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Editorial

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This edition of the Journal of Inclusive Practice in Further and Higher Education includes papers presented at the Second International NADP Conference held in London in 2018 as well as our usual articles on aspects of supporting disabled students in Higher Education.

The paper by Wilson & Martin sets out the preferred language of the UK Social Model of disability since there are still some using language of the outdated medical model. Sadly that model is still in vogue where students need to identify themselves as disabled in order to derive funding from the DSA or 'reasonable adjustments' from their university.

Readers should note that some papers in this issue are from other countries where language and terminology are different, and one paper uses the student-voice which again is different to the Social model – but who are we to query how disabled people refer to themselves?

2018 is another year when we have seen changes by government to disabled student support in the UK, which proposes to unify technology supply and technology training; proposals to change the evidence required to diagnose dyslexia.

NADP has also seen changes in leadership, with the end of Paddy Turner's chairmanship and the departure of several well known, long standing directors; we welcome our new directors and Brian Lutchmiah to the role of chair.

Ensuring quality of support for disabled higher education students has never been so important; there are several initiatives around inclusive practice but implementation is slow and patchy in the sector. NADP is working on both issues and we welcome the papers in this edition and encourage more contributions, both of theory and practical applications, for the next edition around improving support and delivering inclusion.

Dr John Conway

Editor, Winter 2018 Edition

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Models of Disability affect Language: Implications for Disability, Equality and Inclusivity Practice

Lynn Wilson, National Association of Disability Practitioners and Professor Nicola Martin, London South Bank University

Abstract

This paper aims to give a brief overview of four of the most prevalent models of disability and describe how both the medical and social models relate to the variations in disability language found across the world. These variations have come about during years of activism to ensure that disabled people can live fully included lives in society. Proponents of the various forms of language to describe disability are vociferous in defending their particular positions. Theorists who define disability as a socially constructed phenomenon coalesce around a desire for a more equal society.

In this paper we demonstrate that disabled people and allies are not united in the terminology they prefer. We recommend that Disability, Diversity and Inclusivity Professionals are guided by the individual preferences of disabled people. It is also important to recognise that individuals may change their minds over time.

Proponents of the medical model in particular, we argue, may well hold some preconceptions about disabled people. Ableism underpins medical model thinking and the idea that a disabled person needs fixing runs counter to Social Model conceptions. Principles of Universal Design for Learning (UDL) and an ethos and practice of inclusivity which has been embedded in the institution can cut through some disabling barriers, including those exacerbated by language. Disability, equality and inclusivity professionals have an important role to play in illustrating positive language. Often staff in these roles find themselves encouraging disabled students at a period of change in their lives when they are developing their own identity as professionals and academics. This paper focusses on students but the points made apply equally to other disabled stakeholders including staff.

Introduction

The disability, equality inclusivity professions rely on staff acquiring and constantly updating a great deal of expert knowledge. These roles demand a broad and nuanced understanding of a range of issues:

- Neurodiversity, for example, may not necessarily be seen by all as impairment.
- Disability and impairment are not the same thing, but they are related.
- Practitioners often need to know something about medications and their effects.
- The concept of reasonable adjustments can be contested.
- Equality law needs to be understood.
- The role and use of assistive technology is important.
- University strategy, practice and procedures and their intersection with legislation require interpretation.
- Social support and other aspects of student experience beyond the lecture theatre demand the attention of practitioners.

There are many other considerations and these examples are not exhaustive. Disability service staff have the advantage, in NADP, of an established network of colleagues which provide opportunities to add to their current knowledge. (Wilson and Martin 2017).

It takes a lot of time, effort and drive to build successful disability support systems and the NADP network can be a source of energy and enthusiasm. NADP members are working together towards disability equality in post compulsory education both in the UK and, increasingly, having a positive influence beyond the UK. This paper argues that it is essential for practitioners who work with disabled students to be reflexive in their engagement and to constantly examine and re-examine their approach.

Language is an important and evolving aspect of professional practice. In this paper we propose to stimulate debate about the language we use around disability and the meanings we convey. As with all NADP publications, theory is discussed in relation to practice.

Language around disability is more complex when an international dimension is injected into the mix. The NADP International Conference 2018 brought together an enormous diversity of experience which led to some great discussions, sharing ideas and knowledge from a variety of perspectives. The delegates and speakers came from all countries of the United Kingdom; many countries in Europe including Austria, Belgium, Eire, the Netherlands, Norway, Poland, Sweden and Switzerland; as well as Canada, Dubai and the USA.

Colleagues from other countries were fluent in English, which was the conference language. Captioning reduced any linguistic disadvantage by enabling delegates to keep track of the presentations. A more subtle language barrier did manifest itself however during the conference. Comments were made by several delegates about the differences in disability language across the world. 'Should we be saying 'disabled people' or 'people with disabilities'? was the ubiquitous question.

The language we use to refer to impairment, neurodiversity, medical conditions and disability all has its roots in the idea of models of disability. These have changed over time and context and continue to evolve. In this paper we aim to shine a light on what it is that underpins a decision to use a particular linguistic construction in relation to the notion of models of disability.

Models of Disability

"Disability is an evolving concept, and that disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinder full and effective participation in society on an equal basis with others". The United Nations Convention on the Rights of Persons with Disabilities (2006, UNCRPD)

Models of disability are conceptual models devised to help people understand the idea of disability. As such, they shape peoples' perceptions, sometimes positively, sometimes negatively.

Smart (2004:25-9) illustrates the benefits and concerns associated with disability models.

Models of disability:

- provide definitions of disability.
- provide explanations of causal attribution and responsibility attributions.
- are based on (perceived) needs.
- guide the formulation and implementation of policy.
- are not value neutral.
- determine which academic disciplines study and learn about disabled people.
- shape the self-identity of PWDs.
- can cause prejudice and discrimination.

Different models have been developed in a variety of cultural contexts and at various times in history. This article will give a brief overview of four models that are most prevalent in 2018.

The Moral and/or Religious Models

Henderson and Bryan (2011) offer a thorough explanation of the moral/religious models of disability which are associated with a number of religions. Primarily, from a moral/ religious model perspective disability is seen as a punishment from God for particular sins. These perceived sins could have been committed by the person, their parents or even their ancestors. Proponents of these models may also view an impairment as a test of faith where healing is dependent on having faith. Direct harm can be caused by this view which can result in disabled people being excluded from society and regarded as 'not worthy'. Words such as 'cursed', 'blame' and 'possessed' are often associated with moral/ religious disability models.

An alternative interpretation (still found today) is that 'individuals are selected by God or a higher power to receive a disability not as a curse or punishment but to

demonstrate a special purpose or calling' (Niemann, 2005:106). This attitude is also potentially harmful in that it suggests disabled people should be grateful for their opportunity to learn important life lessons!

In the UK in 2018 this perspective is unusual although still found in some theological circles. Globally there are still cultures in which moral /religious views of disability continue to predominate (Dunn, 2015:10). Disabled people are inevitably marginalised when viewed through the moral/ religious lens. Disability professionals need to be aware that disabled students from cultures in which moral/ religious thinking prevails may find it difficult to make contact with disability services and express their needs. Practitioners describe challenging interactions with students who have talked in terms of praying away their impairment.

Medical Models of Disability

Olkin (1991:26) describes medical models as encapsulating the view that...

"Disability is seen as a medical problem that resides in the individual. It is a defect or failure of a bodily system and as such is inherently abnormal and pathological. The goals of intervention are cure, amelioration of the physical condition to the greatest extent possible and rehabilitation."

Medical models reinforce the difference between disabled and non-disabled people and essentially disregard the impact of environmental factors. They also confer a power differential between the medical professions and disabled people. Medical professionals are empowered to initially define an impairment or difference as 'abnormal' and then issue or withhold a diagnosis which may be the passport to social and academic support. Disabled people are disempowered in the process.

The medical model looks at what is 'wrong' with the person and not what the person needs. It can create the situation where all students with the same condition are considered to have identical needs. This sort of thinking can lead to low expectations and to loss of independence, choice and control of disabled people.

The expression 'person with a disability' is regarded as medical model in the UK. The expression implies that the individual is seen to embody the disability rather experiencing it as a socially construction in relation to their impairment. This idea is explored further in the next section.

As disabled students need to provide evidence to obtain reasonable adjustments including the Government Disabled Students Allowances and examination arrangements, the medical model is still prevalent in the majority of higher education institutions. This throws up a contradiction in discourse around the inclusive nature of the sector. In some instances, Disability Professionals may be regarded as 'gatekeepers' to reasonable adjustments with access being dependent on an acceptable medical diagnosis. Requiring a medical diagnosis potentially creates a barrier between disabled students and the people who are there to assist them.

The move towards inclusive practice allows many students, whether they have a diagnosis or not, to access learning and social systems in the way that suits their requirements. UDL is about including most people in all aspects of life without the necessity for labelling.

The Social Model of Disability

The social model of disability developed in reaction to the limitations of the medical model and was inspired by the activism of the British disability movement in the 1960s and 1970s (D'Alessio, 2011:44).

Disability, in social model terms, is regarded as a socially constructed phenomenon 'which disables people with impairments, and therefore any meaningful solution must be directed at societal change rather than individual adjustment and rehabilitation' (Barnes, Mercer & Shakespeare 2010:163)

Impairment refers to in-person characteristics (eg cerebral palsy, hearing impairment etc.). Disabilities are formed of barriers to the inclusion of disabled people. Structural barriers, like stairs, are obvious but attitudinal barriers such as the attitude that nursing is an inappropriate career for someone with dyslexia, can be subtle.

Disability Professionals often find themselves challenging restrictive assumptions within their institutions and with the disabled students themselves. Such assumptions by teachers, parents, careers advisors etc. can be internalised by students and limit their opportunities (Hoong, Sin and Fong, 2008).

The social model is not without its critics. Shakespeare and Watson (in Giddens, 2006:283), for example, remark:

"We are not just disabled people, we are also people with impairments, and to pretend otherwise is to ignore a major part of our biographies".

Many UK higher education institutions claim to operate under a social model banner although the insistence on production of medical evidence to access reasonable adjustments suggests aspects of a medical model approach.

Grech (2008) cautions that the Social Model is not necessarily directly exportable to impoverished majority world contexts. Global perspectives are relevant to UK universities and should be considered by Disability, Equality and Inclusion Professionals (Martin, 2010).

The Affirmative/Identity Model of Disability

The Affirmative/Identity model of disability is closely related to the social model of disability. They both share the understanding that the experience of disability is socially constructed. The affirmative model incorporates a sensitivity to individual experience (Shakespeare, 2007) which is congruent with the approach of disability professionals in their daily practice.

The term 'affirmative' emphasises ordinariness and rejects impairment as tragedy (Cameron, 2008; 2011). It has been credited with inspiring disabled people to adopt a positive self-image that celebrates 'disability pride' (Darling & Heckert, 2010: 207).

One of the main criticisms of the affirmative model is that it compels disabled people to identify with a specific group culture (Fraser, 2003:26). As disability professionals we find many of our undergraduate students are learning about their own identities as they become more independent. People tend to prefer to choose their own

'labels'. These often change over time and circumstance. A disability practitioner shared the example of a student who variously described herself as a Deaf student, a deaf student, a hearing-impaired student or a student with a hearing problem depending on circumstances... but she was always a psychology student!

Intersectionality is included within the Equality Act 2010, which recognises that it is quite possible, for example, to be gay and disabled.

Disability Language in a Disability Support Context

Disability language varies across the world according to culture and historical context. For example, UK social model theorists argue that the expression 'people with disabilities' is directly linked to the philosophy underlying the medical model. Therefore, the term 'disabled people' is preferred as it better reflects the societal oppression that those with impairments are faced with every day. Social modelists argue that the term 'people with disabilities' suggest that individuals 'have' a disability rather than being disabled by the environment. Referring to 'disabled people' is termed 'identity first' language in which the identity is placed before the person, acknowledging that it is a key part of someone's experience. It does not imply that their disability is their complete identity, but rather, that it is entwined with their identity.

In contrast many theorists from the USA argue for 'person-first' language aiming to focus on the person rather than the disability. Hence the term 'people with disabilities' appears in many publications from the USA and across Europe. A growing movement for identity first language is however developing in the USA. This is led by groups who believe that it is not possible to separate themselves from their condition as it is part of their identity. Some autistic people, for example believe that they form a cultural minority and take pride in their identity. Deaf culture is similarly expressed. Other, highly oppressed groups, including people with learning disabilities, prefer person-first terminology as a way of expressing their identity as a person (first).

Language also varies across contexts in the UK. In universities we refer to 'disabled students'; in schools, disabled children are described as having 'special educational needs and disabilities' (SEND) and colleges vary between the two terms. Teachers taking extra qualifications to become Special Educational Needs Co-Ordinators (SENCOs) are steeped in the language of SEND. At London South Bank University a critical disability studies lens shines a light on the SENCO award curriculum. The idea that 'special needs' is a contested term (Valentine 2002), can come as quite a surprise to students who have come from the schools' sector. Martin (2008) cited the example of a Russell Group undergraduate with five A levels (grade A) saying: 'I used to be a special needs child' in the context of a DSA needs assessment. He further demonstrated low self-esteem during the interaction and reported not having been particularly encouraged towards university. Some authors including Barnes (2008) and Richards (2008) consider that 'othering' language and attitudes can precipitate social exclusion and Martin's example illustrates the potential for a negatively construed label to impact on self-perception as well as expectation.

The language we use is very important with Haller *et al.* (2006:61) cautioning that 'Language has always had power to define cultural groups' and Peeters (2000:588) proposing that 'the dominant groups in society reduce minority culture to a discourse of the other'.

Disabled people are progressively rejecting the imposed identity of 'other' (Silvers, 2002; Beardon and Edmonds, 2007) with many neurodiverse people arguing that their differences are not an impairment but part of 'normal' human diversity. Beardon and Edmonds, 2007 were at the forefront of a debate which continues in 2018 about whether neurodiversity should be considered an impairment or simply a difference.

The Role of Disability / Equality / Inclusivity Professionals

Disability professionals in all their various roles have an important part to play in encouraging students to see the positive aspects of their identity as disabled or neurodiverse individuals. Much of this can be achieved with the use of positive language. When strategy, policy, practices and procedures operationalise the idea of UDL, exclusionary conduct is likely to diminish (Draffan *et al.*, 2017).

Goffman (1968) refers to 'spoiled identify' which is possibly an unintended consequence of the language used in special education. Disability Professionals working individually with disabled students can assist students to challenge these ideas and labels by indicating the positive aspects of their identity. 'Specific Learning Difficulties' may be more palatable to some than 'Specific Learning Differences' or Specific learning Disabilities. Language matters and it is important to understand the perspective of the student.

Language, culture and media can often reflect unthinking ableism (Kuppers 2002, 2003; Mallett 2009; Martin, 2010; Sandahl, 2008; Shakespeare, 1999). Disability Professionals are in an excellent position to challenge these unthinking ideas and ensure their colleagues are portraying positive identities for disabled students.

UK Disability Professionals often find themselves arguing language within their institutions' official publications. (e.g. Barnes, 2004, 2008; Barton, 2004; Cameron, 2008, 2011; Corker and Shakespeare, 2002; Crow, 1996; Edelman, 2001; Goodley, 2010; Oliver, 2009; Swain and French, 2000). The majority of institutions in the UK use identity-first terminology as this reflects the position of disability activists and researchers in the UK. It is worth considering the extent to which careful thought is afforded, by the institution, to the disability language used and the messages it conveys. Some university publications may reflect 'unthinking ableism'? This could deter disabled students from applying.

Widening Participation (WP) professionals are integral to the process of introducing disabled students to the changes of language and structure in higher education. Many higher education institutions are training WP professionals in disability support and some close links have been achieved between WP teams and disability teams. Fostering close working relationships between teams helps avoid the situation of disenfranchising disabled students from some services.

Inclusive Practice

Ableism, racism, sexism and classism all promote stereotypes which are manifested in negative attitudes that lead to prejudice. The continuing use of medical model language perpetrates these negative stereotypes. Disabled students may well have heard these detrimental ideas throughout their lives, from diagnosis to 'special education'. Internalised oppression can be the result and can directly affect the way they perceive themselves. Disabled people can, as a result, limit their own expectations. Support systems may inadvertently foster a dependency culture rather than encouraging learner autonomy. Some students will go nowhere near disability services because of negative prior experience. It is impossible to know how many disabled students choose not to discuss their requirements and request the assistance to which they are entitled.

Strategic planners at all institutions need to be mindful that people who do not access disability services are disadvantaged if this is the only route into assistance. The current emphasis on inclusion and UDL has resulted in many Disability, Equality and Inclusivity Professionals working intensively to embed inclusive practice across institutions. May and Bridger (2010:36), Draffan *et al.* (2017) and others recommended that this embedded approach is needed to ensure that inclusive practice is seen as routine rather than something that is compensatory or additional. Such an approach has the potential to minimise disadvantage.

Conclusion

This article started by a short discussion on some of the models of disability that continue to impact not only the way people regard disabled people but also the way disabled people regard themselves. Language used to describe disabled people and their impairments, tells us much about social attitudes that are prevalent at the time and reflect the way people are treated in society.

Impairment, neurodiversity or loss of function has always been part of the human condition. Although most cultures have moved away from impairments being related to magic or divine punishment, disabled people are still often viewed negatively. Language has a large part to play in stereotyping and systematic discrimination. As

Disability Professionals we need to help our colleagues realise this ableism is oppression. We need to challenge inappropriate language and practice.

Language can diminish or empower people and what is acceptable to disabled people changes over time, culture and location. Disability Professionals work with students who are developing educationally and developing their own identity. It is always best to ask how disabled students wish to be known and respond accordingly.

The Equality Act (2010) recognised multiple identities and the positive duty to build good relationships between men/women, disabled/non-disabled people and ethnic groups.

Martin (2008) poses a one-word, reductionist, definition of inclusion in the word 'belonging'. Disabled people belong at university and careful consideration is needed to ensure that this message is understood as an equalities concern.

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Perceptions of students with autism regarding higher education support services

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[editor's note: this paper uses the student-voice and so their preferred person-first terminology, 'student with autism', is used throughout. Many autistic scholars favour the term 'autistic students).]

Abstract

There is an increase in the number of students with autism accessing higher education (HE). There is also emerging literature about good practice for supporting these students in the HE context. However, there is still very little information concerning which specific services students with autism want. This study addresses this gap by gathering the views regarding the support services of the students in one HE setting. Fifteen students participated in this study and completed a questionnaire to share their views. One of the most significant findings was that while students use only the services which they need, they appreciated having the option to access a variety of services when needed. According to the students, the most helpful services are considered to be the following:- personal mentoring, transitional services, mental health services and the support to complete their application for Disabled Students' Allowances (DSAs.. Students identified disadvantages which included lack of communication among services as well as the limited staff awareness of autism. This is a small-scale study, but the evidence which emerges from it indicates the need for further research in the field.

Keywords: Autism, Student perceptions, Higher Education, Support Services

Introduction

Autism is a complex and diverse developmental disability which impacts the areas of communication, interaction, flexible thinking and sensory processing. It is estimated that approximately 1% of the population in the UK or nearly 700,000 people are on the autism spectrum (National Autistic Society, 2017). With the increase in population there are debates around appropriate use of language, with some autistic

individuals preferring 'identity first' language and the use of the phrase 'autism spectrum condition' to describe their diagnosis. However, this is not necessarily shared by everyone with autism, and the participants in this research mainly preferred 'people first' language and the use of 'autism spectrum disorder' (ASD) when discussing their diagnosis. As the main aim of this study was to provide students with a voice, we decided to use their preferred language and are therefore using people first language throughout this article and keeping 'ASD' in all direct quotations.

The increasing population has led to an interest in the education provided to students with autism in primary and secondary school settings, but similar interest is not present when it comes to the Higher Education (HE) context. As a result, until recently limited research has been conducted to examine the experiences and the needs of these students, and which support services can effectively meet their needs (Kerr et al., 2003). Powell (2003) noted that the lack of research might be the result of the widespread (but mistaken) assumption that autism is likely to prohibit individuals to study at this level. This might be the view held before 2003, however autism was included as an independent category of disability in the UK universities in 2003 (Higher Education Statistical Agency (HESA), 2015). Therefore, there are many universities in the country now which have a significant number of acknowledged students on the autism spectrum. The population of students with autism in British universities in 2003/04 was put at 165, whereas according to HESA (2015) the recent data shows this to be 2400. It is likely that the real population is even more since many students do not disclose their diagnosis or see the need to do SO.

Access to a university does not automatically ensure that the students are able to reach their academic potential (Van Bergeijk *et al.*, 2008). Low levels of attainment and employment were reported in the UK by Howlin *et al.*, in 2004. This situation does not seem to have changed, as in a study by Equality Challenge Unit (2011) it was found that 24% of UK-domiciled graduates with autism were unemployed, which was the highest proportion amongst all disability categories. In addition, many students are unable to complete their studies due to problems such as excessive

stress, high dependence on families, and social isolation (Glennon 2001; Howlin *et al.*, 2004; Van Bergeijk *et al.*, 2008).

Difficulties With Higher Education

There is an increasing awareness of the nature of autism and its implication for students while studying at a university. For example, transition from school to university, which can be difficult for most students, is particularly so for those with autism (Martin, 2008). While transition support systems are important, this is not the only area which impacts a student with autism. Beardon, Martin and Woolsey (2009) suggested that the difficulties which students with autism face could be grouped into four categories: social interaction, university social environment, course structure and curriculum requirements, and staff and peer understanding of the condition.

Students with autism often find it difficult to understand the instructions regarding how they should organise, plan and complete their assignment (Cai and Richdale, 2016). In addition, lack of staff and other students' awareness affects the socialisation and the communication of the students who are trying to change their behaviour to behave in accordance with the expected norms so that they can fit in at the university (Knott and Taylor, 2014; Vincent et al., 2016). In their research, Beardon and Edmonds (2007) found that students on the autism spectrum considered that their behaviour is odd and disruptive. If this is their perception and they are trying to mask their autism, it could then impact on their self-esteem and mental health. The most difficult challenge for students with autism is to understand and respond to subtle communicative interactions (Vincent et al., 2016). Martin (2008) argues that the continuous effort that the students put in to fit the university social expectations can lead some of them to social exclusion, and in other cases impact their mental health and well-being. University staff might try and help the students, but Knott and Taylor (2014) found that while they are well-meaning they frequently lack a clear understanding of the support needs of students with autism, and therefore are unable to support them appropriately.

