgium), this is a rather complex procedure for all teacher training institutes supported by the government. In the past, there was a text brochure available for students and a group session was organised to inform the students. For a lot of students, particularly those who could not attend the information session, it was very difficult to complete the application procedure in a correct way. In order to provide more accessible information about the application procedure for internships, an instruction movie was developed. Screencastomatic© was used with a voice-over that explained the procedure step by step. In addition, different visual cues were added (for example colours, symbols, screenshots).

Figure 3: Screenshot of an instruction movie (in Dutch)

Link to UDL principles
This second good practice is an example of the **what** principle of UDL because the information is presented in different ways: there is an explanation in voice-over, as well as visual markers like structures, colours and symbols.

Good practice 3: How to encourage students to express their skills

In the third good practice, the teacher trainer encourages the students to express their competencies in a **personal and creative** way. For example, some students may use artwork while others make a video or comic to describe the policy of a school. For both the student and the teacher trainer, this 'freedom' of expressing skills feels more pleasant: the student can show his/her talents and the teacher trainer gets a broader view of the student.

Figure 4: Student's report of extramural school activity (in Dutch)

Link to UDL principles
This third good practice is an example of the **how** principle of UDL, because the students are given the opportunity to express their skills in their own personal way. In addition, this also enhances the motivation for learning, as mentioned in the **why** principle.

Conclusion

The main goal of the Eye Opener project was to professionalise teacher trainers in adequately addressing the diversity of students during their internships, by means of an inter-vision group. The participants concluded that it was an inspiring and motivating project. Reflecting and learning together created a new and broader vision on diversity of students. They came to the realisation that small actions can have a big impact. They enjoyed the strength of sharing and co-creating which gave them new energy to explore more possibilities to take the diversity of students into account.

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Ireland's ratification of Marrakesh Treaty can open up a world of knowledge for students with disabilities

Dara Ryder

Dara Ryder is currently managing online communications and events for AHEAD and couples this role with the conducting of annual research into the participation of students with disabilities in higher education in Ireland. Having gained a BSc in Music Technology from Queens University, Dara joined Dun Laoghaire College of Further Education as a lecturer, where he became interested in inclusive education when working first-hand with students with disabilities in his classroom. When the opportunity arose in 2008, he joined AHEAD where he has been working ever since in a variety of roles involving administration, training, multimedia, communications, events and research. Dara has a particular passion for using multimedia to convey information accessible to everybody.

"While the signing of this treaty is a historic and important step, I am respectfully and urgently asking all governments and states to prioritize ratification of this treaty."

Hearing this quote, you'd be forgiven for thinking it spilled from the mouth of a senior diplomat, or perhaps a head of state. In fact, they are the words of 25 time Grammy winning artist Stevie Wonder on a historic night in 2013, when he flew to Morocco to witness the adoption of the Marrakesh Treaty, which aims to increase access to books for those with visual impairments and print disabilities.

And finally, it seems the Irish Government have heeded Stevie's call with a recent announcement by Deputy Mary Mitchell O'Connor (Minister for Jobs, Enterprise and Innovation) that

Government approval has been given for the drafting of the "Copyright and Related Rights Bill, 2016", which will enshrine the treaty in Irish law.

The treaty officially came into effect earlier this year when Canada became the 20th country to ratify it, and other countries who have already done so include Argentina, Brazil, India and Australia. There are positive signs coming from the US too where earlier this year, President Barack Obama released an official White House statement recommending that the Senate "give early and favourable consideration to the Marrakesh Treaty, and give its advice and consent to its ratification."

The Marrakesh Treaty will allow 'authorised entities' to convert a book into an accessible format for use by people with visual impairments and other print disabilities, without consent from the copyright owner and crucially, will allow these accessible versions to be distributed cross-border to authorised entities in other countries which have signed and ratified the treaty.

So who is a beneficiary and who is an 'authorised entity'?

