

BlogPost #8: Definitions of dyslexia – a contemporary view: survey analysis

The definitions of dyslexia questionnaire is searching for consensus amongst dyslexia specialists about what dyslexia *is*, what dyslexia *means*.

'Dyslexia specialists' is taken to mean anyone with professional experience of working with learners with dyslexia or who teaches about dyslexia to others – lecturers on university SpLD courses for example. The questionnaire was distributed across dyslexia forums, discussion lists and boards, and promoted to organizations with interest in dyslexia across the world who were also contacted and invited to participate through their own forums or blogs; some responses have been received from Africa but to date, from nowhere else. In addition to replies received as expected, there were some results from individuals in none of the 'professional' categories; for instance: a home-educator parent of a dyslexic child, two respondents who simply described themselves each as 'a dyslexic person', a retired teacher and publisher, and an optometrist.

In total so far, 26 responses have been received which although is a little disappointing, this has produced an interesting spread of results and to date, replies continue to trickle in.

The QNR is comprised of 10 statements that completed the sentence: 'Dyslexia is ...' and invites respondents to select as many of the statements that they felt appropriately described the syndrome and then rank their selection in order from 'most appropriate' to 'least appropriate'. The questionnaire is available to view [here](#) with a visual display of the results [here](#). The source for each of the statements is listed in the references at the foot of this post.

The 10 statements were drawn from a variety of sources including older studies, from seminal researchers in the field (Frith, 1999), from professional support organizations (BDA), from psychological/neurobiological associations (World Federation of Neurology), from other researchers and from one TV documentary. Although a broad range of definitions was sought it is notable that 8 out of the 10 statements imply deficit by grounding their definitions in



a neuro-biological disorder with a biological origin and behavioural signs which extend far beyond problems with the written language	1
commonly understood as a myth, and may be regarded as merely a middleclass excuse for laziness	2
a disorder manifested by difficulty in learning to read, despite conventional instruction, adequate intelligence and sociocultural opportunity, and is dependent on fundamental cognitive disabilities, frequently constitutional in origin	3
a specific condition of primary constitutional reading difficulty which may occur electively and which, in its pure form, differs distinctively from other reading difficulties	4
a combination of abilities and difficulties that affect the learning process in one or more of reading, spelling or writing and may have accompanying weaknesses in processing speed, short-term memory, organization and sequencing	5
a developmental language disorder that involves deficits in phonological processing	6
an experience that arises out of natural human diversity in a world where the early learning of language, of good personal organization and of fast working memory are mistakenly used as markers of intelligence	7
a processing difference experienced by people of all ages, often characterized by difficulties in literacy; it can affect other cognitive areas such as memory, processing speed, time management, co-ordination and directional aspects	8
a specific learning disability, neurological in origin, characterized by difficulties with accurate and/or fluent word recognition, poor spelling and decoding abilities, typically resulting from a deficit in the phonological component of language	9
a disturbance in certain linguistic functions when written language is decoded. It is expressed as difficulties in achieving automatized word recognition during reading, includes poor spelling, often runs in families and tends to persist.	10

'difficulty/difficulties' or 'disorder'. This is perhaps a reflection of the dominant perception of dyslexia across research communities, support agencies and organizations and indeed individuals, that has prevailed throughout the last half-century of interest in the syndrome. Of the 2 remaining definitions from the list of 10, one is the somewhat acerbic definition from the TV documentary purporting dyslexia as a 'myth' and a 'middleclass excuse for laziness' – only two respondents selected this from the list of 10 statements albeit placing it in last position out of all 10 selected – with the other being the single statement that took the more positive stance of considering dyslexia as a condition arising from human diversity (#7, Cooper, 2006).

This single, probably most *positive* definition of dyslexia that is available in the questionnaire (#7) only appeared in four respondents selections, with three of those placing this definition in 3rd or 4th place and the other placing it in 9th position, just ahead of their last position choice of 'dyslexia is a myth...'.