The nature of a university itself can make it difficult for some students to be part of the setting. In their study, Bearden and Edmonds (2007) found that students report sensory issues as a core stress factor. Other factors which can hinder the success of

students with autism in a HE setting include sudden changes to timetables, having to talk in public, and assessment expectations such as having to make presentations for a module, all of which can increase the stress and anxiety (Van Hees, Moyson, and Roeyers, 2014; Fabri and Andrews, 2016). These challenges are common to every student studying at a university; however, as Liew *et al.* (2014) state, the difference is that while most students can adapt reasonably quickly and draw from the support of their friends, for students with autism these challenges can rapidly lead to anxiety, depression, further isolation and eventually dropping out from the university. Research has shown that students with autism have the lowest graduation rates compared to other disabled students (Taylor and Seltzer, 2010). The causation for this could be multifactorial as discussed in this section.

Support Systems

The UK higher education providers are making reasonable adjustments in their academic settings to support disabled students, such as the provision of study mentors, extra time and provision of assistive technology. Although these academic adjustments could have benefits, there is also a danger that they could separate the students with autism from their peers and thereby increase their social anxiety and social isolation (Madriaga, 2010).

Most universities provide access to such support services based on whether the student has an official diagnosis and has access to funding (such as Disabled Students' Allowances (DSAs). As Martin (2008) highlighted, the official diagnosis is the gateway to the services, but it is problematic since there are many students who do not have a medical diagnosis when they start their studies, or who fear the stigmatisation of the label and prefer not to reveal it. Some students may also adhere to the neurodiversity movement and do not see the need to be diagnosed with a label. Another barrier to some of these services is the status of the student, as DSAs are not available for international students.

However, universities in the UK are trying to address some of the identified issues. For example, some universities provide students with an online toolkit to prepare them for the transition to university (Autism and Uni, 2017). The core themes of the

toolkit cover: how to travel to campus locations, typical study situations, whom to disclose their autism to, as well as managing students' and parents' expectations regarding university. Some universities are also providing priority to disabled students for their accommodation and trying to make this suitable for their needs. Certain universities are using peer mentoring which Owen *et al.* (2016) found the students considered as beneficial in their studies. Adjustments are being made to assignment requirements such as providing extra time in exams or extension for completion of assignments (National Autistic Society, 2017).

While all these strategies appear to be moving in the right direction, there is very little evaluation of student perspectives regarding such services. This is the specific area which this study intended to address. We felt that knowing this information could help the universities and other support provider organisations to become aware of what students deem to be a good practice to meet their needs.

Research Methodology

As the aim of this study was to explore the services provided for students with autism in a specific university and the perceptions of the students in this setting, a case study approach was used for this research. Cohen *et al.* (2011) state that case studies can provide an example of real situations which are experienced by people on a regular basis. The core limitation of this approach is that the findings lack generalisability. However, as Robson (2002) and Yin (2009) state, the purpose of a case study is not to achieve a statistical but an analytic generalisation, which fits with the aims of this research.

Sampling

Purposive sampling was used to select participants for this study. The criteria for inclusion was that they were studying at the university, had a diagnosis of autism, and were enrolled on the database of the university disability support team. We felt that if the student is registered with the disability support team, they are likely to be aware of most of the support services as well as accessing some of these. Letters for recruitment were sent to all the students on the database which led to recruitment of fifteen students (8 females and 7 males) studying on the undergraduate and postgraduate programmes.

Questionnaire

It is suggested that a good questionnaire should meet five criteria: a) clarity, b) reliability c) unambiguity, d) brevity, and e) communicability (Robson, 2002). This makes it an appropriate research tool to be used with the participants of this study as it combines the clear structure, sequence, and focuses on what is necessary, all of which are important for people with autism (Wing, 2002). Another significant advantage was that it provides the respondents with greater confidence because of their anonymity. We felt that this would enable the students to express their views without the fear that their answers might be disapproved of, or have an impact on their access to any of the University services. According to Cohen *et al.*, (2011) an effective and attractive questionnaire should have a clear structure, clarity of wording and clear instructions. The questionnaire used in this study was organised in six parts using headings for each part regarding the content. In addition, clear instructions were provided for each section on how to complete the questions.

The research was conducted in accordance to the principles of the British Educational Research Association (BERA) 2011 and the University's ethical procedures. Participants were provided with an information letter which explained the purpose of the study and how the data would be sorted and used, as well as providing them with a right to withdraw.

Results And Discussion

A thematic analysis was used for the qualitative data which was collected. Themes were identified by using the constant comparison method, and then cross checked between the two researchers. Descriptive statistics were used to analyse the quantitative data.

Contextual Information

The university where this research took place has most of the student accommodation on campus. The disability student service is based along with all the other student services and holds regular drop-in sessions. For the last three years, this team along with other services has started providing a taster session for students with autism before they start at the university. Those who are registered with the service have access to accommodation adjustments and priority, disabled

parking permits on campus, individual study skills support and a personal mentor. These latter two are only available to those with DSA funding. DSA is also used for accessing specialist assistive technology. Students without DSA can access general study skills support which is available to all the students. The disability student service also provides information to staff regarding reasonable adjustments which a student may need, which are developed in consultation with the student. In addition to this team there is a mental health team which provides counselling services to all the students. Other than these university-led services, there is a students' union society for autism which provides peer support and regular events.

Demographics

A total of 15 students, who came from various faculties within the university, took part in this study. One of the postgraduate students was an international student and therefore did not receive DSAs. Further demographic date is provided in Table 1.

Table 1. Demographic data

Demographic data	
Gender	8 (53.3%) male
	7 (46.7%) female
Level of study	13 undergraduates
	(7 in final year, 2 in second year,
	4 in first year)
	2 postgraduate students
	(1 pursuing MA and 1 a PhD)
Age range	18-22- eight students
	22-35- seven students
Domicile status	14 home or EU students
	1 international
Official diagnosis	ASD along with anxiety and depression-
	6
	Asperger syndrome- 5
	Autism-2
	Autism and dyslexia- 2

Awareness of Services

All the students were aware of the services provided by the University with five (33.3%) students stating that they are very aware, six (40%) being aware and four (26.7%) quite aware. The service which a majority (six) of the students mentioned as being most aware was the University's disability support service. This was understandable as the students were registered with the service, which in addition has a dedicated page on the University website. The level of awareness about various other services differed among the group. Only eight students were aware of the students' union group for autism. This is significant, as literature recommends (Owen *et al.*, 2016) peer mentoring as good practice and many students in this study considered it would be useful or helpful to receive such support when they begin their studies. Some participants also felt that having information about other students who succeeded at the University would be useful. This can be seen from the following comment by one of the participants:

'I would encourage the use of students with ASD as case studies who have gone on to graduate, find employment, and have achieved at the university, and what barriers they overcame, so that new students who come can relate and not feel isolated when transitioning from leaving home and going to university.'

However, some indicated that they would like opportunities to interact with neurotypical students (those without autism) because only then could they be inclusive members of university. For example, one student said; 'I'm not really into hanging out exclusively with other people that have ASD.'

It seems then that while a peer mentoring scheme is considered to be a good idea by most, this view was not necessarily shared by everyone.

Access to Services

Most of the students (93.3%) had no difficulty in accessing the University services. 46.7% (7 students) felt they were very easy to find, 26.7% (4) easy, and 20% (3) quite easy. They all considered the University disability support team as a key player in making other services accessible. As many students replied:

'Once arriving at the university, I first entered student services where the xxx team (name of the disability support team) is located, and I was directed to them very quickly.'

and

'I discovered xxx (disability support team) on the University website, who I emailed with minor concerns about what to do and how to do it. They then guided me through the process and helped me with any queries after helping me send off my DSA'.

Furthermore;

'I was invited on a day just for students with ASD. I found accessing information about the services the university provided very easy along with the staff who were kind, understanding and very helpful.'

These comments highlight the crucial role which disability support teams can play in universities to help students both in transition and in settling at the university. However, not all students found the location of the service accessible as this student commented:

'When I was attending the university to visit and look around I could not find and it was not obvious or clear where the support was...... I would not say it was easy as I feel the support was hidden.'

This student's experience highlights the importance of making this information accessible not only on the website, but also during university open days and the induction process.

Perceptions of Mental Health Services

With high levels of anxiety and depression in students with autism, mental health services are increasingly being identified as one of the most significant services in universities. In this study, 33.3% (5 students) of the sample reported that they did not have access to mental health services at the University. Most of these students

chose not to use the service as they preferred to talk with their personal mentor and/or therapist. Out of the rest 66.7 % (10 students) of the sample, 20% (3 respondents) answered very satisfied, 33.3% (5 students) satisfied and 13.3% (2 participants) dissatisfied.

Reasons for Satisfaction

The main reasons for satisfaction were the experience, knowledge and support of their mental health advisor. As a student commented:

'The lady was very supportive and understanding, helping me to understand my difficulties and find strategies'.

The students noted that they could not finish their studies without the support of mental health services because they struggled with anxiety and depression. This concurs with what Fabri and Andrews (2016) and Madriaga *et al.* (2008) found, that mental health issues such as anxiety can lead students to abandon their studies and that therefore support for students regarding their mental health issues is vital.

Participants commented on the multifunctional role that their mental health advisor played. As this student noted, her mental health advisor 'always responded quickly and helpfully to my emails and communicated with lecturers for me when I needed help or extensions on deadlines, as well as helping me sort out any other disability-related issues when needed'.

Another student reported 'I see a mental health adviser once a fortnight, and she is always able to support me when I am struggling – either in person or over the phone. She can think objectively about my issues and help me to see them from a different perspective'.

These responses show a trusting relationship between students and their mental health advisor which could help them to raise their self-confidence and reduce loneliness.

Reasons for Disatisfaction

The main reason that some students reported dissatisfaction with the services was because of the process to access the mental health services. Students reported that they felt uncomfortable going to student services to book an appointment because that would mean that other staff members in the university would be aware of their health issues. This mirrors what Davidson and Henderson (2010) found, that students with autism do not like to disclose and talk about their condition to everyone. This indicates that alternative options for making appointments should be provided, so that the students do not feel that they will be identified or stigmatised by other members of staff or their peers.

Another issue which the students in this research highlighted was the delay in getting an appointment, with the result that urgent mental health issues cannot be dealt with. One student also felt that the staff in the services lack knowledge on how to support more complex mental health difficulties. Beardon and Edmonds (2007) found similar results in their study regarding the knowledge of autism in mental health services. It appears then that the level of satisfaction that the students have with the mental health services is very much dependent on the level of knowledge that the staff have of autism in addition to their understanding of mental health conditions.

All the students, whether they were satisfied or dissatisfied with the service indicated that they would like the same mental health advisor throughout their studies at the university. This is understandable both because of the importance that routine and familiarity play for some individuals with autism, and because of the nature of the relationship which is based on mutual trust, and which can only be developed through regular interaction with the same person.

Personal Mentor

Students reported how important a personal mentor is for them, with 40% (6 students) reporting that such a person is very important for them, 33.3% (5) important, 6.7% (1) slightly important. However, the remaining 20% (3) believe that it is not important. Although most students agree on the importance of such support, there seems to be disparity in terms of access. Ten of the students (66.7%) answered that the university provided them with a personal mentor while five

(33.3%) participants did not access a personal mentor because they did not need one. This perhaps reflects in the levels of satisfaction mentioned above, as students who did not access the support also rated this support as less important.

Reasons why a Personal Mentor is Important

Every student who has a personal mentor reported the crucial role they play in academic and social situations. Students viewed their personal mentor as a person with whom they can discuss the difficulties which they are facing on a daily basis. As this student states;

'The mentor helped me to organise my workload, remain calm and gave me advice which helped me to improve the quality of my work. They made university life a lot easier'.

In addition to the personal mentor, the students appreciated having a personal academic tutor. As this student says;

'My personal tutor was also my lecturer on many occasions and was leading many of my regular workshops therefore once I disclosed to her that I was on the ASD it made the experience at university much more bearable.'

As mentioned above, having a familiar person makes life predictable and leads to developing trust. Students commented that these regular meetings provided them with a sense of routine which they appreciated. They also reported how their tutors were flexible to accommodate their needs, as this student reflects;

'I kept the same personal tutor throughout all three years at the university – he took me on for my dissertation despite my area not being an area he specialised in, because he knew the familiarity we had was significant for me. He worked hard to communicate with me in a way that I was comfortable and was available for regular visits.'

The evidence from this study suggests that having a consistent personal mentor or tutor could be vital for some students to succeed in their studies and to continue at the university. This is an important aspect for universities to consider for increasing retention of students with autism.

Perceptions of Transition and Accommodation Services

The participants in this study were requested to evaluate and provide their views regarding the following transitional services which the University offers: priority accommodation process; pre-arrival enrolment; bespoke applicant visit; support to apply for DSAs; introduction to the team of specialist mentors; and 1:1 support to help with the orientation to the course during the first few weeks. It is noticeable that 80% of the students (12 students) reported that the transitional services cover their need while 20% (3 students) answered that they do not. However, even the students who reported satisfaction with the transitional services did not use all of them and only used those that they need. Some students mentioned that they were not aware of some of the services or that they did not exist when the students started at the University. This is understandable as special transition support was only being offered over the last three years. The age of the student seems to impact the need to access such services as can be seen from the following comment:

'I think due to my age (29) and having lived in a variety of places and faced many new experiences transition services, apart from help with applying for DSA were not really needed'.

Helpful Tranision Services

Where students did access transition services they reported various aspects which they felt were helpful for them to start at the university. These included opportunities to see the accommodation before moving which helped to reduce anxiety, and staff being flexible to meet the students' needs. For example, this student says;

'The accommodation services allowed me to have a mini fridge in my room due to my mental health illnesses which was extremely helpful'.

In fact, none of the students who used the accommodation services reported any dissatisfaction with them.

However, only 53.3% (8 students) of the sample used university accommodation while 46.7% (7 students) did not, either because they commuted to the university from their home or they chose to live independently. These findings are similar to those of Beardon and Edmonds' (2007) and Madriaga *et al.*'s (2008) study, which found that 50% of their sample were either living alone or with their parents. This could be because of sensory and social demands in university accommodations which prevent students from accessing such accommodation (Hastwell *et al.*, 2013). Unhelpful Transition Services

Although several students considered that the bespoke applicant services were not helpful, most of these students were not aware that this service existed. This highlights the importance of communicating about existing support to prospective students. Some students commented that this support was only developed since they started at the university. As mentioned in the contextual information, the university is continuously working on improving its support services and the bespoke applicant service has been initiated only in the last three years.

Some students felt that the taster day for students with autism was not helpful for them because of the way autism affected them. As one student explains;

'However, the taster day felt very basic and more directed towards those with ASD students higher on the spectrum experiencing more severe symptoms with social and emotional needs. Therefore, I left the taster day earlier and proceeded to carry out the activities planned independently'.

It is possible that some students are not aware of the support that they need and therefore do not access the available services. Nevertheless, even students who did not access services in this study recognised that while such visits may not meet their needs this could be beneficial for some other students on the autism spectrum.

Academic Adjustments

Extra time for examinations and having access to a separate exam room were the most used academic adjustments, with nine students saying they have accessed these. Students also appreciated the sensitivity which was shown to meet some of their needs, as this student comments;

'I had extra time available if I needed it. After struggling with the exam hall, and then a smaller room with others in year 1, I was given a room by myself for the remainder of the time I was at the university. The room was always adapted to meet my sensory needs, which included facing away from windows or having them covered to reduce visual distractions'.

Students also provided examples of having the option to take exams on computers as another reasonable adjustment which was provided to them and on the whole appreciated the helpful staff.

The main reason for dissatisfaction with the support was around communication again. This student provides an example for this:

'I was given extra time, rest breaks, and a separate room due to my severe exam anxiety, however during the exam season my room numbers were often wrong, my invigilator was late or did not arrive, which in turn made the entire experience much more stressful'.

Some students reported that although reasonable adjustments were stated in their reports, these were not considered during the assessment process, while a minority stated that these options were not offered to them at any point. Although only a small minority of students reported these negative experiences, it does highlight the importance of clear channels for communication, so the required information is shared with the students and staff, and measures are put in place to ensure that the promised adjustments are available for the students.

Staff Awareness

Eight students (53.3%) were dissatisfied or quite satisfied with staff awareness of autism, while only 5 (33.3%) students replied satisfied. One student (6.7%) reported that it is not necessary for the staff to know about autism because he believes that they should treat students with the condition in the same way as others. One student (6.6%) mentioned that he was not sure about how much the staff understand autism. These findings mirror those of Beardon and Edmonds' (2007) research where 45% of students were not satisfied with the knowledge and consequently the support from

university staff. Thus, this similarity between two studies reveals the on-going nature of this issue and the need for staff training programmes in autism.

Conclusion

The aim of this study was to explore whether the support services being provided in universities are meeting the needs of students with autism. This study confirms that most suggested strategies and services to support students in the literature are appreciated by the students. This research has highlighted the important role which mental health advisors can play in the success of a student with autism at the university along with other professionals such as a mentor or personal academic tutor who can all provide consistency and support for the student. The need for these professionals and other staff at a university to be knowledgeable about autism and have a positive attitude has also been raised by the students. The key factors for satisfaction with services has been identified as having trusting relationships with staff, and flexibility in meeting the needs of the individual. The results show that students only accessed services which they require, but that there is a need to have a wide range of services because of the diversity of requirements amongst individuals with autism. Students mentioned they would like more opportunities for social inclusion with options such as peer mentors helping them to navigate the university life.

However, these findings will need to be considered along with the limitations of this study. The sample size is rather small and includes self-selected participants. It is possible that only students who had a specific agenda took part in this research and therefore it is likely that having a bigger sample could have led to a different set of findings. The sample included mainly undergraduate and home students. It is likely that the needs of students at postgraduate level and those who are coming from abroad might be different. In fact, transition for an international student with autism could be even more challenging. These aspects certainly need further exploration to develop accessible services for all students on the autism spectrum.

In spite of these limitations, this research does draw attention to some key aspects which universities need to work on, such as having clear communication systems

which help the students to be aware of the services they are entitled to and enable them to access these when required. The study adds to the plea from previous studies regarding the importance of training staff in HE settings in autism to avoid some of the negative experiences which students in this study have experienced. Developing peer mentor schemes which involve students with autism as well as neurotypical mentors will also enhance the chances for these students to be included in the academic and social context.

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Demystifying the Process of Engaging with the Disability Service in Higher Education

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Abstract

This paper reflects upon a recent collaboration between students and staff on the Creative and Therapeutic Arts degree and the Disability Service at the University of South Wales, where students raised concerns about challenges in accessing specialist support for their learning. As is commonly noted on creative courses, a relatively high percentage of students on this degree identify as experiencing additional or specific learning needs. As part of a pastoral support initiative, it was recognised that a high percentage of students were eager to engage with the Disability Service but perceived that they had experienced difficulties in doing so. By establishing monthly meetings between the Course Leader and the Manager of the Disability Service, and consulting student records with students' full consent, it emerged that there was a significant misunderstanding between students, academic staff and support staff about the process of engaging with the Disability Service and securing specialist support. The collaboration between students, Course Leader and Service Manager unearthed that, as well as differing perceptions of disability, there was a significant lack of accessible guidance for engaging with this process, echoing the Welsh Assembly Government's findings that complexity was a barrier to engagement with such provision nationally (Welsh Assembly Government, 2017). As a result, an accessible infographic was created to guide students and staff through the complex process of engaging with the Disability Service to secure specialist support. The intention is that this resource will support students, academic staff, support staff and colleagues in other departments to understand the process involved in accessing specialist support and thus support students in this important journey.

Keywords: Disability, Inclusion, Higher Education, Ableism, Support, Specific Learning Difficulties

Introduction

This paper reflects on a collaboration between students and staff on the Creative and Therapeutic Arts degree and the University of South Wales' Disability Service. The degree programme teaches students about models of disability (Goodley, 2017), inclusive practice (Fox and Macpherson, 2015; Baglieri and Shapiro, 2017), arts in health (Fancourt, 2017) and arts for wellbeing (Clift and Camic, 2016); nurturing practitioners who are passionate advocates of authentic participation and creative expression. Students facilitate creative arts workshops in their local communities throughout their studies, with a focus on wellbeing. As is common of both therapeutic and creative courses (Alden and Pollock, 2011; Tobias-Green, 2014), this programme attracts a high percentage of students who experience specific or additional learning needs. Many of the students are able to relate to the participants they work alongside in meaningful ways because of their own experiences of specific or additional learning needs.

Despite the critical disability studies lens through which the curriculum is taught, there has been little historical relationship between the Course Team and the Disability Service. Students routinely engage with the service, but as is common and deemed appropriate by the Disability Service, Course Teams aren't necessarily involved in this process. While this separation is advocated by the Disability Service to enable students to access support confidentially, should they choose, Liaisou (2014, p. 124) proposes that this separation further embeds exclusionary regimes: 'These practices are antithetical to the principles of an inclusive discourse that is geared towards the necessity of responding to learner diversity without having recourse to segregating and stigmatising forms of provision'. Kirby (2009) reflects further on the division between neurodiverse students and their peers and suggests that this model 'removes the need for institutional culture change and the removal of barriers through the adoption of inclusive practice' (Kirby, 2009, p. 75).

Osborne and Fogarty (2014, p. 59) take the discussion further to suggest that there can be 'delight to be found in non-standard approaches, that there is significant value in the interdependency of disability, and perhaps of greatest interest to designers, that disability can be a creative and generative force'. This assertion advocates for the learning potential of engaging with diversity.