The beneficiaries of the treaty (i.e. those for whom the normal national copyright law is overwritten for the purposes of the treaty) are those who are blind/visually impaired as well as those with other perceptual and reading disabilities, such as dyslexia. People with a physical disability which prevents them from turning the pages of a book would also be considered beneficiaries under the terms of the treaty.

Bodies which are allowed to create and distribute accessible versions of books are those authorised or recognised by governments to provide education, instructional training, adaptive reading or information access to beneficiary persons on a non-profit basis. Moreover, they can be government institutions or non-profit organisations that provide the same services to beneficiary persons as one of their primary activities or institutional obligations. Such organisations would include colleges, libraries, government departments and disability related not-for-profit organisations like AHEAD, amongst others.

What is the current state of play in Ireland?

Let's look at it from the point of view of Laura – a fictional blind student entering a third level college in Ireland. Currently, when Laura registers with the Disability Officer in her college and hands over her booklist, they have to go through a long process to get to the point where they can provide her with accessible course texts.

This process will likely involve the following steps:

- Contacting the publisher of each required course textbook to seek consent and ask for a 'clean' unformatted electronic copy.

- Since 'clean' copies are usually not forthcoming from the publisher, a hard copy of each textbook is bought.

- The hard copy of each textbook is scanned page by page using advanced scanning software with high quality optical character recognition (OCR) meaning it can be transferred into editable text.

- The editable text version of each textbook is made accessible through a formatting process which includes the application of structure tags, which screen reading software can use to navigate the document more easily, and the adding of alternative text, which describes images for blind users.

This is a costly process meaning students like Laura may only receive a few books which are absolutely core to the curriculum, while her non-disabled peers have a whole gamut of extra information accessible to them. Additionally, the length of time the process takes can result in students like Laura waiting on texts long after their course has begun.

On top of this, it is currently illegal for an Irish college to share an accessible book with a college from another country without receiving the express permission of the copyright owner and in many cases, due to differing copyright and equality laws in different territories and growing concerns around piracy eating away at their profit margins, publishers may refuse the right of permission. This means that the time-consuming and expensive work of reproducing books in accessible formats is not only being duplicated in some cases nationally, but also worldwide.

So, how will the Marrakesh treaty change this, when ratified?

The most startling change for students here in Ireland is in the area of cross-border transfer of accessible books. Take a moment to consider the ramifications for Ireland if the world's major English speaking nations ratify the treaty. Remember that Australia and Canada have already completed ratification and the USA has made positive steps towards it. The USA has a population roughly 70 times the size of Ireland and it stands to reason that there are many more English language accessible books produced there every year as a result. Ratification of the treaty by both Ireland and the US would give prompt access to all of this previously unavailable material to Irish based students who need it and will open up the possibility of an international library of accessible texts in the future.

Suddenly Laura, through her college, would have quick access to millions of accessible books produced by colleges and other authorised entities across the English speaking world and it would cost her college very little in terms of time and money to obtain these texts.

When the treaty was adopted back in 2013, the blind community who have fought particularly hard for this measure rejoiced. The aforementioned Stevie Wonder even kept his promise to perform for the negotiators in Marrakesh the night after agreement was reached.

Not many people this side of Europe would have known much about the city of Marrakesh before this treaty, but many would recognize the city of Casablanca some 240km north of there, as the setting of one of the most iconic films ever made. Humphrey Bogart speculates in this cinematic classic, "I think this is the beginning of a beautiful friendship" and for students with disabilities, with the possibility of doors opening to a world of knowledge previously closed to them, he might well be right.
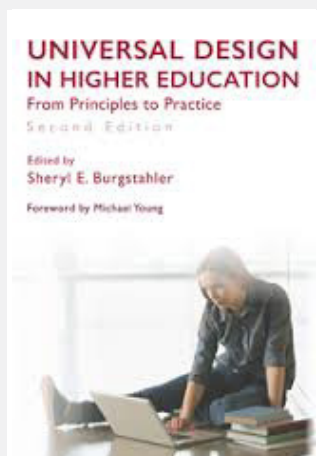
Universal Design in Higher Education
Book Review by Alan Hurst

Professor Alan Hurst
Professor Alan Hurst retired from his full-time post at the University of Central Lancashire in 2007. Since then he has worked as a free-lance consultant and staff developer. He has published many books and articles and delivered lectures and workshops promoting the inclusion of disabled students in third level education in many countries.