In attempting to explain this, we might surmise that respondents are aligning their views with the specific characteristics that research and evidence have consistently associated with dyslexia – that is, tangible, identifiable attributes that have been compounded into definitions - rather than taking a more reflective, less precise and more openly holistic overview of a dyslexia as one element on a naturally-occurring spectrum of neuro-diversity, which is Cooper's (2006) perspective and indeed the definition that I would have placed at the top of my selection. Might I venture to suggest that this 'standard' view may be a conditioned response resulting from the conventional 'wisdom' and training which perhaps needs to be challenged?

The relatively positive definition #5, that of the British Dyslexia Association, which recognizes dyslexia as a blend of abilities and difficulties that is marking a balance between a pragmatic identification of the real challenges faced by dyslexic learners and a positive acknowledgement of many of the positive, creative and innovative characteristics frequently apparent in the dyslexic profile, was selected and placed in first, second or third place by 16 respondents with 12 of those placing it first or second. This only narrowly beat definition #8, noting dyslexia principally as a 'processing difference' (Reid, 2003) which was placed in first, second or third place by 14 respondents, also with 12 of those placing it in first or second place. Interestingly, this definition #8 beat the BDA's definition for first place by 6 respondents to 5. The only other definition being selected and placed first by 6 respondents was definition #9 which characterizes dyslexia (quite negatively) with a 'disability' label, this being the only definition to include this in its wording although this may be due its origination in the USA where the term 'learning disability' is more freely used to describe dyslexia.

So from this relatively cursory inspection of the key aspects of respondents' listings overall, it seems fairly evident that a clear majority of respondents align their views about the nature of dyslexia with both the that of the British Dyslexia Association and with that of an experienced practitioner, researcher and writer Gavin Reid, (2003), whose work is frequently cited and is known to guide much teaching and training of dyslexia 'support' professionals.

However let us briefly consider in what ways these results are aligned or dispersed according to the professional domains of the respondents:

Of the three results received from university lecturers in SpLD, two placed the BDA's definition of a 'combination of abilities and difficulties...' in first position with the third respondent choosing just the definition describing dyslexia as a specific learning disability.

7 respondents described their professional roles as either disability/dyslexia advisors or assessors by which it is assumed these are generally non-teaching/tutoring roles although one respondent indicated a dual role in being a primary teacher as well as an assessor. None of these respondents used the BDA's definition as their first choice, with two not selecting it at all. Of the remaining five, this definition was either their second or third choice. Two of these respondents put definition 8, 'a processing difference...' in first place with three others choosing definition 9, 'a specific learning disability' to head their list. Perhaps this is as we might expect from professionals who are trying to establish whether an individual is dyslexic or not and have to make this judgment based on 'indications' derived from screenings and tests which are comprised of intellectual and processing challenges that are designed to cause difficulty for the dyslexic thinker. Although the professionalism and good intentions of assessors and advisors is beyond doubt, it might be observed that professional conversancy with a 'diagnostic' process may generate an unintentional but nevertheless somewhat dispassionate acknowledgement of the 'learning-related emotions' (Putwain, 2013) that might be expected in an individual who, most likely given a learning history peppered with frustration, difficulties and challenges, has now experienced an 'assessment' that, in the interests of 'diagnosis', has however spotlighted those difficulties and challenges. Might this not contribute to a further erosion of self-esteem in an already dented self-perception of academic competency despite the undoubted and entirely positive intention of determining eligibility for access to 'support' and 'reasonable adjustments' which, it will be claimed, will then 'fix' the problem?

Five respondents described themselves as tutors, practicing in either HE or FE with three placing definition 8, 'a processing difference...' in first position with the remaining two choosing the BDA's definition to head their lists. One further respondent, a retired SENCO + FE support tutor, was one of only two respondents to pick the much earlier, definition 3, 'a disorder manifested by difficulty in learning to read...' in first position with this definition featuring in only 6 of the 22 respondents' lists of definitions.