Through the implementation of a Personal Academic Coaching (PAC) initiative at the university (USW CELT, 2018), the division between academic, pastoral and specialist support was diminished slightly through transparent discussions with students at regular intervals. Through this closer working relationship, it came to the Course Team's attention that of the high percentage of students who identified as experiencing specific or additional learning needs, few of them were successfully engaging with specialist support, with many students reporting perceived difficulties in engaging with the Disability Service. This was the foundation of this collaborative project, which sought to understand these experiences and to resolve the students' confusion and frustration around accessing support for their learning needs.

The Impetus for the Collaboration: Student Voice

Through engagement with a new pastoral support scheme at the university, academic staff took on the role of Year Tutors and liaised with every student in their cohort once per term. The intention of the scheme was to understand the student experience more closely and namely to signpost increasingly effectively to any student services that students may benefit from: either in supporting their learning or in enhancing their employability. This Personal Academic Coaching (PAC) initiative was part of the Student Experience Plan and was intended to 'join the dots of different aspects of [students'] chosen course and intended profession, monitoring regularly and aiding their academic progress, catching any other issues they have and referring them to appropriate support in Student Advice or Careers... enhanc[ing] their student experience, but also aid[ing] engagement and retention' (USW CELT, 2018).

While the Creative and Therapeutic Arts team had always provided a robust tutorial model for students, the rigour of an allocated tutor and scheduled termly meetings enabled deeper monitoring of student experience, leading to recognition of an emerging pattern. This pattern illustrated that a relatively high number of students perceived a challenge in accessing the Disability Service, a service which they believed might benefit their learning.

The percentage of Higher Education students disclosing a disability has steadily increased over recent years (Kirby, 2009; Madaus, 2012; Kendall, 2016), with a 24% increase of students with a known disability status in Wales between 2012 and 2017,

equating to 13% of the HE student population in Wales in 2017 (HESA, 2018). These statistics represent students who choose to share or 'disclose' their disability. Vickerman and Blundell (2010) and Redpath *et al.* (2013) suggest that it is possible that many more students identify as disabled but choose not to share or 'disclose' this experience, for fear of affecting the application process or any associated stigma perpetuated by a primarily ableist, medical model understanding of disability in academia (Moore and Slee, 2012; Knott and Taylor, 2014; Bolt and Penketh, 2017). The term 'disclose' encapsulates this ongoing interpretation of disability as a defect or flaw (Madriaga *et al.*, 2011). Kerschbaum, Eisenman and Jones (2017, p. 2) discuss in detail the 'deeply rhetorical nature of disclosure... emphasising disability disclosure as a complex calculus in which degrees of perceptibility are dependent on contexts, types of interactions that are unfolding, interlocutors' long- and short- term goals, disabilities and disability experiences, and many other contingencies'. The complexity of disclosure is beyond the scope of this article, but is worthy of deeper exploration.

While the aforementioned statistics demonstrate that disabled students are still underrepresented in Higher Education in general (Gibson, 2012), students with specific learning difficulties are in the majority on the Creative and Therapeutic Arts degree programme, as is common for creative subject areas (Woolf, 2001; Tobias-Green, 2014). Another contradiction is that while some literature suggests Disability Services are largely underutilised by disabled students (Hong, 2015; Abreu *et al.*, 2016), students on this programme were eagerly and proactively trying to engage with support. Further research is required to understand whether there is any correlation between the subject matter taught around critical disability studies and inclusive practice and students' engagement with their learning needs and disabled identity (Pickard, 2018).

The prevalence of students in all years of study identifying as having a specific learning difficulty and facing challenges in accessing the Disability Service led to an initial enquiry with the Manager of the Disability Service to understand what could be leading to this perceived lack of necessary support. Upon reflection, the initial assumption was that there may be a backlog of students requesting support at the beginning of a new term; that there may be issues with levels of staffing in the department; or that there may have been challenges in securing necessary evidence

of diagnoses to secure specialist provision. Due to these potentially inaccurate assumptions, early meetings reflected a clash of culture and understanding between the Disability Service Manager and Course Leader. Both parties were eager to support students, in the students' best interests, but shared a different understanding of the system and potentially held a subtly distinct definition of disability at the heart of the conversation.

Disability as a Social or Medical Construct

It was interesting to understand through discussions with the Disability Service Manager that students couldn't be referred to as 'disabled', according to the service, until they had received a diagnosis. This was very contentious with the approach to inclusive practice on the Creative and Therapeutic Arts degree, where strides are made to move away from a medical model interpretation of disability towards increasingly social model and affirmative perspectives (Mallett and Runswick-Cole, 2014; Goodley, 2017). Further, this medicalised perspective negates the notion of the student as expert in their own experience, and relies on professionals to verify, justify and legitimise students' needs. This approach can focus on the student's 'defects' as opposed to challenging barriers created by the institution's ableist culture (Kirby, 2009; Brown and Leigh, 2018). The Course Team recognised that students were notably disabled by the curriculum, system and space on a regular basis, and there was a strong motivation to challenge and address this. Ownership was taken by the team for some of these disabling barriers, and engagement with increasingly inclusive curriculum design is continually researched to address this (Grace and Gravestock, 2009; HEA, 2011; UDLL, 2016). However it was also recognised that within the current Higher Education climate and discourse, specialist provision is necessary for some students.

It is possible that there was also tension between the constructs of 'special educational needs' and 'disability', which aren't necessarily synonymous (Lewis *et al.*, 2010), a perspective which 'necessitates the removal of disabling barriers by means of problematising and modifying existing organisational attitudes, processes and practices that exclude certain individuals from mainstream cultures and communities' (Liasidou, 2014, p. 122).

Financial burden was a further barrier to support at the time of this collaboration, with some students required to finance a diagnostic assessment to engage with specialist support. Several students found this barrier insurmountable, and it is extremely positive to note that the university has since revised this process and is able to fund and administer the necessary assessments internally without cost to the student.

Further, some students had existing diagnoses but the specific nature or source of the diagnosis didn't meet the criteria of funding providers and thus, despite accepting and receiving support for their diagnosed learning needs for several years, students were required to access diagnostic testing anew, a potentially distressing and expensive experience (Kirby, 2009; Sparks and Lovett., 2014).

This is by no means intended to be a criticism of the Disability Service, who are a highly skilled and compassionate team. The legal, systemic and financial reasons for maintaining clear boundaries on who can access specialist provision are understood. Kirby (2009) provides insightful commentary into the multifaceted roles and identities of a Disability Service in Higher Education, taking the roles of 'procurer', 'advocate/activist' and 'adjudicator/verifier'. Reflecting some of the tensions noted above, Kirby (2009, p. 79) recognises that the 'policies, procedures and systems, which these services work through, are often at odds with promoting inclusion and maintaining the students' voice and the core of the educational experience'.

Despite the contrasting perspectives on disability and the various complex processes at play dictating which students were eligible to engage with the service, it was clear that there were students who may well meet the necessary diagnostic criteria, who, for a variety of reasons, weren't accessing the specialist support they were potentially entitled to, and this in itself was perceived as disabling by the students.

Meeting in the Middle

Having taken some time to understand the true scale and scope of the situation, and having reflected on the challenges of supporting students with specific learning difficulties and/or additional learning needs in Higher Education, consideration was given to what small steps could be explored in this pilot collaboration to enable students and staff to understand and engage with this important process more constructively.

The outcome of engaging with the Disability Service effectively can be incredibly valuable to students, potentially making students more likely to complete their studies successfully and making a significant positive impact on overall performance (Welsh Assembly Government, 2017). However, this model still perpetuates a medicalised, deficit-based interpretation of disability and relies on the academy making what it deems a 'reasonable adjustment' to its provision (Equality Act, 2010). Transforming the systemic approach to diversity and disability is a significant but vital endeavour (Bolt and Penketh, 2017) and while beyond the scope of this initial pilot collaboration, this is a vital area to further challenge. As Guillaume (2011; cited in Liasidou, 2014, p. 123) asserts, the phraseology of 'reasonable adjustments' 'portrays disability as an individual problem rather than a systemic problem that results from power inequities and discriminatory regimes'.

While the longer term ambition is to 'remove barriers for disabled students at an institutional level, in all aspects of mainstream planning' (Kirby, 2009, p. 80), in seeking to provide tangible and immediate solutions for students and staff affected, initial steps were taken to support students and staff in understanding the existing process more effectively. In recognising the complexity of the process as a barrier to initial engagement, an accessible, visual infographic was developed, outlining the six key steps involved in engaging with the Disability Service at the university.

A Potential Solution: An Accessible Infographic

It was understood that students felt they were taking a big step in reaching out for support and making initial contact with the Disability Service. Students felt that after making an appointment and attending this initial meeting, they had overcome the most challenging hurdle and were eager to receive support as a result. However, Disability Service staff had a more detailed understanding of the process and recognised that this first step, while important, was only the initial stage of engaging with the service and in isolation was unlikely to lead to support being implemented.

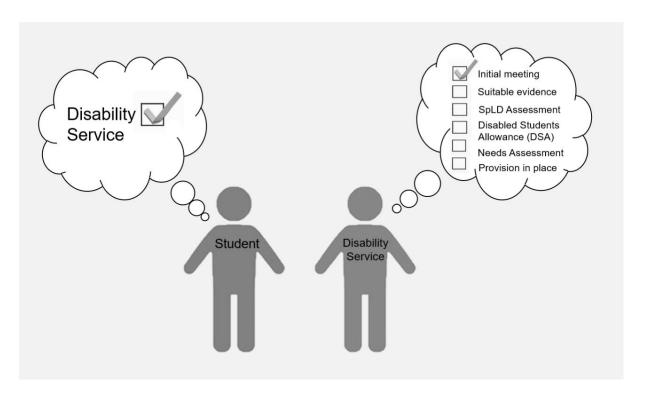


Figure 1 – Illustration of the disparity between students' perception of the process of engaging with the Disability Service and the Disability Service Adviser's perception

It transpired there was a misunderstanding of progress made and necessary next steps for securing specialist provision through the Disability Service. On the one hand, this misunderstanding was that of the student, who, due to the complexity of the process and the reliance on processing complicated written information presenting a barrier to engagement, wasn't aware that they were required to act further. On the other hand, there was also a lack of follow up on behalf of the Disability Service, who were expecting the student, who had already outlined that they felt that they required support in processing complex information, to make further communication or take further steps in the complicated process. The fragmented and overly complex nature of this process is recognised by the Welsh Assembly Government in their recent evaluation, where it is noted that the current system 'places too great an onus on the student to navigate themselves through [the system]' with 'the application form itself... a barrier to many students' (Welsh Assembly Government, 2017, p. 3).

While the Welsh Assembly Government report goes on to discuss challenges in acquiring funding, needs assessments, time scales and assessors' understanding of contexts; consultation of students' records with their explicit permission highlighted

that students hadn't even progressed to the initial stages of the journey to accessing specialist support. This is therefore a further challenge not identified in the Welsh Assembly Government evaluation, and is potentially more of an organisational challenge. Further research is necessary to understand how other Higher Education institutions articulate the process to students.

In an attempt to address this disparity of expectation and understanding around Disability Service support and subsequent receipt of specialist provision, an accessible infographic was developed in order to demystify the process and presents the necessary stages in an accessible format to all parties. This infographic took the shape of a road to symbolise the journey students would take in engaging with the service and to represent the necessary stops along the way to reaching the desired destination. On reflection, the analogy of a road or journey is an interesting one, which conjured up some further metaphors in the later consultation stages.

In developing the Infographic, the Course Leader and Disability Service Manager were eager not to deter students by emphasisng the complexity of the process, but were also passionate about creating a useful and realistic tool for engaging with the service. As such all the necessary information was included in a clear and visually accessible format. Funding from the Faculty Learning and Teaching Committee enabled collaboration with a Graphic Designer to develop the infographic in a professional, aesthetically pleasing way.

As the authority in the process of engaging with the service, the Manager of the Disability Service presented what she perceived to be the six key steps in securing specialist support. Having established the six key steps, consideration was given to what information was essential and useful, and what information might merely complicate students' engagement. It was decided that a document that could be used digitally and in print would be valuable, so web links were included either to click electronically, or to photograph or write down if the document was seen in print. The document was developed to be printed at A2 size in poster format as well as in A4 print as a handout, and thus graphics which worked well at this scale were created. A first draft was created and crucially circulated for consultation with key stakeholders.

Stakeholders included students who had successfully engaged with the Disability Service and been through the six steps; Disability Service Advisers who support students in engaging with the six steps; colleagues in associated departments who's provision is referenced e.g. Student Development and Study Skills; academic colleagues who have engaged with Disability Service support in the past; academic colleagues with no experience of engaging with the Disability Service; Faculty Learning and Teaching Committee; and Student Voice Representatives, who may or may not have engaged with the Disability Service.

Signposting to other services was considered important in order to emphasise which services were complementary and which shouldn't be considered a replacement for one another. Historically, there has been some frustration when students who identify as experiencing specific learning needs approach the Study Skills service hoping to receive specialist support, when the remit of the service is quite distinct to that of the Disability Service. Managing student expectations is very important to overall student experience and by ensuring that students were confident with which services they could access regardless of learning needs or diagnosis, it was hoped that students would more confidently engage in appropriate services to support relevant learning needs.

Colleagues and students also provided guidance on fonts, spacing, layout and accessibility of the design and format. This was further developed in the second draft, where background colours were adjusted to support learners with dyslexia and fonts were adjusted both for ease of reading and access to screen readers. Stakeholders who had less experience of engaging with the Disability Service in the past were surprised at the detail involved in the process and found the infographic a constructive format for educating them in this. Stakeholders who were heavily involved in the process of providing specialist support commented that there should have been a resource like this many years ago and questioned why in fact there hadn't been. This was an interesting reflection, and posed the question as to how students overcame the complexity of the process in the past, and what proportion of students may not have accessed specialist support due to this barrier of complication and misunderstanding.

An interesting observation came from the group of Student Voice Representatives. It isn't known whether this group of students had personally engaged with the Disability Service. Their comments were that the analogy of the road should include speed bumps or traffic lights to emphasise the waiting or potential delays that they perceived were an inherent part of the process: 'Some felt that [without these bumps or traffic lights] it may give students the impression that it was an easy journey to negotiate' (Student Voice Representative feedback).

This was particularly insightful feedback – either about the known experience of the service being about waiting or delays, or about the expectation that such a process would or should take a long time. While there certainly are bumps in the road, and many students report challenges in accessing support due to financial or diagnostic challenges (Sparks and Lovett, 2014; Welsh Assembly Government, 2017); the intention of the infographic was to emphasise the possibility of engaging with specialist support and what this could offer students to enhance their learning experience.

As the Student Voice Representatives made a valid point, and potentially one drawn from personal experience, traffic lights were chosen to illustrate the necessary stages of progression from one step to the next. For example the light might be at red until documentation is collated to evidence diagnosis; or might be on amber while funding is agreed but detail of appropriate provision is arranged; or might change to green when the student completes and returns the necessary Disabled Students Allowances (DSA) forms.

Further research is necessary to understand whether the Student Voice Representatives' comments were based on lived experience of bumps in the road in accessing Disability Service support, or were assumptions that such a process would or should take a long time for disabled students.

Further to the traffic lights, some statistics were added which represent the potential benefit to students of engaging in this process: 'Most students (over four fifths) agreed that the DSAs support had made a significant positive impact on their overall performance' (Welsh Assembly Government, 2017, p. 52). In addition, an anonymised student quotation from a student who had engaged successfully with the Disability Service was incorporated:

'Last year, I really struggled with the workload but the support of my Disability Service tutor has really helped. I feel that engaging with the Disability Service support has really helped me with my academic work. I would thoroughly recommend promoting the service for those who are struggling' (Anonymised Student Quotation taken from USW Disability Service Infographic).

It is hoped that these additions give a balanced and realistic overview of the challenges and benefits of engaging with this specialist provision.

Once final changes and revisions were incorporated, the infographic was launched and shared at the university's annual Learning and Teaching Conference (Pickard and Norris, 2018). The infographic was also published on the university's internal home page and circulated to through key colleagues across faculties. It is intended that this resource will be utilised with future applicants through Enquiries and Admissions, students as they enrol through Student Administration, during engagement with the Disability Service, at year tutor meetings and academic tutorials with academics and for information through a range of services such as the Advice Zone, Study Skills and Marketing.

Initial feedback has been resoundingly positive, with disabled staff commenting on the utility of the resource, as well as students negotiating the process for the first time.

Conclusion

Engaging in this pilot collaboration was a very insightful and informative experience which provided a different vantage point on inclusive practice within the university. While the Disability Service are rightly seen as the authority on disability provision, it was surprising to understand such a medical model underpinning the provision and process, and to realise that the vast number of students who didn't qualify for accessing the service would need to find alternative means of engaging with their learning needs. Again, this isn't intended as a criticism of the Disability Service in any sense, but is rather an important realisation that academic staff need to take much further responsibility for developing the accessibility of their provision (Liasidou, 2014).

If principles of universal design for learning (UDLL, 2016) were more widely engaged with, there might be less reliance upon specialist support (Griful-Freixenet *et al.*, 2017; Bedrossian, 2018). There will inevitably be students who are on the threshold of requiring specialist support and if they are unable to receive that support, there needs to be a deeper consideration by academic staff of their learning experience. While in primary and secondary education it is much more likely that an educator would have access to very specific guidance on the learning needs of a pupil and strategies for enabling their meaningful participation, in Higher Education it appears that this level of detail is much less possible to acquire (Mortimore and Crozler, 2006; Kendall, 2016). Some students may not choose to disclose their learning needs, while others may not be aware of them. As such, there is much more responsibility upon academic staff to ensure that their provision is as widely accessible as possible (De Bie and Brown, 2017), ensuring that those who do not access specialist support can still access the education for which they have paid and subscribed.

Some academics describe this as a shift away from a normative, ableist discourse in academia (Moore and Slee, 2012; Bolt and Penketh, 2017; Brown and Leigh, 2018), advocating that the notion of 'reasonable adjustment' only serves to perpetuate an interpretation of disability as deficit. While other authors take a social justice approach (Valenzuela, 2007; Gibson, 2012; Liasidou, 2014), encouraging educators to consider the socio-cultural processes at play in their educational environments.

The next project between the Creative and Therapeutic Arts degree and the Disability Service proposes to develop a system whereby students can share the notes they take during lectures with their cohort. It is hoped that this will be a valuable opportunity for students to experience in practice some of the principles of universal design for learning they are encouraged to employ in their creative arts workshops. It will however be vital to learn from the experiences of students in understanding if this mechanism is constructive or meaningful (Griful-Freixnet *et al.*, 2017).

In designing the initiative, there was a clear desire to move away from the hierarchy of the expert and the student in need, and thus a model is proposed whereby students are given training in a range of note taking methods and styles but

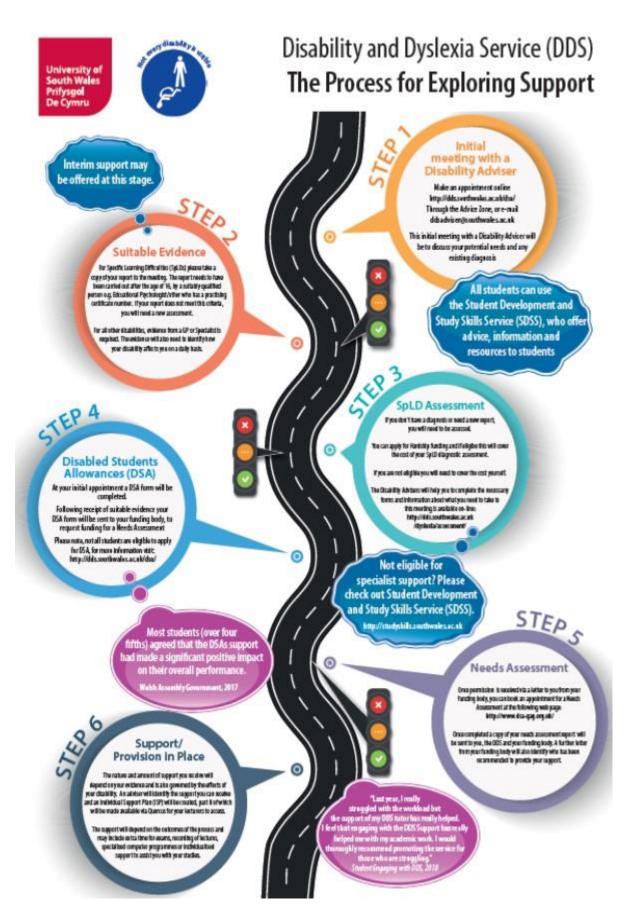
encouraged to upload their diverse and rich examples to support each other's and their own development. In this way, a highly academic 'read-write' learner can benefit from engaging with the cartoons drawn by their peer who has Autism, or a student who has dyslexia and has difficulty writing their own notes while attending to the lecturer simultaneously can revisit the written notes of a peer, read aloud by software accessible to all through the university.

This is a small-scale pilot embedded within one module of the programme initially, to understand student perspectives towards the initiative, and whether the quality of the notes taken meet the needs of learners. This project is by no means intended to discredit or make redundant the vital work of the Disability Service and specialist support, but is hoped to provide constructive interim support in the first term of study.

While Taylor, Baskett and Wren (2010) advocate that support from the outset is imperative for disabled students, and Kendall (2016) reports that this is so in her case study, this is unfortunately rarely the case at this university. There is often a tension between pending Disability Service support in the first term and immersive learning agendas when students without access to necessary support are expected to complete early assessments. It is hoped that this proactive model of sharing resources and expertise will address this shortfall in the first term, and may develop a community of learning between students. This will also be an authentic opportunity to understand the potential of inclusive practice and universal design for learning: emphasising to students through experiential learning the sociocultural dimensions of inclusive practice in addition to logistical and practical considerations (Valenzuela, 2007; Gibson, 2012).

A vital response to this pilot project will be to engage much further in principles of inclusive practice and universal design for learning in Higher Education, in order to limit the segregation of disabled students to specialist services and to ensure a parity of experience for all learners.