Opening comments

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

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

Currently, AHEAD is in the final stages of participation in the UDLL project working alongside SIHO in Belgium and under the leadership of UNIVERSELL based at the Norwegian Technical University in Trondheim. Given this growth of interest and the development of what might be described as a new orthodoxy, it seems appropriate to question whether there is evidence to suggest that the

approach is successful and whether the need to make 'reasonable accommodations' will disappear. Reading and reviewing this updated edition of the collection of papers compiled by Sheryl Burgstahler, one of the key figures in the UD movement, offered me the opportunity to explore this and other questions.

Structure of the book and sequence of content

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

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

Research evidence on the effectiveness of UD for disabled students

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

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

I share Burgstahler's view that

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

Additional research-based evidence is cited in the paper by Spooner, Davies, and Schelly (Paper 8) in which they evaluate the effectiveness of UD. I liked the use of a comment made by David Rose, another key authority on UD, who asserts that

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

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

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

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

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

Discussion of other topics in Part Two of the book

The next paper (Paper 5) in this part of the book considers how UD principles were applied to a particular first year course. The author, Jeanne Higbee, makes considerable use of a scheme devised by Chickering and Gamson in 1987 which identifies eight points to which attention should be directed in terms of UD. These are creating a welcoming classroom, determining the essential components of a course, communicating clear expectations, providing constructive feedback, exploring the use

of natural supports for learning including technology, designing teaching methods that consider diverse abilities, learning styles, previous experience etc., creating multiple ways for students to demonstrate their acquisition of knowledge and skills, and promoting interaction between learners and teachers.

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

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

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

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

Parts Three, Four and Five

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

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

Closing comments

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

This book would be an extremely sound beginning in terms of getting to grips with taking on the new role having acquired a good working knowledge of UD. The book has plenty of very useful tables and practical suggestions. It is not without its shortcomings.

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

I recommend the book wholeheartedly and with no qualms.

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

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

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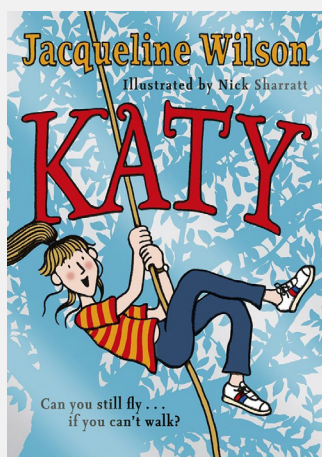
Katy by Jacqueline Wilson
Book Review by Sile-Marie Carroll, aged 10

Sile-Marie Carroll
Aged 10 years (4th Class, Hewetson School, Clane). I love to doodle, make art, and play with my friends. I love to read – I enjoy David Walliams, Timmy Failure and some Jacqueline Wilson. Someday I'd also like to be an author.

We welcome this review of the children's book' Katy'. Jacqueline Wilson describes it as a book inspired by the classic 'What Katy Did' but updating Katy's experience of acquiring a disability and defining a new life. Children's books have an important role in changing views about disabled people in society and working with children at a formative stage of their lives.

Katy is an 'everybody' book about a girl who gets a disability and about how she lives with that disability. Adults could read it and enjoy it a lot while children can also read it and not feel it's just for grown-ups. I would recommend it as it is an interesting read.