Appendix 1: The Process for Exploring Support



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Identifying and Addressing Barriers to Employment of Autistic Adults

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Abstract

This paper considers aspects of the employment landscape and ways in which practices focusing on employability could be more helpful to autistic people. When working in well organised, supportive environments which are conducive to success autistic employees can flourish and be an asset in the workplace. For this to happen potential employers need to understand the sort of reasonable adjustments which are necessary to enable autistic employees to reach their potential. Often these adjustments are really simple and can be achieved in the main via universal design. Preparation for employment at school, college and university requires careful consideration. Abstractly choosing a career without practical experience demands a lot of imagination and this can present a challenge. Autistic people do not always have access to good quality work experience to help them make informed choices. Interviews can create barriers and work trials often make more sense. The Equality Act and The Autism Act emphasise access to work. Various interventions exist which aim to reduce barriers to employment. They are not always joined up effectively. The aim of this paper is to equip practitioners with information which will be useful to assist autistic people to find and keep work.

Introduction

The gap between disabled and non-disabled people's employment rates is on ongoing concern and reliable data is not easy to access (Baumberg *et al.* 2015). Figures tended not to isolate impairment-specific information so do not precisely illuminate the situation for autistic people. Employment is an important facet of social inclusion, and autistic people (including those with intellectual impairments) have much to offer as employees. Autistic people may well be disadvantaged in the workplace for a variety of reasons which are largely socially constructed or at least socially exacerbated. Difficulties with communication are associated with autism but communication is a two-way street and often employers do not communicate

effectively with autistic people, particularly those who are nonverbal. Systems frequently fail to communicate with each other.

Employers, as well as autistic people, may well not have heard of a range of initiatives which could provide useful workplace support. Structure is usually important for autistic people who often find chaos and lack of predictability hard to manage. Workplaces can be chaotic and unpredictable and a sensory nightmare for many autistic people who experience sensory sensitivities.

Services designed to provide assistance are not necessarily joined up in ways which make them easy to access and navigate. Employers will not automatically know what they are expected to do in relation to making reasonable adjustments or helping their autistic employees to thrive in the workplace.

Transitions can be particularly difficult especially if they are poorly planned. Flexibility is something for which neither autistic people nor places of work are necessarily famous. It is easier to be flexible from a secure base where firm foundations are guaranteed but work is not always like that. Autistic people working in a safe predictable environment are more likely to realise their potential.

Strengths associated with autistic employees include reliability, sound work ethic and methodical approaches to tasks. The ability to see the bigger picture and come up with innovative solutions and a high level of motivation arising from an in-depth interest are also excellent aspects of many autistic minds. Society is missing out on the productive capabilities of autistic people who have not been able to find or keep jobs and autistic people are missing out on the satisfaction of appropriate and rewarding work.

A range of legislation is in place in the UK which aims to promote the social inclusion and wellbeing of disabled people generally and, in the case of the Autism Act 2009, autistic people in particular. Employment runs as a thread through much of this and various employment-focussed initiatives have been developed to try and improve the situation in practice. The Autism Act was followed by the Adult Autism Strategy, and its subsequent revisions (Department of Health, 2015). These have been usefully reviewed by Parkin (2016). Employment looms large as an indicator of wellbeing as well as social inclusion in legislative documents.

The Equality Act 2010 can work in harmony with the Autism Act and Adult Autism Strategy which provide a useful platform on which to build employment initiatives. Employment Autism (EA), and similar charities and private providers can work in tandem with statutory services towards the aim of trying to achieve equality in work. Equalities legislation requires public bodies to improve their understanding of ways in which public services could systematically reduce access barriers commonly experienced by autistic people.

Access to employment is the focus of this paper but it is important to acknowledge that broader obstacles around social inclusion can also impact on work opportunities. Austerity concerns, and the ways in which the benefits system operates, can create further barriers are outside the scope of this paper but rumble along as a background concern.

Barnham (2016) considers recent government initiatives designed to address the disability employment gap. He found little evidence of impact for autistic people seeking to find, keep and progress in work. Research Autism (2018) conducted a comprehensive review which further evidences the need to be proactive about finding ways to help autistic people into gainful employment. While this paper is UK focused, research evidence suggests that the situation similar across the world. Hedley *et al.* (2016) and Wehman *et al.* (2016; 2017), for example, discuss obstacles to employment in Australia and America. As with UK studies they evidence the value of work and bemoan the absence of organised support for finding and keeping a job.

The Autism Act and Adult Autism Strategy

Autism is the only specific impairment label with a piece of UK legislation directly associated, i.e. the 2009 Autism Act. This situation is not universally popular with academics and activists within the field of critical disability studies, but some pragmatists acknowledge the potential benefit to autistic people. The Adult Autism Strategy (2010, revised in 2014) was developed as a result of the Autism Act. Its aim was to improve the lives of autistic people by improving their access to the community and the preparedness of the community to offer appropriate support. Section 5 Fulfilling and Rewarding Lives strategy (DoH; 2010) focuses on four aspects to support autistic adults in England with regards to employment:

ensuring they benefit from wider employment initiatives

- personalising welfare and engaging employers
- improving existing provision
- developing new approaches that will better support them.

The requirement to roll the new autism training to all Disability Employment Advisers at Job Centres was included in the 2014 recommendations. However, the use of the term 'hopefully' in relation to this aspiration is slightly concerning. Words like 'must' would probably be more effective. Nevertheless, the Act and subsequent strategy provide a useful platform on which to build. Martin and Krupa (2017) point out that finding and keeping work and then eventually retiring are accepted parts of ordinary life for most adults and, in an equitable society, this should also be so for autistic people.

The Children and Families Act

For some autistic young adults up to the age of twenty-five the Children and Families Act (CFA) 2014 is relevant. It is likely that Statements of Special Educational Needs (henceforth Statements) apply for individuals whose needs were assessed prior to 2014. Education Health and Care Plans (EHCP's) are the modern version of statements and reflect the intention that various agencies should work more effectively together. Disabled children and young people may well access services from education, health and social care providers. Formalising processes to require these providers to work together underpinned the EHCP process. Autistic young adults may well have not transitioned from one system to the other as the process is in a liminal space which has resulted in two methods of recording operating in tandem. Notionally this should have been sorted by 2018 but there is still some catching up taking place. Statements do not offer the same degree of protection as EHCP's during transition to employment. Both Statements and EHCP's apply only to those with the most complex requirements and it is important to note that many autistic young people will have neither.

The CFA places a requirement on school settings and the further education sector to offer students study programmes which are coherent, appropriately challenging, and designed to support progression to apprenticeship or employment. Evidence of high-

quality work experience being a routine part of education is limited and access to data about the extent to which young autistic people have part time jobs such as paper rounds is not available. It is safe to assume that exposure to work experience and part time employment for young disabled people does not match that of their non-disabled peers. Many autistic pupils have time out of education or are educated via home schooling. (Brede *et al.*, 2017, Sproston *et al.*, 2017). Consistent access to activities which are a sound preparation for work cannot therefore be guaranteed.

University

With its focus on progression to FE, apprenticeships and work, the CFA was remiss in its discussion of post compulsory education destinations for disabled learners. Higher Education really merited a specific mention. Arguably the unintended consequence of not doing so was to give the impression that university was not an option. There is a limited number of university students who have EHCP's and the threshold for Disabled Student Allowances (DSAs) is lower than it would be for an EHCP. In effect, this means that access to support at university is available to students who may well not have qualified in school for an EHCP (or a Statement).

Disabled UK higher education students can access DSAs which also cover their support in unpaid work placements. Those on courses involving paid work placements can make use of Access to Work. As all aspects of university life are covered by the Equality Act 2010 the university has a duty to make services such as careers advice, careers fairs and alumni events accessible to disabled students. In practice autistic students often study close to home and, as a result, may miss out on the Russell Group and Oxbridge Universities. Recruiters tend to target 'elite' universities and accordingly may miss out on autistic talent. Staff supporting autistic students via the DSA are expected to have an appropriate level of understanding. (Sims *et al.*, 2016). Arguably this should apply to all university personnel who come into contact with autistic students (Hastwell *et al.*, 2012, 2013).

The problem of adult diagnosis however rears its ugly head here. Without an autism diagnosis the DSA is unavailable. Concerns exist around the availability of adult diagnosis which potentially disenfranchises autistic people from a wide range of services.

The Equality Act 2010

The Equality Act 2010 applies to public bodies and disability is one of the protected characteristics covered by the legislation. Providers of education across the age range into adulthood are included within the remit of this legislation. The legislation, as it relates to education, requires that reasonable adjustments are made to ensure that disabled learners, whatever their age, are not disadvantaged. Providing educational opportunities which are not geared to the requirements of the disabled student would arguably constitute disadvantage.

Autistic people who identify as disabled and have a clinically recognised diagnosis are therefore protected by the Equality Act. Universities and private providers are not exempt. Employers within public bodies are also expected to comply which, in theory, should make it easier for autistic people to get jobs, for example, in local authority settings.

In relation to education for work preparation, disabled pupils and students need access to information, advice and guidance on employment and career choices which will make sense to them. Their CV needs to be accessible to them as well as to prospective employers. Producing a document that the individual cannot read, and which does not reflect their aspirations does not represent equality of access. Autistic and other disabled people often require real experiences rather than two dimensional representations in order to make judgements about whether they would like to work in a particular context. Tokenism such as showing someone a picture of a garden centre and a supermarket and asking them to choose where they would like to go for work experience has no place under the good quality education for work preparation banner.

Volunteering opportunities, work experience, work coaches and mentors who are fully equipped to work with the individual concerned would form part of a good quality programme orientated towards employment. A systematic review conducted by Gibson *et al.* (2017) highlighted the need for and lack of good quality well organised work experience for disabled students transitioning from education to employment.

It is essential to understand autism as a spectrum and respect individuality. Disabled students leaving university with doctorates are covered by the Equality Act as are

school pupils who have profound and multiple impairments. Equality is not about treating everyone in exactly the same way.

The Equality Act is clear that equality of access to opportunities may well mean treating people differently from each other in order to meet individual requirements. A nonverbal autistic sixteen-year-old with additional learning disabilities is not likely to access the same sort of work as an Oxbridge autistic physics graduate. Both however are likely to need some help, and both are covered by the Equality Act. Bespoke individualised assistance is part of the story. The legislation is underpinned by principles of universal design in which base line systems are sensitive to the diversity of people who are likely to access them (Milton and Martin 2017).

Public Bodies have anticipatory duties under the Equality Act. Just as it is not good enough to plan to build a ramp if a wheelchair user ever signals their intention to access a public building, it is also not adequate to fail to think in advance about requirements autistic people may have. Clearly policy makers and others require education about what these requirements might be. Enacting the principle of 'nothing about us without us' suggests that such training should be informed and delivered by autistic people with first-hand knowledge and insider perspective.

Work Focussed Initiatives

A range of initiatives exist which were set up to support disabled people into employment and at work. Barnham 2016, Blamires *et al.* (2015). Research into their efficacy is limited and sustainability is not guaranteed particularly in a climate in which the impact of years of austerity and underfunding is still being keenly felt. Many charities and statutory services have been poorly resourced for many years and operate on a shoe string. Although the Prime Minister, Theresa May, advised the UK that austerity is over during the 2018 Conservative Party Conference she did not provide compelling supporting evidence to justify her assertion. Even if austerity is now in the past, the effects of financial cutbacks on a whole range of services for disabled people will not disappear overnight.

On a more positive note, a number of private sector businesses are engaging with a sense of corporate responsibility towards social justice initiatives involving the employment of autistic people. Commentary in the public domain about the efficacy of such schemes from the perspectives of end users evidences mixed opinions. The

two quotes which follow relate to a scheme set up by a large multi-national company:

'I have been working at XXX (More than 3 years). **Pros.** Good culture and global team. **Cons.** Not sure about cons. Good place to work. **Advice to Management.** Take the offer'

'I was put in a team which had only been formed the previous year, with a manager who was too busy to schedule regular meetings with me (in blatant disregard of the recommendations of the firm's occupational health adviser). The "work" I did consisted of tweaking a spreadsheet for a few hours each day. I tried to look for work elsewhere for after the placement, but I was held back by being unable to explain exactly what I was doing at XXX as I didn't know myself! Considering that the scheme has been in existence for 10 years now, I expected better. More fool me, you may say'.

Apprenticeships and Traineeships

Theresa May's majority government introduced the 'apprenticeship levy' (HM Revenue & Customs, 2016). This announcement signalled the intention to incentivise employers to offer apprenticeships for young people or adult learners to earn money in 'a real job', whilst also gaining a qualification. Maths and English qualification requirements represented a stumbling block for some, but the overall aim was that apprenticeships should be inclusive of disabled young people. The literacy numeracy obstacles are unfortunate and unresolved to date.

For young people who aspire to an apprenticeship or a job but are not quite ready in terms of their level of work skills or experience Traineeships are a possibility. These are based on a mainstream education and training program, with built in work experience, work preparation and work skills development. Literacy and numeracy skills are built into Traineeships as deemed necessary.

Supported Internships

Supported Internships (Sis) are conceived as structured study programs, based with employers. They were set up to assist young people aged 16-24 (who have EHC plans or Statements) to gain sustainable paid employment. SIs were conceived as a way to learn skills required for a particular role in situ in the workplace. For autistic

learners, developing skills in context has the potential advantage of reducing the requirement to generalise learning from another context or a simulation.

The main concern with SIs is that they are unpaid. The Equality Act 2010 does not cover socio economic status so cannot be used to evoke any sort of legal argument about SIs effectively discriminating against people who cannot afford to work for nothing.

Supported internships were trialled in 2012/13 in 15 FE colleges. Evaluation published in December 2013 found that 36 percent resulted in paid employment (Department for Education, 2013). Data on whether these jobs continued is not available.

Initiatives Which Are Inclusive of People Over Twenty-five

Many initiatives focus on getting young people into work which is rather unfortunate for people in their mid-twenties and beyond. There is a great deal of research evidence which points to the conclusion that many disabled people experience delays in their education which mean that they are likely to acquire some skills appropriate for work later in life. This is especially likely for those with learning difficulties who experience some areas of developmental delay. Acquisition of skills is, however, dependant on opportunity and not likely to happen incidentally. (Young-Southward *et al.*, 2017).

The Autism Act and The Adult Autism Strategy take a lifelong view of the social inclusion of autistic people and highlights work as an aspect of community and societal participation right up to retirement age.

Access to Work

Access to Work (AtW) provides grants to cover additional costs of starting or staying in work (including traineeships and supported internships). Specialist equipment, transport costs, support or workplace job coaching and disability awareness training for colleagues may be included. These facilities will depend on individual requirements determined during the AtW assessment. 36,470 people used Access to Work in 2015/16 and many report that without AtW they would not be able to do their job. (Department for Work & Pensions, 2016).

Training and ongoing continuous professional development (CPD) is important in order to ensure that AtW professionals involved are sufficiently prepared to work with autistic people and this training should be delivered by autistic people.

Assessment for Disabled Students Allowances and AtW cover much of the same ground, particularly around assistive technology. Potentially costs could be cut by allowing the DSA report to be used as a basis for AtW assessment. Similarly, equipment and assistive technology are not transferable from one job to another is often experienced as a frustration by end users. When consulted, users tend to be in favour of joined-up thinking and joined-up systems (Martin 2017).

Some concern has been expressed by disabled people about the potential loss of other disability benefits which cover independent living requirements which AtW is not designed to meet. Without these, for some, getting to work would be an impossibility. The economic arguments about why this situation is ridiculous are self-evident. (Martin 2017). Working with employers to develop an understanding, of how AtW functions and what it can offer may help.

Disability Employment Advisers and Work Choice

The Department for Work & Pensions has a network of around 400 Disability Employment Advisers (DEA's) in Job Centres. Part of their remit is to understand and signpost to the various opportunities described here, including AtW.

Work Choice is a voluntary programe which is described as offering disabled people a range of help to find, get and thrive in a job. This could usefully be recommended and it would be expedient to ensure DEAs know about its availability and that of other relevant initiatives. Over a quarter of Work Choice referrals (27 percent) have learning disability recorded as their primary impairment. Arguably some autistic people could be gainfully employed in delivering staff training, as required by The Autism Act 2009, about how autistic people could be assisted in making use of schemes already available but not always flagged up. (DWP, 2013).

Disability Confident Campaign

The last Conservative Government worked with employers on the Disability Confident Campaign, 'a scheme to help employers to 'recruit and retain disabled people and people with health conditions for their skills and talent' (DWP, 2014). The end goal was that employers would follow through and employ more disabled

people. Joined up thinking underpinned the idea of raising awareness amongst employers of available support services. Success stories and practical advice are built in to the processes in a positive way, designed to motivate employers. Arguably autistic workers are best placed to shine a light on their achievements in the workplace, the barriers they have encountered and ways in which said barriers could be knocked over.

Joined Up Thinking

Statutory provision designed to comply with legislative requirements exists to support disabled people into work and pockets of good practice can be found. However, there is a reliance on local authorities, in the school years, and individual institutions and providers of FE, as well as a range of other statutory and voluntary initiatives to support progression to work

The envisaged coherent approach to creating an easily accessible source of information about 'The Local Offer' in relation to services for disabled people is rather like the curate's egg, i.e. good in parts.

The task of creating this coherent picture of services to support disabled people into work is daunting. It may be possible for researchers to collaborate to create a joined-up map of what charities can offer to supplement state support.

The Autism Act (2009) and subsequent Adult Autism Strategy (Department of Health, 2015) require public bodies to develop an understanding of autism as well as a range of provision. The extent to which information, advice and guidance is autism-aware, autism informed and readily available to employers and autistic people is unquantified. Initiatives do exist which are designed to improve 'the local offer' and up-skill the workforce of public servants who may impact on the lives of autistic people. There is however a lack of compelling evidence that these have resulted in easy availability autism-aware staff assisting autistic people into work via a coherent fit for purpose joined up system which is universally understood and incorporates smooth transitions. Company human resource departments may well be on the front-line when it comes to the employability equality agenda but there is scant evidence of autism-focused, autism-informed training to help personnel in these roles to be effective.

Stumbling Blocks and possible solutions

Qualifications

A CV which identifies attendance at a special school or pupil referral unit or considerable time out of school is likely to require some explaining to employers. Autistic learners may well leave education without the traditional qualifications which employers immediately recognise. Some special school pupils do not necessarily have access to qualifications they are capable of gaining (Douglas *et al.*, 2016). Literacy and numeracy requirements have already been identified as stumbling blocks to some opportunities designed to increase employability.

For some autistic people qualified to PhD level access to employment is still an issue so it would be a mistake to assume that those able to gain a doctorate will automatically be able to get a job commensurate with such an exceptional achievement (Martin 2017).

London South Bank University's Participatory Autism Research Collective (PARC) is comprised of numerous highly intelligent, talented, hardworking, unemployed autistic Doctors of Philosophy and this situation is replicated across the UK and beyond. DSAs may have helped some PARC members to gain their impressive degrees. AtW could assist them in gaining and keeping employment. Pointing you potential advantages of removing the disconnect between DSAs and AtW.

Deciding whether to 'come out' as autistic

'Disclosure' is a nasty little word which is almost universally unpopular with disabled people. Unfortunately, it is a frequently used term to describe the act of an individual informing employers and others about their disability status. 'Tell' is a rather less value laden word. Telling a prospective employer, or anyone else, might be easier if words like 'disclosure were binned and a favourable response to the information could be guaranteed.

Martin (2017) discovered that reactions from employers are not necessarily positive and 'telling' does not necessarily open doors to seamless appropriate support. It is also easy to assume that all autistic people are 'out and proud' but this is not necessarily the case (Martin 2008).

DSAs are, of course, behind a wall for those who choose not to identify as autistic to their university. Not accessing DSA and then not taking up AtW or other work-related reasonable adjustments can set an unfortunate pattern; potentially making studying and working more difficult and less productive.

If disabled people feel uncomfortable about discussing their disability-related requirements at work perhaps employers are not doing enough to make doing so ordinary and straightforward. Failure to implement reasonable adjustments goes against the spirit of the Equality Act (2010).

Advocacy and self-advocacy

Autistic people with a capacity for verbal language are probably in a better position than those who do not use their voice to communicate to counter negative stereotypes. If a person does not speak, even if they are very able to communicate in other ways, employers might well make unfavourable assumptions about their capabilities.

Self-advocacy is easier for people who can speak and have a strong idea of future self. (Brett 2017). Nonverbal forms of self-advocacy are entirely possible, provided that everyone involved in the interaction understands the process. Barnham (2016) suggested that it could be useful to develop some kind of 'passport', to assist communication by outlining strengths, interests and support requirements to ease the transition to work. Advocacy support may well be required for people less able to advocate for themselves. Advocates would need to be in tune with the autistic person and not pushing their own agenda.

To address reluctance to think about nonverbal autistic people as potentially valuable employees, case studies from employers might usefully form part of a 'transition toolkit' and training materials aimed at potential employers and gatekeepers to employment (such as Job Centre staff). Ensuring that all materials are informed by autistic people who are properly paid for the work they carry out is good practice.

It is important not to automatically conflate alternative forms of communication with intellectual impairment. This point is powerfully illustrated by 'silentmiaow' (2007)

The SilentMiaow videos form an autoethnographic account by an autistic person who

does not communicate verbally but can explain her way of thinking by using technology.

Whatever mode of communication is involved the process of decision making has to be based on access to a range of experiences which would enable an individual to make realistic choices. An example of a young man with autism and intellectual impairments pointing at a picture of a train and this action being interpreted as his attempt to communicate his desire to be a train driver illustrates where things can go wrong. His father had to intervene and explain that although his son did like trains he did not necessarily understand the idea of working as a train driver. Brett (2017) has developed a subtler and nuanced approach to helping young people with autism and intellectual impairments to communicate their aspirations. Her work is underpinned by ensuring access to experiences which build a solid foundation for choice making.

Mentoring

Various more informal initiatives run alongside these which may be better regulated. Research into their efficacy is scant. Mentoring is a term which can be confused with similar interventions such as 'befriending', 'life coaching' or 'job coaching'. All are highly skilled processes requiring subtle and focused training, especially if they are to encompass the requirements of individuals who communicate non-verbally or face other additional challenges Ongoing supervision is important but is not always built in to programmes. This is a cause for concern especially when vulnerable people are on the receiving end (Sims *et al.*, 2016).

The Research Autism Cygnet Mentoring project based at London South Bank University (Milton *et al.*, 2016) highlighted the benefits of goal orientated fixed term mentoring to enable autistic adults to identify and achieve their own goals, including goals around employment. Autistic participants reported finding it difficult to set goals themselves, especially if they were thinking about something new and outside of their experience.

Any sort of employment-focused mentoring requires the mentor to be aware of avoiding interpretation of what the mentee wants based on a false assumption that

they have an adequate grasp of the idea of work. Autistic people with additional intellectual impairments are likely to struggle greatly with abstract ideas and these cannot be made concrete in decontextualised conversations. Picture prompts are no substitute for real in situ experiences. Concepts which may seem quite abstract need to be made meaningful for an individual via the provision of opportunities for lived experience. Saying 'would you like to work in a kitchen?' whilst using pictures of kitchens from the B&Q catalogue as the only prompt would make little sense to someone who has not experienced really cooking a real meal. Making beans on toast at home in no way resembles working in a fast-paced commercial canteen.

Mentoring always involves careful active listening. Cygnet participants were critical of bossy mentors who appeared to be imposing their own ideas rather than assisting the mentee to identify their personal goals and their own strategy towards meeting them. When spoken language is not the primary mode of communication, and abstract ideas cannot be grasped easily, mentoring has to be about more than guided conversation and paper-based action plans. Listening can be aided by watching the reaction of an individual within real contexts. Interpreting what a mentee is making of an experience is a subtle process fraught with inherent dangers. If someone has been steered towards an NVQ in horticulture with a view to working in the field, for example, and obviously hates mud and soil and worms something has gone horribly wrong. Work experience involving dirt was an obvious necessary first stage.

Practical Considerations

Work experience is important. It is particularly difficult for someone on the spectrum to imagine a situation which they have not experienced, therefore exposure to job taster opportunities is essential in order to facilitate informed choice.

Work trials with support are often more appropriate than conventional interviews. Some potential employers judge autistic people unfairly at interview because they may communicate in an abrupt manner or not realise that they are expected to elaborate on particular questions which seem to demand a yes/no response. Eye contact can be an obstacle. Interviewers may well expect it without realising that often autistic people find looking directly at someone very stressful. The social convention of looking someone in the eye is no indicator of ability in the workplace.

When London South Bank University appointed an autistic researcher his feedback was that it really helped him to have in advance the interview questions in written form and a clear indication of the format of the interview.

Sensory overload is problematic for many autistic people and someone to help with navigating the sensory environment could be useful. A work-placed mentor who understands the requirements of the individual in this respect could assist with, for example, finding quiet calm spaces within the work environment.

Expectations of the job need to be explicitly and effectively communicated and understanding should be checked. Ambiguity causes misunderstanding and creates stress. Visual timetables, picture prompts and assistive technology can be relevant at work and a sound induction and orientation is essential.

Social conventions within the work setting may also need explaining and pressure to socialise can be anxiety-provoking. On the other hand, being left out of the social buzz may feel humiliating and upsetting. Someone to turn to at work can make a real difference. The autistic employee is likely to grow in confidence under conducive circumstances and may well require this sort of backup less as things become more familiar.

Milton *et al.* (2016) discuss approaches to universal design which would work in employment and are congruent with the requirements of the Equality Act.

Anticipatory autism-informed planning underpins their recommendations. The REAL model (Hastwell *et al.*, 2013) calls for reliability, empathy, anticipation and logical clear communication. REAL is relevant to work as well as other situations and extends beyond the requirements of autistic people. Reliable work place support, empathically anticipating the potentially negative impact of disjointed systems and taking steps to avoid chaos and communicate clearly would help everybody.

Motivation arising from in depth interests can make work a joy under the right circumstances and a highly motivated employee who has developed an area of expertise can be a gift in the workplace. Part time or voluntary employment are possibilities which can have a positive impact on well-being and self-esteem and can be part of a co-ordinated portfolio of activities. which make up a full and active timetable.

Conclusions

Joined up systems and well-informed employers and employees are necessary to recruit, interview and support autistic people. Ideally everyone involved would know exactly what they were doing, having received excellent training delivered by autistic people. Trainers would inform employers about support services and ways in which they could work together. They would also understand the strengths and aspirations of autistic people, including those with intellectual impairments and /or do not use verbal language to communicate.

Ideally, autistic people would be well prepared through work experience which would enable them to make informed choices.

In the workplace, barriers to work place success would be identified and circumvented and ongoing support would be easily to access. Gatekeepers would be committed to employing autistic people and well informed about how to do this.

Help to get into work is a starting point but progression beyond gateway jobs needs to be considered. The experiences of some PARC members illustrate a level of exploitation in the workplace in which people are performing above their pay grade and unable to get promoted or are not being paid at all.

Once an autistic person had gained employment, smooth transitions would be facilitated by clear communication and joined up systems. Information would be freely available.

The sustainability of support arrangements merits consideration. Information has been provided on funding streams such as AtW but research evidence suggests that these sources of support are poorly understood (Martin, 2017; Milton *et al.*, 2017).

Work place mentors would be trained by autistic people and mentoring schemes would all be safely supervised. Work-based volunteers may well have a role but as with mentoring relationships, boundaries have to be clear, and supervision is important.

Staff employed in colleges, universities and apprenticeship schemes have an important role to play in ensuring that the employability agenda and the equalities agenda match. Placements and work experience, services beyond the disability team, careers fairs and all employment focussed aspects of the course need to be

autism aware and working effectively together. Thinking about employment should of course start in school and ideally colleges and universities would pick up where excellent school provision left off.

In an ideal world can-do attitudes would prevail throughout the process.

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Diversity for Everybody, Achievement for All, Patterns Not Labels

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(Based on a Presentation and Workshop given at the 2018 NADP International Conference)

Abstract

Delivering what is known as 'inclusive' teaching is one of many pressures on academics and Higher Education Providers (HEPs) in England – the Teaching Excellence Framework (TEF); increased competition for students; the Equality Act 2010 and its Anticipatory Public Sector Duty; widening participation; the growth in international students; and significant changes to the Disabled Students' Allowances. The authors argue that HEPs' difficulties in responding to these pressures may lie in a long-established definition of inclusive teaching and that by modifying the definition operationalising inclusive teaching is made significantly easier.

The paper builds on the authors' experiences of supporting disabled students to suggest specific teaching adaptations which might benefit the whole cohort's diverse learning needs. The authors offer ideas for mainstreaming what have up to now been specialist teaching techniques by identifying and responding to patterns of difficulties common across student cohorts and moving away from delivering largely individualised support, defined by somewhat arbitrary labels - linguistic, cultural, social or disability.

A case study based on modifying a fundamental aspect of pedagogy, that of giving clear assignment feedback, is offered as an example of using a technique typically used for students with Specific Learning Difficulties (SpLDs) and generalising its use across a cohort.

The authors conclude that HEPs could achieve success by drawing on expertise already based in their student services/disability support teams or from external study skills tutors to develop these teaching adaptations, together with their students.

Pressures to be more inclusive

Higher Education Providers (HEPs) in England and their academics are under intense pressure to deliver effective inclusive teaching to a an increasingly diverse student cohort due to widening domestic participation, both social and in terms of disabilities, and significant numbers of international students. Simultaneously, Disabled Students' Allowances are reducing as part of a 'modernisation' programme and HEPs are obliged to deliver on their Anticipatory Public Sector Equality Duty (PSED)1. Additionally, HEPs progress towards inclusivity is now under public scrutiny.

The inaugural results of the Teaching Excellence Framework (HEFCE 2017a; HEFCE 2017b) have exposed HE Providers' (HEP) to assessment on Teaching Quality, Learning Environment, Student Outcomes and Learning Gains across age, ethnicity, disadvantage and disability (HEFCE, 2016c). TEF awards will be used in HEPs' marketing and, the Government hopes, by students when they decide where to apply. HEPs, therefore, have significant commercial reasons to perform well in the TEF and in the parallel Research Excellence Framework (UK Government, 2016). HEPs also compete for students globally (Universities UK, 2014) and domestically (UK Government CIMA, 2015). Additionally, HEIs in England are required to submit public domain Access and Participation Plans which, amongst other things, identifies institutions' access [inclusion] measures (Office for Students (ex. OFFA), 2018).

Additionally, UK Government HE policy is delivering widening domestic participation (DfE, 2015; 2016; 2017; HEFCE, 2016). The percentage of UK domiciled young full-time first degree entrants from state schools increased from 85% in 1998/99 to 89.9% in 2015/16. The percentage of UK domiciled young full-time first degree entrants from low participation neighbourhoods rose from 9.6% in 2009/10 to 11.3% in 2015/16 (HESA, 2017). Nearly 640,000 (2015/16) international under and post-graduate student studied in the UK in 2015/16 (HESA, 2016).

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¹ The Anticipatory Public Sector Equality Duty is a duty on public authorities to consider or think about how their policies or decisions affect people who are protected under the Equality Act 2010 (Citizen's Advice, 2018).

The UK Government is also 'modernising' Disabled Students' Allowances (DSAs), largely aimed at reducing Government spending, through HEPs' implementation of inclusive learning environments by mainstreaming inclusive teaching so, in part, replacing individual "reasonable adjustments" (DSSLG, 2017). Furthermore, the Equality Act (UK Government, 2010, S.20; S.149), places a Public Sector Equality Duty (PSED) on all HEPs to anticipate and accommodate diversity in nine protected characteristics, age, disability, gender reassignment, race, religion or belief, sex, sexual orientation, marriage and civil partnership and pregnancy and maternity (Equality Act, 2010, S. 4). Collectively, these factors raise the question of how HEPs and their individual academic teachers respond, operationalise and so adapt to these multiple pressures.

This paper examines a long-established definition of inclusive teaching, suggesting that part of the difficulty of operationalising inclusive teaching may lie in that definition and so offers a modified version. It then analyses the patterns of academic difficulties encountered by diverse students and, by dispensing with traditional labels, identifies teaching responses to deliver meaningful inclusive practice. Whilst these patterns are revealed by various tests used to determine the presence of SpLDs, we are most definitely not suggesting that all students should be 'tested', rather the converse, that from the patterns revealed by the tests academics can be informed of typical difficulties faced by their cohorts and modify their teaching accordingly. A case study is used to illustrate the approach.

The HE Response to Student Diversity

The growth in student diversity, in response to Government policy to improve social mobility participation (DfE, 2015, 2016; 2017; HEFCE 2016; HESA, 2017) and the attractiveness of pursuing HE studies in the UK (HESA, 2016) has resulted in a growth in 'administrative diversity' - 'bolt-on' structures intended to support these diverse students. This administrative diversity typically comprises disability units and Skills Centres. Disability units responded, at least partially, to legislation, the Equality Act (UK Government, 2010), plus its predecessors, the Disability Discrimination Act (UK Government, 1995) and the Special Educational Needs and Disabilities Act (Uk Government, 2001). Skills' centres have responsed to an increase in students from non-traditional backgrounds who require greater support to develop academic oral

language, academic writing, study skills and numeracy, pre and in-sessional support for English as a second language students. Somewhat conveniently, by labelling our students as having a disability, as coming from a non-traditional social background or speaking English as a second language we have been able to successfully identify needs and apply this 'bolt-on' support.

However, Wingate (2006, in MacFarlane, 2011), notes that "the 'bolt-on' approach has severe limitations, mainly because it separates skills or language acquisition from the process and content of subject-matter learning" (Macfarlane, 2011; Wingate, 2006).

Furthermore, whatever this 'bolt-on' support has achieved it may not be financially sustainable. Certainly, this is already the case for some support types, no longer funded by the DSAs, and, of course, HEPs are under increasing commercial pressures (Johnson, 2015). The DSA 'modernisation' programme was initiated, in large part, in recognition that DSAs were financially unsustainable at the then current level and growth rate (UK Government, 2014). One may also speculate that the newly created Office for Students (HERA, 2017; UK Government, 2017) will only add to these pressures.

Can we move away from the current 'bolt-on' situation? Can educators be put back into the driving seat of teaching – for all students, no matter their learning needs? Embedding certain specialist study skills into mainstream teaching has been shown to be effective for students with SpLDs (Wray *et al.*, 2013), however, as observed by Professor Sue Rigby, Vice-Chancellor of Bath Spa University, whilst the desire to become more inclusive is generally not the issue, operationalising inclusivity into the HE curriculum is far from easy. Additionally, as we have already noted, the problematical current model is based on labels attached to the different students, so perhaps the answer lies in dispensing with such labels.

However, dispensing with such labels may be made more difficult by a long standing and widely used² definition of inclusive learning and teaching which states:

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² One of the authors, Ivan Newman, is currently (August 2018) researching the adoption of inclusive learning and teaching in HEPs in England. Early responses indicate that Hockings' definition is widely used. The research is planned for publication in 2019.

Inclusive learning and teaching in higher education refers to the ways in which pedagogy, curricula and assessment are designed and delivered to engage students in learning that is meaningful, relevant and accessible to all. It embraces a view of the individual and individual difference as the source of diversity that can enrich the lives and learning of others (Hockings, 2010:1).

Whilst we do not disagree with the definition, regarding it highly, it may be that HEPs, by too completely embracing the idea of individual difference, find it difficult to mainstream approaches which appear to de-emphasise the individual. Returning to Rigby's comment about the difficulties of operationalising inclusive approaches we propose a slight modification to Hockings' definition, replacing the second sentence by wording which addresses operationalisation (emboldened text):

Inclusive learning and teaching in higher education refers to the ways in which pedagogy, curricula and assessment are designed and delivered to engage students in learning that is meaningful, relevant and accessible to all, through identifying and addressing patterns of difficulties which are experienced to some degree or other by all students.

This paper, therefore, advocates that we place greater emphasis on identifying patterns in these difficulties, developing meaningful responses to them and then applying those responses to the diverse body of students, allowing us to dispense with labels. To achieve this we propose moving away from Macfarlane's (2011:59) 'up-skilling' of professional support staff and the 'de-skilling' of academic staff, instead 're-skilling' or even 'super skilling' academics themselves, appropriately informed and supported by their specialist colleagues. We believe it imperative that HEPs use the expertise that already lies within its own support specialists to work with their academic colleagues in developing the teaching adaptations discussed in this paper.

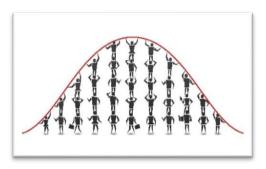
Everybody is Different

'Everybody is different', a familiar phrase, based on observation, given not a second thought. We 'know' that, for example, in any randomly selected group, some are tall, some short and most are 'in the middle'. This frequency distribution, the bell-curve, is well-known in statistics, see Figure 1 (Field, 2009:18-19). Similarly, the bell curve

applies to our learners' academic abilities. However, unlike height, achievement on the academic performance curve need not be static but can be mobile depending upon, amongst other things, the support or teaching received and/or learning strategies evolved.

Figure 1: Bell-curve illustration

(www.thoughtco.com)



We have worked with many learners with SpLDs, for example dyslexia³ or dyspraxia⁴, whose affected cognitive abilities have led in the past to reduced academic performance, and by the delivery of appropriate support achieved just such mobility on the academic curve. We argue that these students' academic performances are merely an exaggerated version of all learners' academic diversity and curve position and hence we can draw on our experience to address the wider diversity in cognitive ability. However, first, we need to make underlying cognitive ability visible.

Making Cognitive Ability Visible

Numerous psychological tests exist to identify cognitive ability. This section describes how these are commonly used before generalising what they can reveal across the whole student cohort.

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³ Dyslexia: A combination of abilities and difficulties persistently affecting the learning process of reading, spelling and writing. Weaknesses include speed of processing, short-term memory, organisation, sequencing, spoken language, motor skills, auditory and /or visual perception. It particularly relates to mastering and using written language, including alphabetic, numeric and musical notation. It is not connected to intellectual ability, socio-economic or language background (Peer, 2006; BDA, n.d.).

⁴Dyspraxia persistently affects fine and/or gross motor coordination and may also affect speech, participation and functioning of everyday life, skills in education, work and employment. Other issues include social and emotional difficulties, problems with time management, planning and personal organisation (Dyspraxia Foundation, n.d.; SASC, 2013).

Since 2005, in the UK, a range of diagnostic tests has been specified for assessing the possibility of learners having SpLDs (DfES, 2005; Jones & Kindersley, 2013). These cover attainments in:

- Underlying Abilities (e.g. verbal analogies, pattern recognition)
- Cognitive Processing (e.g. auditory & visual working memory)
- Phonological memory (e.g. sound processing)
- Manual dexterity (e.g. copy fast)
- Literacy (e.g. word recognition, phonemic decoding, comprehension, reading, writing)

Students with SpLDs, show statistically significant differences between certain of the test results which together with a long term history of missed developmental milestones and educational difficulties, yield a diagnosis of an SpLD. Figure 2 shows one student's results for each of 21 tests, displaying a 'spikey, alpine' profile, typical of a diagnosis of an SpLD, dyslexia in this case. For clarity the names of the individual tests have been omitted.

This student shows strengths (the 'peaks') in the tests addressing vocabulary, phonological awareness and spatial design but weaknesses (the 'troughs') in the tests addressing auditory memory, picture memory, rapid naming (recall), decoding symbols and the written word. Obviously, this student will face significant challenges if the teaching s/he experiences depends heavily upon these areas of weakness.

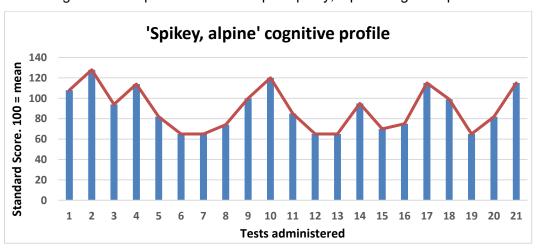


Figure 2: An SpLD student's unique 'spikey, alpine' cognitive profile

Whilst the above profile indicates an SpLD, any student we choose to test would also show some variation across the assessed abilities. Where there is no specific learning difficulty, the profile would, instead of being 'alpine', typically resemble 'rolling hills', with neither significant strengths nor weaknesses, merely quite small relative differences, Figure 3, below. Yet this student might still need extra support, e.g. in auditory working memory (revealed by a low digits backwards score, test 6). The key point for our thesis is that, armed with a number of individuals' profiles , we can reveal 'cohort-wide' patterns of learning weaknesses and so dispense with labels.

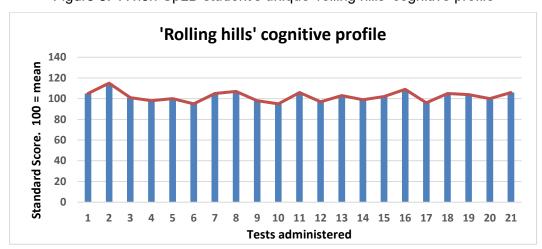


Figure 3: A non-SpLD student's unique 'rolling hills' cognitive profile

Effects of Cognitive Weakness on Academic Work

The diagnostic testing described above has many benefits but only provided the information is correctly interpreted. However, it can be difficult for teachers or support workers to effectively bring to life the information gained to make it not only "comprehensible" but also meaningful in terms of its relevance to students' "performance on classroom tasks"; despite knowing a student has strengths in certain areas and weaknesses in others, the results do little to help the teacher translate this into meaningful pedagogical approaches (Freeman & Miller, 2001: 10). Although this translation may be less difficult for specialist teachers, with the changes to and reduction in DSAs, including the drive to embed inclusive practices within mainstream curriculum delivery, there will be an increasing need to translate "anatomised" (Black, 2001) snap-shots of psychometric tests into more meaningful interpretations to provide effective corresponding teaching adaptations. We offer

suggestions below to provide some of that required interpretation and operationalisation.

To that end, we introduce our Class of 2018, an 'imaginary' group demonstrating a wide range of linguistic, cultural, social and disability diversity, whose individual cognitive abilities have been made visible in actual assessment tests, see Table 1, each with observable and measurable strengths and weaknesses.

As mentioned, these results are "anatomised" possibly appearing complex, but revealing useful patterns. By acknowledging the patterns of weakness we can address the similar and shared consequent academic issues. For example, students 1, 3, 4 and 8 show strengths in **visual patterns (bold)**. In contrast students 1, 2, 3, 5, 6, 7 and 8 show weakness in *rapid naming (bold italics)*.

Table 1: Class of 2018: Assessed cognitive strengths & weaknesses

	Demographic	Strength	Strength	Strength	Weakness	Weakness	Weakness	Weakness
		1	2	3	1	2	3	4
1	F, 30	Visual	Spatial	Spelling	Phonological	Rapid	Vocabulary	Visual
		patterns	design		awareness	naming		memory
2	M, 22	Auditory	Phonological	Vocabulary	Visual	Vocabulary	Rapid	Writing
		memory	awareness		patterns		naming	speed
3	M, 23	Vocabulary	Spatial	Visual	Rapid	Phonological	Visual	No specific
			design	patterns	naming	awareness	memory	weakness
4	M, 25	Visual	Spatial	Digit	Auditory	Phonological	Vocabulary	Writing
		patterns	design	symbols	memory	awareness		speed
5	F, 42	Manual	Auditory	No specific	Visual	Spatial	Rapid	Vocabulary
		dexterity	memory	strength 3	patterns	design	naming	
6	M, 26	Spatial	Manual	Analogies	Rapid	Manual	Auditory	Visual
		design	dexterity		naming	dexterity	memory	memory
7	F, 20	Vocabulary	Analogies	Phonological	Rapid	Visual	Digit-	Manual
				awareness	naming	memory	symbols	dexterity
8	F, 22	Visual	Phonological	Spatial	Auditory	Rapid	Vocabulary	Digit-
		patterns	awareness	design	memory	naming		symbols

Note, we are most definitely not advocating using these tests across our student cohort. We are just reflecting upon our experience of employing such tests to provide insights for us to discuss the underlying issue of the patterns in the variability of students' performance and teaching responses to them.