Katy is a twelve year old girl; she is an adventurous tomboy, she loved to play adventurous games, skateboarding and climbing trees. Katy's family is made up of eight people including herself; her kind dad - a doctor, her fashion-conscious stepmother, her around eight year old stepsister Elsie, her real ten year old sister Clover (who is also her second best friend) and a cute three year old step brother Phil, and finally the five year old twins – Jonnie, a girl who loves zebras and Dorry, a boy who loves to eat – a lot!

Katy had one day that changed her life a lot. After this day her best friend Cecy treated her differently (for a while), her stepmother became too nice which was annoying and her sister Clover started to play with Elsie instead because she couldn't go upstairs to play anymore. The day before this day, she was able to happily run and have adventures in the secret garden with her brothers, sisters and best friend. In the days after she spent most of her time in hospital, sitting around and eventually ended up in a wheelchair.

She acquired her disability on a day she was supposed to be skateboarding with her friends, but her stepmother banned her for doing this because she misbehaved. So she went to play, tied a

rope to a tree to swing but the rope snapped and she fell. It was as a result of the accident she had to use a wheelchair.

Being in a wheelchair changed her life a lot. In school she was no longer in her best friend's class and someone had to volunteer to push her around. She could only stay downstairs at home as she couldn't take the chair upstairs – this made her feel sad and left out as she could no longer share a bedroom with her sister. Her hobbies and interests changed altogether- she could no longer do the things she once loved. Her best friend also treated her differently - but she didn't stay like that. However she did make a new friend – an adult, a friend of Katy's dad who was also a wheelchair user. Helen was loved by everyone; she was so kind, gracious and funny. But she had an extra special bond with Katy.

I half enjoyed the story. At times I thought it got very repetitive – there were too many fights with her stepmother. Her stepmother, Izzie, was a fashionable lady that made handbags for a living and who spent a lot of time telling Katy to 'smarten up', 'to be less of a tomboy' and 'to stop skate-boarding as it was too dangerous'. Katy also fought a lot with her younger stepsister, Elsie. Elsie was not a great person to play with, she had a horrible imagination. Some of the make believe games were too action-packed for her.

However I did enjoy the fact that all in all they were a crazy family who at times were very funny and this made for good reading. My favourite part is where young Phil cuts his finger with a sharp knife and everyone goes crazy – he creates havoc!

Having read the book I think that if I had a disability it would be hard to play some of the games I love to play with my friends. In school I do believe that most people in my class would treat me differently – they'd be strange around me, or cautious or even shy. I also think my teacher would treat me differently – she'd be nicer to me. But that would not be a good thing because I wouldn't like to be treated differently. In fact, if I used a wheelchair, I could not go to my current classroom- its upstairs.

I have read other books where someone had a disability or illness. In 'Gangsta Granny' – granny gets cancer and in all 'Percy Jackson' books, while it doesn't say he has dyslexia – because he is a half-blood the words muddle up so that only half-bloods can read.

To make it easier for someone in a wheelchair I think that a faster electric wheelchair would help. This would mean they would not need to be pushed; they could still play games like 'catch' and they could compete in games at the Paralympics.

In the future I would like to see improved wheelchairs; faster, easier to control and better able to deal with bumps and uneven surfaces.

If Katy was writing a blog, I think she would ask that when other children meet someone in a wheelchair they should be nice and treat them normally. While she looks different, she still feels normal.

Sile-Marie Carroll

ahead

Association for Higher Education Access & Disability

THE AHEAD JOURNAL - No. 4
A Review of Inclusive Education & Employment Practices

AHEAD, the Association for Higher Education Access and Disability, is an independent non-profit organisation working to promote full access to and participation in further and higher education for students with disabilities and to enhance their employment prospects on graduation.

AHEAD provides information to students and graduates with disabilities, teachers, guidance counsellors and parents on disability issues in education.

AHEAD works with graduates and employers through the GET AHEAD Graduate Forum and the WAM Mentored Work Placement Programme.

AHEAD coordinates LINK, a worldwide network of professionals promoting the inclusion of students & graduates with disabilities in Higher Education managed by 6 European partner organisations.

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