Table 2 shows the typical effects of these cognitive weaknesses on academic work. Note that the specific range of strengths and weaknesses will vary by class, but the above represents, in our experience, a commonly encountered mix.- Understanding these common patterns of strengths and weaknesses in their classes, we argue, would allow academics to respond and adapt their teaching, whilst avoiding the complexities of underlying individual cognitive profiles and also avoiding labelling by language, culture, social background or disability.

Table 2: Cognitive weaknesses and their effects on academic work

Weakness in	Potential Effects on Academic Work(illustrative list, not exhaustive)
Rapid naming (word retrieval)	 Could be reluctant to participate in seminars. Potentially slow to articulate thoughts. Unlikely to be good with spot questions. Reduced reading fluency. Can appear to have poor specialist vocabulary.
Visual (working) memory	 Difficulty remembering/retaining things shown on boards, slides, posters, books etc. Consequent difficulty encoding/understanding things which can't be remembered. Can appear to have poor specialist vocabulary.
Auditory (working) memory	 Possible lowered ability to remember/retain what lecturer says. May show difficulty keeping up in seminars/group work. Probably has difficulty with multipart questions posed orally. Poor in auditory comprehension exercises. Can appear to have poor specialist vocabulary.
Visual patterns	 Potential effect on spelling. May experience problems decoding graphs/graphical representations.
Spatial design	 May not always see alternative approaches. Possibly challenged by spatial relationships, including sequencing.
Writing speed	 Cannot always take handwritten notes. Possibly won't finish in-class exercises.
Phonological awareness	 Likely difficulty with new words, pronunciation & coping with accents. May not be good with tone of voice – hearing & speaking. Can appear to have poor specialist vocabulary.
Coping with the above weaknesses	 More likely to suffer fatigue – the brain is working overtime to make sense of all the things it cannot handle easily! Typically will experience anxiety, self-doubt, low self-esteem.

Teaching Responses and Adaptations for Diversity

A generalised teaching response suggests that diverse learners, meaning all learners, thrive best when their teachers employ multiple means of concept

representation, concept engagement and individual student expression, typically involving multi-sensory approaches (Voltz *et al.*, 2010; CAST, n.d.; Rose *et al.*, 2006; *Hockings*, 2010; *Mortimore*, 2003). However, we feel that even when multiple means of representation, engagement and expression are used, and even when we are aware of the common patterns of difficulty, teaching an approach which responds to individuals' diversity is also required.

Armed with the range of knowledge, outlined above, about our Class of 2018 students, we suggest some appropriate teaching adaptations using the strategies in Table 3, Column C. This table re-presents the columns of Table 2 but adds a third, C, showing potential teaching adaptations. None of the contents of Columns A, B & C are exhaustive, but merely represent illustrative lists. Additionally; these suggestions are supplemented by the output of a workshop held at the National Association of Disabilities Practitioners, International Conference, 2018, presented in Appendix 1.

For example, an academic could use the fact that the students have strengths in visual patterns and weaknesses in rapid naming to influence teaching. The academic could recognise that those who can see alternative approaches might be good at spatial design, but generally avoid spot questions, especially for those who are quiet in seminars or have difficulty participating in discussions. Further examples are given in Table 3, below.

A further example might involve vocabulary; a number of learners will face difficulties with lack of specialist vocabulary; possibly due to lack of exposure or having few opportunities to practice, typically seen in English as a second language students or non-traditional learners. Equally it could be due to cognitive weaknesses, such as poor word retrieval [affects knowledge retrieval], reduced auditory or visual working memory [affects encoding what is seen or heard], reduced phonological awareness [affects breaking the words into components or recognising the word components]. One teaching adaptation might be to give multiple opportunities to practice new specialist vocabulary at multiple levels of proficiency, see Table 3, below. Hence, knowing the difficulty patterns and academic consequences helps inform teaching approaches.

Table 3: Cognitive weaknesses, their potential effects on academic work and possible teaching adaptations (Illustrative lists, not exhaustive)

Column A Weakness in	Column B Potential Effects on Academic Work	Column C Possible Teaching Adaptations
Rapid naming (word retrieval)	 Could be reluctant to participate in seminars. Potentially slow to articulate thoughts. Unlikely to be good with spot questions. Reduced reading fluency. Can appear to have poor specialist vocabulary. 	 Give more time to speak and avoid class being dominated by the 'quick' responders. Provide enough time for 'spot' question to be assimilated. Ensure spot questions are sufficiently explicit, watch for individual 'body language' to see who 'doesn't get it', repeat the spot question in identical words. Give reading well in advance and never give too much. Focus on the essential. Use structured feedback technique such as PEAL (see the case study below).
Visual (working) memory	 Difficulty remembering/retaining things shown on board, slides, posters, books etc. Consequent difficulty encoding/understanding things which can't be remembered. Can appear to have poor specialist vocabulary. 	 Ideally provide electronic versions of slides/handouts in editable software, e.g. PowerPoint/Word (not PDF) so students can modify to suit own colour/size/font requirements. If giving physical handouts, use ivory, not white, to avoid distracting glare & visual stress. Always number pages/slides and refer to these numbers. Emphasise key terms at the beginning and end of a lecture/session and also write them down where they are accessible to all students.
Auditory (working) memory	 Possible lowered ability to remember/retain what lecturer says. May show difficulty keeping up in seminars/group work. Probably has difficulty with multipart questions posed orally. Poor in auditory comprehension exercises. Can appear to have poor specialist vocabulary. 	 Lecture slides always on Virtual Learning Environment (VLE), two days ahead of lecture. And lecture capture should always be available on VLE same day. Give time for question/comment to be processed and repeat if needs be, using identical words. Re-cap often. Pose each part of the question individually and repeat using identical words. Avoid unnecessary background noise. Let students record sessions.
Visual patterns	 Potential effect on spelling. May experience problems decoding graphs/graphical representations. 	 Spelling non-English or technical words: Words in 'families', over learn one family before introducing next. Graphs: Find different ways of representing graphs. SIMPLIFY so ways numbers relate are obvious. Don't make graphs look 'fancy' - keep very, very simplemore info = more noise = more confusion = less learning.

Table 3: Cognitive weaknesses, their potential effects on academic work and possible teaching adaptations (Illustrative lists, not exhaustive)

Column A Weakness in	Column B Potential Effects on Academic Work	Column C Possible Teaching Adaptations
		Use multiple representations: For some pie charts don't make sense, lookup tables can cause problems.
Spatial design	 May not always see alternative approaches. Possibly challenged by spatial relationships, including sequencing. 	 Let student find the way that works for them and then don't expect them to vary it. Remember it might not work for YOU but if it does for them then leave well alone. Introduce sequencing models/techniques such as PEAL (see case study below) to provide a method of achieving more linear outcomes.
Writing speed	Cannot always take handwritten notes.Possibly won't finish in-class exercises.	 Students free to use laptops/tablets. Give 25% fewer questions to complete rather than 25% extra time (this also reduces fatigue)
Phonologica I awareness	 Likely difficulty with new words, pronunciation & coping with accents. May not be good with tone of voice – hearing & speaking. Can appear to have poor specialist vocabulary. 	 Give multiple opportunities to practice new specialist vocabulary at multiple levels of proficiency. Use the back chain/reverse reveal method to help build self-sufficiency in phonological decoding. Be prepared for questions which might sound aggressively posed, but are not meant that way. Let students record lessons.
Coping with the above weaknesses	 More likely to suffer fatigue – the brain is working overtime to make sense of all the things it cannot handle! Typically will experience anxiety, selfdoubt, low self-esteem. 	 Reduce work load rather than increase time allowed to complete it. Ask yourself, "Do all 10 questions on the same point of need answering. Would 6 do?" Prioritise reading and exercises. Give clear feedback, eg using the PEAL technique.

Moving Beyond the Labels

For 20 years, the UK's HE sector has responded to the developing legislation including the Disabilities Discrimination Act, 1997, Special Educational Needs and Disabilities Act (2001), Equality Act (2010), aimed at reducing and eliminating discrimination against individuals with disabilities and other differences by 'bolting-on' more and more fixes to an existing, and largely traditional education delivery model, as discussed above.

Perhaps our educational preoccupation with the identification and categorisation of difficulties has moved us away from the important matter of "how we can best support and alleviate the difficulties of all those who struggle" (Collinson, 2012:63).

The thrust of this paper is to move beyond the labels, Collinson's "shadows" (Collinson, 2012:69) and traditional 'bolt-on' support. The following Case Study describes one project aiming to achieve Collinson's goal of alleviating difficulties in a small but important aspect of academic life – giving and receiving assignment feedback. The project serves as a valuable example of what can be achieved in one HEP through awareness of a learning problem and a willingness to make changes to teaching.

Case Study - Inclusive Assignment Feedback Using PEAL

The University of Bath's PEAL Project comprised a pilot implementation of inclusive teaching and learning practice and its novelty lay in the way it simultaneously combined working with tutors to improve the quality of their assignment feedback whilst giving all participating students a technique for organising their work more effectively.

Quality and specificity of assignment are vital to all students' progression, especially those with SpLDs. The National Students' Survey frequently identifies feedback quality as requiring improvement (Fernandez-Toro *et al., 2013; HEFE 2017)* In other words, better feedback might benefit the whole diverse cohort; this project tests that suggestion.

Regardless of study subject, students with SpLDs typically experience identifiable patterns of difficulties relating to writing. More widely, many students struggle with the organisation, structure and sequencing of their ideas as evidenced, at least anecdotally, by the number of extra-curricular sessions on the subject scheduled by many HEPs. The PEAL project's rationale viewed students with SpLDs as experiencing an 'exaggerated' version of the challenges all students face, rather than as experiencing a distinctly different set of difficulties. Hence, by directly addressing the needs of this specific part of the cohort, the strategy would be of benefit to all students.

PEAL (Point, Evidence, Analysis, Link) is a well-known, but not universally used, technique for structuring arguments (Best Custon Writing, 2012). By using a formula

to help students scaffold their academic writing development and by embedding it directly within the mainstream curriculum, the project's managing team (the Disabilities Service and a lecturer in the Education Department) could observe and measure the utility of applying such a strategy directly to teaching and learning. The project represented a tangible move away "from...disability in isolation as a specialist silo...towards a joint operation" (Rodger *et al.* 2015:11) where support is integrated and anticipatory (Equality Act, 2010, S. 149).

Rather than take a common and, in our experience, ineffective mainstreaming approach of issuing a top down directive where staff are told they have to make a change to their practice without fully understanding why, the managing team took a collaborative approach, explained below.

PEAL - Engaging both Students and Academics

The initial pilot ran with one group of 30 Education with Psychology 2nd year students from the Department of Education, diverse in social background, disability status and included both national and international students. The group comprised the whole of one course, nominated by a staff member who was interested in developing an inclusive curriculum. Post pilot, the approach adopted by the PEAL project was taken up by additional lecturers in other departments as well as within some service departments. The results discussed below relate to the initial pilot phase.

Working collaboratively with the member of academic staff, we mapped the PEAL technique for developing students' writing to the lecturer's particular subject. An overview of the PEAL strategies and techniques was embedded into lecture delivery and co-delivered to the students by the lecturer and Disability Support. The lecturer involved in the pilot then used the PEAL technique to develop informally his own feedback to learners. Students gave questionnaire-based feedback allowing measurement of the perceived value and usefulness of the approach. The pilot lecturer also gave anecdotal support for the approach.

Did PEAL Appeal?

Regarding their own written work, over 70% of pilot students agreed they would use the technique in the future. Of those who found PEAL useful respondents felt, in descending order, it would help them with structuring paragraphs (92%), staying on topic (64%), evidencing their ideas (56%), developing critical analysis (52%) and getting the balance right between evidence used and own ideas (28%). Overall, 80% found being taught the PEAL technique very helpful as an aid to thinking about or developing their academic writing and 96% agreed that introducing PEAL early in their courses would have been beneficial.

Regarding receiving assignment feedback, 92% of respondents agreed it would be useful if lecturers referred to PEAL when feeding back about their assignments, especially in terms of developing their critical writing skills.

PEAL Moves Ahead

The PEAL project will be rolled out to further cohorts during 2017/19. Work will also be initiated to explore expanding the project's scope to help students develop their reading strategies in relation to their writing development. A similar model of project development and delivery will be used, assisted by identified specialists, including Subject Librarians and the Academic Skills Centre. Additionally, further staff will be supported more comprehensively with marking using the PEAL formula. PEAL has shown that problems are best addressed by multi-disciplinary action. The project illustrates how a technique which is currently used to support students with SpLDs is also one which is appreciated and valued by all once it is presented to the wider body of students.

We believe this outcome could be the case across the range of techniques now used to support learners with SpLDs, namely that the wider cohort would also benefit from their usage.

.A Future Model for Inclusivity?

This paper aims to move forward the debate about accommodating diversity in HE through operationalising greater inclusivity. We have used our experience in making cognitive diversity visible to identify what we have refer to as 'patterns of common difficulties'. We have looked beyond the labels of individuals' differences and the current 'bolt-on' support model to offer some teaching strategies matched to those common difficulties. We have also offered an example from one HEP's inclusive learning strategy, which dispenses with labelling students and addresses, within modified mainstream teaching, two commonly reported patterns of academic difficulty – organising written work and giving and receiving assignment feedback.

We argue that modifying teaching approaches to achieve greater inclusivity might need a modified definition of inclusive learning and teaching and that such a modification can only be developed and mainstreamed by a detailed understanding of the strengths and weaknesses within the student cohort. Put simply we need to fully understand the nature of the problem before we can address it. This understanding will allow teaching solutions to be appropriately designed and deployed across cohorts.

As the PEAL project demonstrated, a consequence of modifying teaching approaches is that academics have to be 'on board', supported by their HEPs' own specialists in understanding diversity and its own teaching and learning development teams working together with its student cohort to deliver more inclusive teaching. No one group can progress inclusivity alone; to borrow a phrase from the 1990s' US disabilities rights campaigns, "nothing about us without us" (Charlton, 2000); all involved in achieving inclusivity need to be involved in that process of achieving it.

Our hope is that this paper acts as a signpost for others to follow in creating a more inclusive teaching environment. We are in a joint pursuit of 'diversity for everybody, achievement for all' by dispensing with labels and addressing patterns of difficulty through multi-disciplinary working.

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Appendix 1. Patterns Not labels - Workshop Participant Output, 25/6/18

The information presented in this Appendix is based upon input provided by attendees of a workshop held by two of the authors at the National Association of Disability Practitioners (NADP) International Conference, June 2018. The self-nominated group of 30 attendees, were presented with a summary version of this paper, *Diversity for Everybody, Success for All: Patterns Not Labels*, before being asked to work in pairs or small groups to identify issues they had individually faced during their higher education. Attendees were asked to identify the problem(s) they experienced, the teaching style or method which gave rise to the problem(s) and the strategies they felt could/should have been adopted by the teacher/lecturer to reduce or remove the problem(s). Responses were written by attendees themselves into a table over the course of 20 minutes followed by a 5 minute plenary. Twelve response sheets were received, some based on individual's experiences whilst some were amalgamations based on all the members in each groups. There were numerous repeated problems and also numerous repeated potential solutions.

Of importance to this paper is the fact that within this self-selected group, patterns of difficulties emerged without the need for or any reference to labels.

Table 4: Problems Caused by Lecturers' Actions, Behaviours, Style; Effects on learning and Potential Teaching Responses

Problem Caused by Lecturer's Action/Behaviour/Style	Effect on learner	Possible Teaching Responses
Lecturer assumed I could write in 1 st person for psychodynamics course' when all my training had been to write in 3 rd person. [General issue: Assumption of prior skills, knowledge and/or experience.]	 As I didn't have the skill, it made me feel I didn't belong. The curriculum became inaccessible to me until I learned the skill. 	 Check on students' prior knowledge/skills, make no assumptions. Be clear about what assumptions are made. Hold practice sessions for any writing style/special requirements of the course.

Table 4: Problems Caused by Lecturers' Actions, Behaviours, Style; Effects on learning and Potential Teaching Responses

Problem Caused by Lecturer's Action/Behaviour/Style	Effect on learner	Possible Teaching Responses
		4. Draw on/use knowledge in the room [use buddy system, students support each other]
[General issue:1. Assumption of course members' current capabilities.2. Assumption about course members' inter-personal skills.]	 Huge anxiety. Made me freeze Felt I was being judged by my peers. 	 In training sessions about public speaking be honest about the difficulties of doing it [some will always fear it]. Make course an emotionally safe environment. Only ask people to speak publicly once they know each other. Hold sessions where course members discuss issues of mutual trust. Offer alternative ways to deliver stand-up presentations [e.g. prerecording a video] and/or start with
Always ordering activities (e.g. Presentations) in family name A-Z alphabetic order led to anxiety. [General issue: Assumption that a generally used approach suits all.]	As my surname name was at the end of the alphabet, by the time it got to me I was always a quivering wreck.	smaller [e.g. 1:1] presentations. 1. Use range of ways of ordering contributions [e.g. vary by using both ascending and descending alphabetic order, on given name and family, course member choice, random]
Materials not circulated beforehand so I couldn't preview lectures which forced me to listen and take notes simultaneously, which I could not do.	The course was not accessible to me as I can't	Materials should always be available well beforehand [e.g. Moodle/blackboard].

Table 4: Problems Caused by Lecturers' Actions, Behaviours, Style; Effects on learning and Potential Teaching Responses

Problem Caused by Lecturer's Action/Behaviour/Style	Effect on learner	Possible Teaching Responses
[General issue: Assumption about rate of assimilation of academic materials.]	write fast enough to take notes simultaneously. 2. Couldn't understand the new terms/ideas given in the lectures as had no time to find out their meaning or become familiar with them.	 Always check on students' prior knowledge/skills. Don't assume students' knowledge/skills/abilities Encourage alternative approaches [e.g. recording allowed, lecture capture, notes' sharing] Provide notes to accompany slides.
 Lecturers present information too quickly. [General issue: Assumption about ability to assimilate information presented simultaneously through multiple senses. Assumption about the degree to which hearing = understanding.] 	I can't keep up so I fall behind then disengage from the lecture or seminar.	Check frequently with students regarding pace and learning, not just by a show of hands but by using a method in which everybody can participate without breaching confidentiality, e.g. use voting pads/apps.
Lecturers talk over presentations. [General issue: Assumption about ability to assimilate information presented simultaneously through multiple senses.]	I can't absorb visual and auditory input at same time and so disengage.	 Pause between visual and auditory input. Repeat auditory input, describe what is shown visually. Show and say less and do both more slowly.
Key words are not explained. [General issue: 1. Assumption about prior knowledge. 2. Assumption about ability to understand specialist vocabulary.	I miss concepts and explanations which are based on use of keywords as these are not understood so I don't get the knowledge transfer.	Offer strategies to students: a. Keep keywords in view, e.g. in margins of presentations. b. Use 'key terms' crib cards Introduce the keywords/concepts separately/slowly and allow time for assimilation.

Table 4: Problems Caused by Lecturers' Actions, Behaviours, Style; Effects on learning and Potential Teaching Responses

Problem Caused by Lecturer's Action/Behaviour/Style	Effect on learner	Possible Teaching Responses
Assumption about ability to recall, on demand, specialist vocabulary.]		Be clear regarding what assumptions are made about prior knowledge.
Too much information is given.	Missed a lot, maybe the most important parts.	Obtain student feedback early and often.
[General issue: Assumption about rate of assimilation of academic materials.]		Take action to give less information or give it in alternative ways.
academic materiale.j		Break lecture down into smaller segments.
Information is badly presented and/or badly written.	Missed a lot.	Obtain student feedback early and often.
[General issue: Assumption about of what might constitute clearly written/presented material for students in general and specific groups in particular.]		Have material critically reviewed by colleagues prior to delivery.
Slides/other visual material taken away too quickly.	Only gained partial knowledge, no time to absorb before the next	Obtain student feedback early and often.
[General issue:	slide/visual material makes me	2. Pace delivery.
Assumption about rate of assimilation of academic materials.]	forget the prior material.	3. Give time for catch-up.4. Repeat material (but not too quickly).
Lecturers assumed that everybody can take notes, I couldn't.	Never knew which were the important points to focus on.	Look at things from students' point of view.
[General issue:	Revision was very difficult – too much information.	Obtain student feedback early and often
Assumption about ability to fully absorb from auditory and visual senses whilst still having sufficient executive function to condense information into notes.]		3. Have certain students volunteer to take notes which are shared with all.4. Provide summaries of and/or clearly identify key points.

Table 4: Problems Caused by Lecturers' Actions, Behaviours, Style; Effects on learning and Potential Teaching Responses

Problem Caused by Lecturer's Action/Behaviour/Style	Effect on learner	Possible Teaching Responses
Too theoretical, questions not encouraged, no reinforcement.	 Couldn't relate to the material. I/we weren't prepared and so I/we couldn't understand the 	 Illustrate theory with practical examples. Encourage questions.
[General issue: Assumption about students' different learning preferences.]	new material.	3. Pair working to give mutual support.
Assessments focused on the negatives, seemingly never the positives. [General issue: Approach to marking may be inappropriate for some course members.]	 Caused stress and anxiety. Destroyed my confidence. 	 Assessments should recognise success as well as areas for improvement. Use alternative methods of assessment.

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Dialogical Encounters with Disability in Integrated Dance Education

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Abstract:

This article (based on a paper presented at the NADP 2018 conference) discusses the social encounters taking place within the context of integrated dance education programs partnering students with and without disabilities, taught by teachers with and without disabilities. The paper is based on a larger anthropological research focusing on teachers' and students' practices, knowledge, and attitudes towards disability and bodily difference in integrated dance and is based on fieldwork conducted in projects of integrated dance in Israel and the US.

The activities I discuss here require participants with and without disabilities having a shared understanding and implementation of concepts such as rhythm, partnering, and pacing, which, in this context, are taught, learned and expressed through multiple modes. These encounters challenge the taken-for-grantedness of the ways in which one performs with his/her body, creating performances that provoke a critical understanding of what a body can do and what disability is. The research reveals the ways integrated dance delivers complicated messages about disability, embodiment, and dance, and its unique capacity to embrace and include cultural binaries and differences within the same social and physical encounter. In other words, integrated dance education is a context that enhances disability experience, and can be considered as an inclusive educational practice. This enhancement is expressed by 1. Practices of study and exploration 2. A development of participants' kinaesthetic awareness, and 3. A change in perspectives regarding the meaning of disability.

Introduction

When I read that the theme of the NADP 2018 conference was "Ensuring quality provision", and saw its aim of "sharing solutions ... in order to allow opportunities to positively affect how quality principles are applied across the world" (NADP website, 2018), the educational and social practices I have been documenting in my study on integrated dance immediately came to mind. These programs challenge stereotypical

notions of ability and disability, and expand participants' understanding of what their bodies and others' bodies can do, and how they should look and move. I believe that the type of meetings and the dialogues taking place in integrated dance can offer a blueprint for quality provision in the field of disability, and within social encounters with social otherness more broadly.

My research, which began in 2014, explores the construction of sensory practices and disability embodiments within the emerging phenomenon of "disability performance" art" (Garland-Thomson, 2000) in Israel and the US. This phenomenon is part of what has been identified as "Disability Culture" (Kuppers, 2004; Peters, 2010) -- a movement and a collective awareness through which people with disabilities claim their condition as a basis for positive identity politics, which has led to numerous initiatives, many in the arts.⁵ In my research on disability culture, I focus on dance programs and companies in which people with and without disabilities collaborate in the creation of public artistic performance. 6 The programs comprise participants with a wide spectrum of abilities and body types, including performers using wheelchairs, crutches or prosthetics, dancers with one arm or leg, and dancers without disabilities with diverse bodies in terms of height, size, strength, and age, and some with cognitive disabilities. All of the programs I study have an educational component, including teacher training programs, in-studio dance classes, and school-based projects with youth from age 5 to 18. These initiatives commonly include not only students with and without disabilities, but also teachers with and without disabilities, and are based on a model of co-teaching.⁷

Methodologically, the research is based on fieldwork I conducted in five programs of integrated dance in Israel and the US from different genres: integrated ballet, modern dance, dance-theatre, contact improvisation, and sign-language dance theatre. Fieldwork

⁵ Disability culture is identified, for example, with Deaf Culture, which asks to recognize deaf with capital D, not as a medical problem needing curing, but as a social identity with its own cultural practices, offering the term "deafhood," which emphasizes a deaf sense of being and a belonging to a community (Padden and Humphries, 2004). In my doctorate research I used the ideas of disability culture to offer the term "sensory capital" (Hammer, 2012) of blind women, through which they accept, and even celebrate their difference.

⁶ My research on integrated dance emerged from a theme I wrote about in my previous study, in which I explored blind women's gender identity and the cultural construction of blindness and sight (Hammer, 2013). When I talked to blind women about their everyday gender performance, they described a common experience of feeling like a performer and a spectacle when simply walking down the street, attracting gazes and stares from people because of their blindness. This made me think about the junction of disability and performance.

⁷ See, for example, an introductory video of an Israeli teachers' training program of integrated contract improvisation: https://www.youtube.com/watch?v=l2knv3y7ZHo

included 63 in-depth interviews with practitioners, educators, directors, curriculum writers, and participants with and without disabilities; hundreds of ethnographic observations of classes and workshops; and content analysis of publications about integrated dance.⁸

My research questions focus on the formation of embodiment, movement, ability, and disability in integrated dance. When I look specifically at educational programs of integrated dance, I ask about the ways integrated dance programs and companies promote a dialogue about difference and influence equality. These programs bring into a shared space two categories considered oppositional and in conflict with each other: dance and disability (Aujla and Redding, 2013; Broyer, 2017; Cooper-Albright, 1997; Harari, 2016; Kuppers, 2001). In our cultural imagery, dance is typically associated with ability, strength, and physical capital, while disability is associated with weakness, dependency, and lack of physical strength. Moreover, dance is traditionally identified with aesthetics, beauty, youth, and sexuality, while disability is identified with sickness, old age, death, and asexuality. Thus, the meeting between these two categories often engenders suspicion regarding integrated dance's artistic value, and disbelief that disabled people can actually dance. Broyer (2017), an Israeli scholar of dance and disability, addressed this complicated conjunction, which threatens to turn this type of dance into what she calls "dis-dance." "The common assumption," she writes, "that disabled people lack the ability to dance creates an almost unbridgeable distance between the impaired body and the dancing body. These two bodies are loaded with conflicting cultural meanings to the extent that attempting to connect them generates an epistemological collision." (Broyer 2017, 32)

This "epistemological collision" taking place within integrated dance is what I find so fascinating about this phenomenon. Just imagine the reactions of kids of every age when a wheelchair user rolls into their classroom or dance studio and is introduced as their guest teacher, coming to give them a dance class no less. Their shock stems not only from the fact that they're not used to seeing people with disabilities in positions of authority, but also from the idea that someone with a disability could teach them about dance. The seeming impossibility of it immediately raises critical questions about what

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⁸ Methodological issues that are outside the scope of this paper relate to my own participation in the observations, the role of my body in the study, and the challenges of writing and producing a written text on an embodied research subject. On these matters, see: Ophir, 2016; Samudra, 2008.

When quoting participants, I refer to them using the term by which they identify themselves (disabled/with disabilities), and use an alias unless research participants asked to be identified by their own name.

constitutes movement, dance, and ability, and through physical contact with disability and a body different from theirs, the activity soon engenders curiosity, surprise, and exploration of the nature of the dancing body.

Theoretical Context

I explore integrated dance through several theoretical prisms, including: Disability culture's research on the empowering force of "disability performance art" (Garland-Thomson, 2000; Kuppers 2004; Quinlan and Bates 2008; Quinlan and Harter 2010; Sandahl 2004); the cultural study of performance which examines dialogue as a critical, self-reflexive tool (Conquergood 1985; Garland-Thomson 2009); and research on the moving body (e.g., Manning 2014; Sheets-Johnstone, 2018; Sklar, 1994). Integrated dance education programs allow me to bring into a mutual conversation studies from the field of physical education with theories from the field of the anthropology of the senses (including the kinaesthetic sense) – both arguing for the importance of movement as both a physical and cultural practice.

Studies of physical education have pointed out the benefits of inclusive physical activity for participants with and without disabilities (Brittain, 2004; Taub and Greer, 2000; Vickerman, 2012). McCaughtry and Rovegno (2001), in their article on the role of physical activity in education practices, discuss for example, the wide and varied roles movement has for students (not disabled), including the development of self-confidence, self-respect, honesty, and responsibility; a willingness to cooperate, and an openness to incongruity. Movement, they demonstrate, also affects the development of aesthetic attitudes, such as playfulness, openness to diversity, openness to exploration, gracefulness, harmony and balance. Iris Young (1980), who already explored movement socialization in the 802, wrote on the ways young girls and boys are taught to move and use their bodies and demonstrated how movement affects the social opportunities

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⁹ Previous research on disability performance art has identified disability culture's role in challenging cultural norms about the body as well as racist and ableist ideologies, yet largely focuses on individual performances and productions by artists with disabilities (e.g., Fox 2007; Hodges at el. 2014; Lipkin and Fox 2001; Saur and Johansen 2013). This project's focus expands the scant available research on dance pedagogy for dancers with disabilities (Aujla and Redding 2013; Morris et al. 2015; Whatley 2007) by examining effects of integrated dance education on social opportunities, disability equality, and attitudes towards disability.

¹⁰ Research within the field of anthropology of performance has indicated that dialogue between individuals different from one another may result in new understandings of social identities (Conquergood 1985; Schechner 1985; Turner 1986). It is therefore significant that differences among participants in integrated dance education are not eliminated but, ideally, are employed to create physical, emotional, and social interactions that promote self-reflection and agency (Garland-Thomson 2009).

women have later in life and the way they understand their bodies. Scholars of physical education, therefore, tell us that movement can contain deep educational meaning, enriching our "store of sensory perceptions" (McCaughtry and Rovegno, 2001, 498).

Anthropologists of the body and the senses share a similar enthusiasm about movement, addressing it as crucial in the formation and expression of social identity and cultural ideology. Anthropologists of skill-making, of sports, dance, and martial arts have argued for the ways culture affects and mediates our sensory practices, perceptions, and experiences, including the kinaesthetic senses (Bar-On Cohen, 2006; Downey, 2010; Geurts, 2002; Hammer, 2017; Parviainen, 2002; Spinney, 2006). The philosopher of the body Maxine Sheets-Johnstone (1999) calls movement "the mother of all cognition" (253) and reminds us that movement is the initial way in which we communicate with the world as infants, while language and verbal expressions come later. And the dance scholar Sklar (1994) argues that: "Movement is a corporeal way of knowing. It is as loaded with significance with who people take themselves to be" (11).

My study of integrated dance education builds upon and contributes to these studies. First, investigating educational practices in integrated dance exposes how the shared participation of students and teachers with and without disabilities in an activity requiring physical intimacy, collaboration, focused attention, and trust can change participants' attitudes about disability and enhance social opportunities. Secondly, integrated dance allows exploring what the anthropologist Marchand (2010) called our "embodied cognition." Students and teachers engage in a mutual exploration of rhythm, use of space, partnering, the centre of gravity, exposing and articulating the ways kinaesthetic knowledge is learned, taught, and transmitted, and the conscious aspects of physical habitus. Thirdly, integrated dance contributes to the study of the nature of the kinaesthetic experience because it focuses on disability as a "kinaesthetic culture" (Samudra, 2008). Like dancers and people of other embodied professions, people with disabilities who have experienced injury develop a meticulous kinaesthetic awareness of the body through relearning or understanding different concepts such as range of movement and centre of gravity (O'Donovan-Anderson, 1997 in Parviainen 2002, 17; Sobchack 2005). Integrated dance therefore, bringing together two kinaesthetic cultures,

¹¹ The kinaesthetic sense has been identified as "the physical qualities of meaning in movement" (McCaughtry and Inez, 2001). For a broader definition of the kinaesthetic sense of motion, see: Potter, 2008, 448; Sklar, 2000, 72.

dance and disability, allows questioning the social conventions that understand disability as a lack of movement, promoting instead a more sophisticated understanding of a spectrum of mobility and disability, and allows asking about the ways values such as pathological/normal are manifested in and maintained through bodily practices.

Dialogical Encounters with Disability in Integrated Dance

The meeting of people with diverse abilities in integrated dance fosters participants' critical self-reflection regarding the notions of embodiment, ability, and disability. This critical awareness is expressed and based on three dynamics taking place in integrated dance: 1. Practices of study and exploration 2. A development of kinaesthetic awareness, and 3. A change in perspectives regarding the meaning of disability.

Study and Exploration

The dialogical encounters taking place in integrated dance are created by the dynamics of study and exploration. The engagement of bodies with and without a disability requires asking questions, verbalizing the body and its abilities and limitations, and mutually exploring movement possibilities. While in an integrated dance setting we cannot take for granted faculties such as carrying weight, doing lifts, conducting floor work, walking on two legs, and being able to sense touch through the whole body, we might also be called to question common associations of the disabled body as fragile and vulnerable, something that needs to be treated with caution. Therefore, dancers working together in integrated dance *must* communicate their specific abilities and explore their range and possibilities of movement together. In other words, integrated work invites hesitancy; a suspension of what we take for granted.

Aspects of study and exploration were present in my research observations in the dance studio and in the classroom. In 2015, I watched three new dancers in an American integrated modern dance company studying a work that had been created a year before for two nondisabled dancers and a wheelchair user dancer. Learning this piece posed a challenge to the new trio, since Dwayne, the wheelchair user dancer, had a different type of injury from the dancer he replaced, in a different location in the spine, which meant that Dwayne's range of movement, the body parts he moves, the way he uses the chair, and the body parts in which he has sensation are different. Dwayne sits in the chair differently, stretches his arms differently from the original dancer, and has a different

aesthetics of the fingers, arms, and shoulders. While watching them I wrote in my field journal: "When Dwayne opens his arms and does the sequence of movements, he can't stretch his fingers into straight lines, and all of a sudden the shoulders get the focus. The folding fingers bring new aesthetics to the piece, and his movement from the shoulder, through the arm, to the fingertips, creates whole worlds of meaning with a new nature and quality." The specific ways Dwayne moves required the new dancers to re-explore, "to solve", as they put it, how to travel on stage and to partner.

Another instance in which dynamics of exploration and study came to the fore occurred in the classroom, in one of my observations in an Israeli year-long, schoolbased project in which 16-year-old high school dance students met once a week with a group of disabled youth from the same city, to create an integrated dance piece they performed at the end of the year. In a workshop dedicated to what one of the teachers, who uses a wheelchair, called "a sharing-weight laboratory," groups of students, each including one student with a disability, explored different techniques of tilting, and of giving and sharing weight, and maintaining balance. The students carefully investigated what their bodies could do together, how their different centres of gravity could meet, and how to use their bodies and equipment to create balance and weight-sharing possibilities in space. The teachers explained that the goal was not to create the highest lift or the fanciest position, but to explore and "expand their movement options" by learning and exploring the essence of pushing, pulling, falling, and learning among different bodies, becoming aware of the tonus of the body, of angles, intentions, and momentum. In my field journal, I described: "In this class, the students' bodies become tangled. An entanglement of balances, connections, points of touch, weights, is created. Creative structures of balance are formed as bodies move along. There's the joy of creativity and exploration in the room. Structures of shared effort and bodies."

Embodied Awareness

The second dynamic that constitutes dialogical encounters and self-reflection in integrated dance is the development and expansion of participants' embodied and kinesthetic awareness. Susie, a nondisabled dancer, described the new techniques she developed by working with someone different from herself: "Depending on who you're working with, you pick up different skills [...] Working with... someone who works in a wheelchair, you just have these moments of pivots and swooshes and you can try to

replicate them in your own body ... and if you're the kind of person who is interested in picking up bits from other people, it's such a rich pool of information."

Participants' kinaesthetic awareness is expended in integrated dance not only to new movement possibilities but also to a discovery of the art of stillness and small movements. In the school project I described earlier, for example, the choreography for the end of the year performance was based mainly on the movement of folding and stretching the hand. The two teachers deconstructed the movement to its smallest segments and asked the students to explore the simplicity of taking the hand to the side and stretching it forward. The students practised a new awareness of the ways body parts like the chin, the forehead, and the ears could lead the movement, and the ways small gestures of the head and hands may receive beauty and richness. "I discovered the beauty of simplicity," one of the dance students told me when I asked about what she learned in the workshop. "I discovered that lack of movement is not the opposite of movement," another commented. "You can also move when you're still, through breathing and touch. And to use each other's body as a source of inspiration." "12"

An expansion of participants' embodied and kinaesthetic awareness takes place in integrated dance also through a practice called "translation"- an adaptation of movement from one body type to another, and its translation to varied forms of movement. The practice of translation involves distilling the essence of a movement, and then translating its essence to different locations, body parts, and ways of moving. For instance, the translation of the movement called in contact improvisation 'starfish,' which includes a contraction and opening of the body, like a starfish, focuses on the principles of expansion and contraction. One participant, therefore, may contract and stretch the entire body, another the hands, and another one the eyes only.¹³

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¹² Participants' discovery and new awareness of the value and artistic possibilities of small gestures, of shaking, and of floor work, are important not only in order to enlarge participants' embodied awareness, but also in order to challenge ideological, cultural, and kinaesthetic structures of power in an additional discussion on this matter, see: Wood's (2012) writing on "critical spatial practice" dance and in the everyday life that are based on verticality, phallic, speed, and virtuosity. Bodily awareness created in integrated dance continues the critique started in 1980s by dancers, choreographers, and artists who challenged the political ontology of dance by performances of stillness and slowness, performances that included crawling, and non-vertical walking (Lepecki, 2006). For an additional discussion on this matter, see: Wood's (2012) writing on "critical spatial practice."

¹³ The term "translation" is used by practitioners in the field, and I find it very meaningful, since it brings into a shared space the somatic and the semiotic. Quinlan, and Harter (2010) in their article on the integrated ballet company Dancing Wheels mention this term as used in this company. For additional discussion of what I call "sensory translation" and the way this tern is used by anthropologist, see: Hammer, 2017.

Rethinking Disability

The third dynamic dialogical encounters in integrated dance are based on, is a change in perspective regarding disability that emphasizes a spectrum of abilities rather than lack of skills, rethinking disability outside the normalizing ideology. In this regard, disabled dancers emphasized the ways working in an integrated setting, and having disability valued within a non-hierarchical structure, changed their view of their bodies. Nondisabled dancers also talked about how they came to see disability differently because of the integrated work, becoming much more aware of issues of accessibility, for instance, and to the stigmatic ways disability is treated.

Change in disabled dancers' perspectives came up in my interview with Hailey, a dancer who was born with a disability that affects bone development. "I had a very narrow definition of who dance was for - who people would want to watch dance," she said. Hearing for most of her life messages emphasising what she *can't* do, and internalizing ideas such as, "my body doesn't fit in," "my body has pain," "my body looks different than everyone else's," Hailey spent "many years trying not to listen to my body." "I just wanted to be as normal as possible," she said, "I didn't want to be different, I didn't want everything to be harder." With this as her background, watching and participating in an integrated dance program was very meaningful, offering her a lens which suggested that "disability can be cool, and athletic, and dynamic." Integrated dance not only offered Hailey a different way of approaching disability, but also legitimized her way of moving. "I can get out of my chair, I can't walk, but I can crawl; and I can kind of walk up-right on my knees. [But] being a woman, get[ting] a little older and as a pre-teenager, you want to be cool, and you want to fit in, and you want to feel pretty, and sexy, you don't want to crawl around on the ground [...] And so [integrated dance] was really inspiring to me, to explore more of how I can move and what I can do."

Conclusion

Following the call of disability studies in education for an interdisciplinary expansion of policy, theory, research, and practice that takes disability beyond the "monopoly" (Connor 2012) of special education, my research addresses integrated dance education as a platform with the potential to create a rare form of quality provision, an inclusive education that promotes a meaningful dialogue among participants of all abilities. Within these environments, disability is understood and expressed not as a deficit or

insufficiency, but as an additional human experience; as such, all participants can engage in the activity as full members and expand their bodily and kinaesthetic awareness. This context is important, since the typical social encounter with disability asks to normalize it into the normative social order, in which disability is a liminal category located between death and health (Garland-Thomson, 1997; Hughes, 1999; Snyder and Mitchell, 2006), or in Mary Douglas' (1966) terms, "a matter out of place." Examining the rich mosaic of gestures, movements, and motions in integrated dance indicates the ways physical and symbolic space may bring together different worlds of being not only through a discourse of rights or access but also through an alternative conceptualisation of bodily experiences. If we go back to Nili Broyer's (2017) term I mentioned earlier, integrated dance is not a "dis-dance" but a type of art that takes its inspiration from the disabled body, or in this case, from the meeting between different bodies, through an experimental, critical, somatic listening.

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Universal Design for Learning and Digital Environments: The Education Superpower

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Abstract:

Universities serve a more diverse group of students then ever before, including students with learning disabilities. These institutions are also increasing the amount and types of digital learning environments students use. Meeting the needs of such a diverse student group with changing resources is a dynamic problem. The Universal Design for Learning (UDL) framework has the potential to support professors, lecturers, and course designers as they create academic events for this wide group of learners in every field of study. This paper examines the core concepts of UDL and presents specific examples in digital university teaching constructs. Students with diverse learning needs can be served in the same environments as more traditional students when this design framework is employed. UDL can be leveraged as an instructional superpower to the benefit of all learners in universities and post-secondary courses.

In the United States, particularly in the State of California, there has been an increase in the number of students with diverse learning needs, such as special education, and an amplified awareness that students have had a wider variety of learning experiences. For example, in The California State University system the number of students who are first in their families to attend college, students from poverty, and students whose first language is not English is increasing ("The California State", n.d.). As these scholars access university systems there is an awareness that these learners bring unique experiences that challenge long held believes about what university students should know and understand about the college experience.

In order to address this new diversity of learners accessing post secondary institutions, colleges, universities, and community colleges are finding that continuing with the same academic policies is not working. Treating the influx of students as if they had the same needs as students from fifty or more years ago is causing a lot of students to fail, and a lot of lecturers or professors to feel as if they are not meeting the needs of their learners. Instead of maintaining the status quo, many in education are searching for ways to

increase the success of this diverse group. Many universities believe diversity in the student body is helpful to the success not only of the institutions, but also of society as a whole.

Designing learning environments to meet the needs of a diverse student body is the purpose of the framework known as Universal Design for Learning (Meyer, A. & Rose, D. H., 2005). This paper seeks to explain the goals of Universal Design for Learning (UDL) as a way to leverage the power of education and enhance the success of students. In addition, using the UDL framework will increase the success of lecturers and professors in reaching the educational goals set out for curricula. Finally, this paper highlights the value of the the UDL framework in digital environments. The popularity of digital learning is increasing in all post secondary settings (Research on the Effectiveness of Online Learning, 2011). It is interesting to consider that not only are many classrooms digital, but information dissemination at universities, like advising, is also increasing digital. Students and faculty alike rely on university websites and email communication as well as social media tools like Facebook and Twitter to understand information previously given in faceto-face settings with advisors or administrative assistants. The design of digital environments, and digital learning events can be enhanced by the UDL framework (UDL On Campus, n.d.).

Online instructional environments can support many types of learners by providing content using a diverse range of instructional media including audio, live interactive discussions, and prerecorded video. Current technology-based accessibility features (e.g., text-to-speech) add to the allure of online environments for people with disabilities. In fact, the continued growth, availability, and convenience of online courses is leading to enhanced participation by all groups of students, most notably those with disabilities (Thompson, Ferdig, & Black, 2012).

This paper is based on a keynote speech given by the author at the 2018 International Conference for the National Association of Disability Practitioners (Coy, 2018). Following the general shape of the speech, this paper will will first outline the author's personal and professional journey to the UDL framework as the working lens for my work as a teacher and researcher at the University of California, Fresno. Next the paper will explore the goals of UDL, especially as a framework for the university setting, and finally specific examples of UDL in action will be presented.

All About Me

Several confessions are necessary to get started. One, I am obsessed with Universal Design for Learning. In may ways it is difficult for me to see this (common for most obsessives), however when my own life partner banned me from the combination of drinking wine and talking about UDL, I was able to see that friends at cocktail parties probably did not need to know about neuroscience or that multiple forms of representation helped to create resourceful, knowledgeable learners, or that Dr. David Rose was a genius. I am not still not perfect when it comes to this rule, just better.

And two, I have a diagnosed anxiety disorder. Frustratingly, I am most impacted during two tasks. One is giving speeches, most especially in front of peers, and the other is writing for peers. Since this is my profession I have needed to find ways to work with myself so that I do not just give up. One of the most effective tools I learned for addressing my anxiety was through the discipline of neuroscience. When the brain is nervous, like when I am at the beginning of a speech, or at this very moment writing a piece for an educational journal, I become hot and uncomfortable. I can have trouble concentrating and organizing my thoughts, and I imagine I am loosing control of my physical body. I often have trouble forming sentences and seeing clearly, and I always feel inadequate. Neuroscience informs me that the same physical reactions also happen in my body when I am excited. The experience of getting on a plane to go somewhere amazing (the UK of course), getting off a ski lift to begin skiing down a trail, or getting on a new horse for the first time can all be thrilling. I love doing these things, and I get so excited! When I speak or write I have learned that I can trick my own brain and body. I say out loud, "I am excited" both when I am doing something fun and when I am doing something anxiety producing. This helps me to associate the physiological reactions of anxiety with an enjoyable experience. My research into the importance of neuroscience in UDL gave me the idea to try this. It has also helped me to understand that in fact teaching, talking in front of large groups of smart people, and writing does excite me in a positive way.

I am also dyslexic. This is another strength that I used to perceive as a weakness. Although I have been dyslexic brain since birth, I was not diagnosed until I was in graduate school getting my teaching degree. This is where I learned what dyslexia was (Høien and Lundberg, 2000), and it was a comfort knowing that it was not that I was not

trying hard enough to spell word correctly or to read new material, but that my brain was just wired a bit differently. And as my daughter grew up with dyslexia I was able to witness as a parent how being dyslexic could be a gift. It allowed her to see the world in creative and interesting ways and pushed her to learn new skills What I did not realize until recently was how pervasive my self-doubt was due in part to being dyslexic. At a faculty meeting I recently mentioned I was dyslexic because I had reversed something on a PowerPoint slide. One of my colleagues rolled his eyes and said, "Oh I know, you say that all the time." What I felt when he said that was shame. Later I got angry. I realized that my own self-perception had been shaped very much by what I could not do in my primary and secondary school years. I overcame a lot of difficulty because much of the education world told me I could not do it. I had to persevere through doubt. I am proud of that. I am dyslexic, and I plan on continuing to tell people.

A brief journey to Universal Design for Learning

As I was working towards my teaching degree in the late 1990's I learned about Multiple Intelligences (Gardner, 2011). Howard Gardner's work seemed almost magical to me. There was more then one type of intelligence? I imagined my future classrooms arranged in eight sections. Each student would be placed by dominate intelligence, and the content of the course would be delivered by text, or music, or numbers, or they would all hang out and learn from each other if the students were of the interpersonal type. It is painfully obvious from my current lens that I had no real experience as a teacher. This idea, while exciting and powerful, was too unwieldy by itself for me to put into practice.

Next I read about Learning Styles (Cassidy, 2004). In this theory, each student has a modality through which they understood new content best. For example, a learner could be a visual or auditory learner and would understand new material best if it was delivered in their preferred modality. Now I felt my ambitions were more focused. I could present material in several ways so that each student would learn through their preferred learning style. I was already teaching in a classroom by this point, so I was able to learn about my students and assess which learning style was best for each of them. Then I attempted to give them opportunities to learn by reading or audio, and to respond by talking or writing, or movement, or art. This was so difficult, but I persevered until I realized I just could not consistently deliver on the mechanics of this in the classroom. In the last several years the concept of learning styles has come under a new lens, as the evidence-based

research has not shown significant gains in the concept (Pashler, McDaniel, Rohrer, & Bjork, 2008). UDL (Gordon, Meyer, & Rose, 2016) suggests that humans all have a preferred style based in the context of the learning event and that preferences shift and change as the context changes.

When I was working in an inclusive school setting, both students with and without identified learning needs in the same classroom, I was introduced to Differentiated Instruction (Levy, 2008). This seemed like a very robust framework. Differentiated Instruction worked to differentiate based on students current ability in a concept but I realized that I had to really know the students before I could begin to make progress. By this time half of the school year had passed, or most of a semester, and a lot of possible instruction time may have been lost. This framework worked to differentiate for each student, in each concept, within each content area, but in practice it was impossible to do well or at least to achieve the type of impact we hope for.

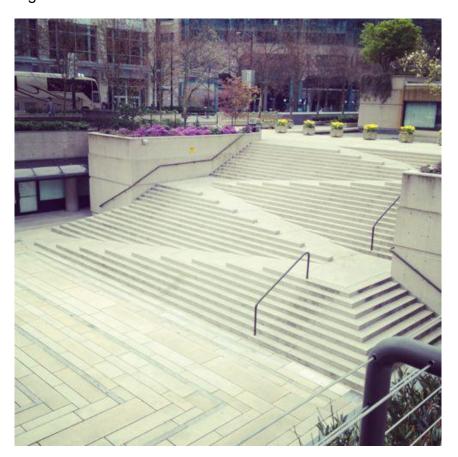
My journey and education continued as I began my Doctoral studies. One semester I walked into a graduate seminar on Universal Design for Learning, a new concept for me. As the professor moved through the course content I became overwhelmed. While I did not fully grasp the details, I felt an excitement that this could be what I was searching for; a way to address every voice in the room and a way to make an impact on all learners of all abilities. As I look back on my experiences in education and as a teacher I realize that UDL may be just another step on my journey, but I cannot ignore that it is a monumentally important one.

Universal Design for Learning

Ron Mace coined the term Universal Design in architecture in the early 1980's (Bremer, Clapper, Hitchcock, Hall, & Kachgal, 2002). Architecture embraced the concept that all spaces should be accessible by all people. This includes people who are wheel chair mobile, have vision or hearing impairments, are impacted by cognitive challenges, and all other variations within the human experience. While this initially sounds impossible, it turns out that people are both very creative thinkers and skilled designers. There are many examples of universal access in the world. One is this staircase in figure A. The picture of this staircase encompasses one vision of universal design. The goal is to move from one space to another on an incline. This staircase has the ability for people of different mobility's to access it, and it was designed this way from the beginning. A

person could choose to use the stairs or the ramp, choose a variety of each, and choose to hold the handrail or not. It is up to the user to choose what route to take to achieve their goal.

Figure A



Other examples involve crosswalks that include words, images, and auditory signals as well as the bumps on the sidewalk to denote when the sidewalk ends and the street begins. Curb cuts allow not only people who are wheel chair mobile to cross a street in greater comfort and safety, but they also allow strollers, carts, baggage, and bicycles to access the area more efficiently and safety. Closed captioning on television helps people with hearing impairments or those watching foreign language films, as well as people at the gym who want to watch the latest home remodel show.

We look at older buildings and see that in order to welcome everyone these places need to be retrofitted. New buildings are designed so everyone is welcome at the onset. Back in the 1970's when this concept was first being thought about in the design world there was a lot of resistance. Change, and especially large-scale concept change, is hard. Figure B reminds us of how silly this looks when we view it from the future and we see it

with different eyes. UDL asks us as educators to embrace the challenge of change and realize that providing access in education is what we are all about.

UDL helps to shift this idea of universal access from architecture to education. There are three core concepts in UDL: goals, variability, and context. The goal refers to the purpose of the educational event. What is it, specifically, that a lesson or assessment is trying to measure? Is the goal to understand a complicated historical concept, or to write a paper with beautiful paragraphs? Variability refers to the variations in how humans learn and process information. Neuroscience is continuing to teach us that the human brain looks more different from one person to another then was previously believed. Context in an educational frame indicates the content or curricula, the delivery of the content, and the assessment process.

Goals:

Figure B is an example of how goals in education are not as clear as they could be. This is a picture of a gingerbread house. Stay with me. One year when I was teaching 10 year olds, I set up an afternoon for the students to make gingerbread houses. As the instructor I believed the goals were to make gingerbread houses and to have some fun before the winter break.

Figure B



This picture represents one of the houses. I know, this did not look like a house to me either. I approached the student and asked how things were going. He enthusiastically showed me his "house" and said, "isn't this great? Since you said that all of the candy that got to stick we could take home and eat, I did a great job!" Yes, he did a great job at

accomplishing the goal as he interpreted it. Checking the goal of the learning event is as important for professors as elementary teachers. As a university professor I often find myself assigning papers with the goal of having the students demonstrate their knowledge, and occasionally forgetting the goal as the papers are turned in. To this day I sometimes still find myself red-lining the text before I really consider the content and understand the assigned goal.

Variability:

A key example of variability is that of George Church. Church is a genetic scientist who started the Human Genome Project (Church, 2005). His work is instrumental in the understanding of DNA and the human genome. Further proof of his creative thinking and inventiveness is his latest project to bring back into existence the Wooly Mammoth (Shapiro, 2015). He and his team have even gone so far as to choose a place in Russia where the new herds of Wooly Mammoth will live. But all of these achievements are not the most interesting aspect of George Church. The most interesting part of Church is his narcolepsy. Although he has had narcolepsy his whole life, he did not know that about it until his mid 40's when his daughter was identified with the condition (Begley, 2017). What is fascinating is how he credits what might be thought of as a debilitating condition, as one reason why he is so successful and such a creative thinker. He feels that when his brain is between the awake and sleep state he has really creative ideas that he remembers and can act upon, in particular difficult concepts in his work and research. The world should be very happy Church has a neuro-diversity that is commonly thought of as a disability. Church is not alone in having a neuro-diverse brain. In fact human brains are much more diverse then the educational system has previously understood.

Context:

The educational event as presented in a course or lesson is where students learn and educators teach. Within the digital world this context can be quite varied. A learning management system like Canvas or Blackboard is the context as is a social media platform like Facebook, Twitter, or Pinterest. YouTube can be a context or place where learning takes place as well as games or digital game platforms. Context also refers to the subject matter and the content of curricula. Some students, or learners, prefer one context to another. For example, a student might like to learn about the effects of carbon emissions by playing a digital game while they better understand the history of Ghanaian

music by listening to songs on YouTube and discussing it within the comment sections in a closed Facebook group. Context is rich, varied, and unique to the specific goals of learning (Burgstahler & Cory, 2013; Coy, Marino, & Serianni, 2014).

UDL in Higher Education

One of the earliest, and in my opinion, most accessible works of UDL in Higher Education is a self-study conducted by David Rose and a group of teachers and researchers at Harvard University. In this study titled *Universal design for learning in postsecondary* education: Reflections on principles and their application (Rose, Harbour, Johnston, Daley, & Abarbanell, 2006), Rose and the course teaching fellows looked at a course they were teaching where the concept of UDL was at the core of the course. Interestingly the course was being taught by lecture and reflection, a very traditional format in the graduate schools at Harvard. The students were the ones who began to push back to Dr. Rose and ask to see the concepts of UDL within the delivery of the class. The self-study describes the changes Rose and his teaching fellows implemented in the course, and it is fascinating. One change was in note taking when there were lecture days. Rose randomly assigned three to five students to take notes with the purpose of sharing the notes with the class. At first it was difficult to get Harvard graduate students to share notes. The students reported feeling uncomfortable that they may not have been taking notes the "right" way, since the note taking was just for them. The students had been taking notes to make individual meaning of the content of the lectures. When they did share the notes the diversity in each student note taker's understanding of what happened of during the lecture and the way they conceptualize the material was evident. Some students took notes in a classic ordered view, while others used drawings, other focused on one part of the lecture that resonated with them, and still other students used screen shots and took notes on the images. The results ended up having several positive effects. One, people who needed to use professional note-takers from the office of disabilities no longer needed to use this service. And two, understanding the diversity that this group had in processing the lecture information was empowering to every students. This validated their own perceptions and encouraged everyone to conceptualize the meaning in their own ways.

What does UDL look like?

Examples of UDL in post secondary education given here are within the context of Fresno State University in central California. Fresno State is one of 23 universities in the California State University System. The school is located in the city of Fresno, set in the central interior of the State of California known as the Central Valley. The institution serves a very diverse group of students. For example in 2017 68% of the students attending the university are the first in their family to attend college. A total of 60% students attending are those whose families qualify for Pell grants because of low income status. Adding to this rich diversity, over 70% students are multilingual and English is not their first language. The U.S. Department of Education designates this university as both a Hispanic-Serving Institution and an Asian American and Native American Pacific Islander-Serving Institution (The California State University, n.d.). In addition there are also students with a wide range of learning disabilities, and although there are services available to those students to support their educational needs, students are not required to disclose identified disabilities in order to attend classes and complete degrees.

In order to provide successful opportunities to such a diverse group of learners Fresno State has been engaged in several university-wide initiatives to support faculty in teaching. Three initiatives in particular highlight UDL as part of the optional faculty training offered. Two of these are supported by the Center for Faculty Excellence at Fresno State (Center for Faculty Excellence, n.d.). The Center provides faculty development to increase teaching effectiveness through training in the uses of academic technologies.

One initiative that is related to UDL is titled "DISCOVERe". This is part of the mobile technology program to maximise the use of technology on campus to support student learning. The focus of DISCOVERe is to support faculty to create and provide learning experiences in the classroom setting that increase student innovation and engagement in order to have learning activities more often meet higher learner outcomes and achievement. This was not initially designed as a UDL initiative, but instead with a focus on technology to encourage and support faculty as they taught the students at Fresno State who come to the classroom with experiences that may differ radically from the professors who are designing and instructing the courses. As DISCOVERe and the other

programs offered by the Center for Faculty Excellence has evolved, more inclusive practices have been emphasized.

The purpose of Universal Design for Learning

There are three purposes for UDL. The first is to remove barriers to learning. An effective way to conceptualize this is to think about as many barriers as possible in any learning environment. In digital environments the barriers to learning can include the access to wireless networks, poor course organization, or the fact that many digital or online courses are very text heavy (Thompson, Ferdig, and Black, 2012). Identifying barriers from the learners' viewpoint is a powerful step toward removing them.

The second purpose for UDL is flexibility. UDL acknowledges that humans learn in an incredibly wide variety of ways. Providing flexibility in a learning environment acknowledges this variety in human learning and provides options. An example would be to make sure the content can be delivered in more then one modality. Books and articles should be screen reader ready so the text can be read out loud for the learner if they choose. These options should be available to all students taking a course, not just those who have been identified as having a learning disability. This both honors the concept of variability, and acknowledges that the students are resourceful and knowledgeable about their own learning preferences in different contexts.

The third purpose of UDL is to maintain high achievement and expectations for all learners. If the learning designer, the professor or lecturer, has a clear goal of content acquisition, then how the student gets there is not as important as the student understanding the content. For example, in my Introduction to Special Education courses the expectation is for all of the students to be able to understand what an Individual Education Program(IEP) meeting is within the school context. After presenting the content about what needs to happen in this meeting, according to federal and state laws I offer my students several choices for illustrating their understanding including the option to create a three dimentional model of an IEP meeting, not just to write a more typical college style paper. This gives students another way to understand and express the content and changes up their perspective.

UDL guidelines, a brief introduction

UDL is a framework for designers to allow learners to reach the goals of the education setting, lesson, or event. In order to see lesson building through this framework CAST

has created guidelines and checkpoints (The UDL Guidelines, n.d.). The creation of the principals, guidelines, and checkponts are based on empirical studies in neuroscience and educational sciences. The release by CAST of the website udlguidelines.cast.org has provided clear avenues for educators, designers, and researchers to access both the practical ideas and the research behind them. Simply type in the word "research" in the search box on the website and the research for each checkpoint is displayed.

A video on the opening page of the website by Dr. David Rose provides a beautiful introduction of the structure of the graphic organizer. As instructors and lecturers at the university level rethink their courses the graphic organizer and udlguidelines.cast.org website can be useful. These specific ideas promote thinking about education in specific paths that empower change in practice and change in learner outcomes. In the following section examples of specific guidelines and checkpoints will be modeled in digital education.

https://youtu.be/wVTm8vQRvNc

Specific examples of UDL in digital university settings

This table is created to take the reader through examples of how the UDL checkpoints influenced specific practices in digital post-secondary settings. The first column points out a potential barrier, the second column describes the specific UDL checkpoint with a hyperlink, the third column explains how the barrier was reduced. The hyperlink is connected directly to the udlguidelines website. It is worth noting that each link also connects to research directly supporting the checkpoint.

Table: Examples of UDL

Barrier	UDL checkpoint and link	Practice
Syllabus information	Offer ways of	Deliver syllabus in screen
misunderstood, or unread	customising the	reader format. Provide mini-
leading to severe	display of information	lessons throughout the
instructor frustration		course to highlight smaller
		portions of document
Complicated or complex	Optimize individual	Introduction of a complex
concept	choice and autonomy	topic, for example Feminism,
		can be illustrated in a variety
		of formats; video, scholarly
		article, popular article,
		graphic organizer, or podcast
Learner does not read	Support decoding of	Teach specific digital
with deep comprension	text, mathmatical	strategies. One source:
using digital documents	notation, and symbols	https://bit.ly/2NPqyST

Students are confused as to how to get help, or loose track of tasks	Heighten salience of goals and objectives	Weekly email detailing upcoming tasks, and where to get help
Learners lose track of important course goals	Highlight patterns, critical features, big ideas, and relationships	Surveys provided to students so they can self report progress on course goals
Assignments students turn in do not demonstrate deep understanding of concept	Use multiple tools for construction and composition	Give students choices in assignments beyond writing a paper. For example, a movie or www.smore.com Use same rubric highlighting goals of course or content acquisition
Students demonstrate lack of effort or persistance in course	Foster collaboration and community	Use gamification techiques. For example, provide a public quest with high creative and low cognitive load to keep students connected to each other and course goals
Instructor becomes bord reading the same assignments	Vary the methods for response and navigation	Dance your PhD video shown to class. Invite students to demonstrate knowledge in unusual way. Grade on creativity.
Learners do not seem to understand why instructor is making certain course choices	Enhance capacity for monitoring progress	The instructor continusly uses metacognition to explaine how the course is composed
Students loose track of resources	Minimize threats and distractions	Provide an alternative to the storage of resources. An example to many of the resources and examples discussed in this paper are in this Padlet

We are glorious

Universities, colleges, and other post-secondary institutions are acknowledging and embracing the increasing diversity within student bodies. Using the Universal Design for Learning lens to design and construct rigorous learning environments can increase the success of all students by providing every student a deeper connection to content and learning. As educators we can believe that every student voice is important, and the end has not been reached until every student has met the learning goal. This is not easy but it is worthwhile.

It is critical for universities to shift to meet the need of a variety of students This includes race, social class, ethnicity, cognitive differences, gender, families, and many more. At the university level we should embrace these changes and take steps toward believing that diversity makes us stronger. If we believe that working to make changes, to create pathways for all students to be successful, and to provide rigorous content is important then we must take that step. UDL is a platform for building that step; for raising people up, expanding opportunity, and creating an environment for divergent thinking. And at its core, this is what a university should be providing its students.

In the 2017 movie *The Greatest Showman* a band of misfits work to create an entertaining and profitable circus act. Although it is hard work and they face many challenges, they are successful because they leverage and highlight their diversity instead of hiding it. The opening lyrics from one of the movie's songs *This is Me* highlights the difficulties in changing perception and the value of diversity.

I am not a stranger to the dark
Hide away, they say
'Cause we don't want your broken parts
I've learned to be ashamed of all my scars
Run away, they say
No one'll love you as you are

But I won't let them break me down to dust I know that there's a place for us For we are glorious

When the sharpest words wanna cut me down I'm gonna send a flood, gonna drown them out I am brave, I am bruised
I am who I'm meant to be, this is me
Look out 'cause here I come
And I'm marching on to the beat I drum
I'm not scared to be seen
I make no apologies, this is me

The work you do in education is as important as it is difficult; you are Glorious.

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Journal of Inclusive Practice in Further and Higher Education (JIPFHE): Editorial Guidelines

- JIPFHE is the open access, refereed journal of the National Association of Disability Practitioners (NADP). All JIPFHE academic papers are peer reviewed and share the common aim of furthering best practice to promote disability equality in post-compulsory education.
- Papers which focus on any part of the student journey from pre-entry to post-exit are in keeping with this over-arching theme, as are those which consider issues relevant to staff in Further and Higher Education.
- The main audience for JIPFHE is staff who work with disabled people in FE and HE and the journal should be of practical use to this constituency. It should enable readers to gain a deeper theoretical underpinning in critical disability studies upon which to develop their day-to-day professional work.
- Based on the principle of 'nothing about us without us', contributions directly from disabled students and staff are encouraged.
- A general edition will be published each year with consideration given to a themed edition if resources are available.
- Sufficiently robust research papers, as defined in these guidelines, may be submitted for the general or themed editions. Narrative pieces reflecting the personal experiences of disabled people or staff will also be considered for publication. Work submitted for NADP Accreditation can be considered for the journal, including short articles.
- All submissions for JIPFHE need to fulfil the guidelines set out here. Articles of interest to the NADP membership which do not meet the criteria set out for JIPFHE may be considered for the NADP website.
- Articles for the JIPFHE general or themed editions should be a maximum of 6,500 words.
- Communication on your submission will be via the NADP office admin@nadp-uk.org
- Two referees will be nominated by the edition editor, who will be a member of the editorial board.
- An abstract, maximum 300 words, is required for academic articles.
- Harvard referencing is compulsory and authors need to ensure references are as up to date as possible.
- Contributions should reflect ethical participatory/emancipatory research, which involves disabled/neurodiverse participants and results in interventions which

improve services for disabled/neurodiverse people in the education and training sector.

- Ethical guidelines prescribe that research participants should not be identifiable and confidentiality must be respected.
- A clear ethics statement is required for academic articles.
- Language reflecting the social model of disability is expected.
- Articles must be original and should not be being considered by another journal when presented.
- Formats must be accessible to screen reading software

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