One respondent was an optometrist 'with a special interest in dyslexia' who selected just one definition in their list this being #9, 'a specific learning disability...' but additionally provided a very interesting and lengthy commentary which advocated visual differences as the most significant cause of literacy difficulties. An extensive, self-researched argument was presented, based on an exploration of 'visual persistence' and 'visual refresh rates'. The claimed results showed that 'people who are good at systems thinking and are systems aware are slow, inaccurate readers but are good at tracking 3D movement, and vice versa', adding that

'[neurological wiring that creates good systems awareness [is linked with] slow visual refresh rates and that this results in buffer overwrite problems which can disrupt the sequence of perceived letters and that can result in confusion in building letter to sound associations'.

This respondent was also of the opinion that none of the definitions offered were adequate (actual words used not repeatable here) with some particularly inadequate, commenting further that 'I do not know what it would mean to prioritize a set of wrong definitions' which I felt to be particularly pertinent and which resonated with Cavanagh's observations (above) about the problem of 'continued dependence on text-based materials [in learning situations]'.

To recap on the purpose for conducting this small survey, it was prompted by my disquiet about the variety of definitions of dyslexia that have emerged throughout its period of being observed, researched, evidenced, 'diagnosed', identified, supported, and so forth. Conducting a substantial piece of research around dyslexia and its impact on academic confidence in Higher Education students in the UK surely requires that the core ideas that are underpinning the research objectives, namely *dyslexia* and *academic confidence* are properly scoped out. This means that without wrapping the project up in clearly and consensually understood definitions of the core concepts, it might be argued that the research outcomes that are functions of those definitions will be relative to them in such a way that if the definitions are not sound, then neither will be the research outcomes.

In commencing the 'dyslexia' section of the literature review it quickly became clear that in adopting the conventional research approach of underpinning a study with a definition of the principle concept under investigation, researchers in *this* field have found this to be problematic. This has been especially evident in the past half-century where dyslexia has not so much become more prevalent - since there would be nothing to suggest that proportionally more individuals are burdened (or blessed, depending on one's point of view) with the learning difference now than in the past - but it has become more recognized and identified and hence it is the prevalence of research studies that has increased, each adopting one definition of dyslexia or the other or some new combination of previously defined summaries of the syndrome to create a foundation for their research and hence a focus for their outcomes. To summarize, my conjecture is that any research outcome must surely be framed by the definitions that underpin the study and which set out the foundations upon which the enquiry is built. So where researchers in the field continue to have a lack of congruence in these definitions, this has to be a factor in our level of acceptance or appraisal of the quality of the research outcome.

With the exception of Cooper's description of dyslexia being an example of neurodiversity rather than a disability, difficulty or even difference, definitions used by researchers and even professional associations by and large remain fixed on the issues, challenges and difficulties that dyslexia presents when engaging with the learning that it is delivered through conventional curriculum processes. This approach supports, or certainly tacitly compounds the 'adjustment' agenda which is focused on the learner rather than the learning

environment which, although it is acknowledged that more forward-looking learning providers are at least attempting to be inclusive by encouraging existing learning resources and materials to be presented in more 'accessible' ways - is at least a pragmatic approach -this is still not grasping the nettle of to create a learning environment that is not fundamentally text-based. I comment more about this in my [blogpost on neurodiversity](#).

It is surely undeniable that 'difficulty' or 'disorder' are both loaded with negative connotations that imply deficit, particularly within the framework of traditional human learning experiences in curriculum delivery environments that do remain almost entirely 'text-based'. This is despite the last decade or two of very rapid development of alternative, technology or media-based delivery platforms that have permeated western democracies and much of the alternative and developing worlds and which are embraced by an information society that sees news, advertising, entertainment and 'gaming', government and infrastructure services, almost all aspects of human interaction with information being delivered through electronic mediums. And yet formal processes of education by and large remain steadfastly text-based which, although now broadly delivered electronically, still demand a 'conventional' ability to properly and effectively engage with the 'printed word' both to consume knowledge and also to create it. We might see some hope in an interesting, forward-looking paper by Cavanagh (2013) presented at the Global Innovators Conference 2013, which highlights this tardiness in the delivery of education and learning in keeping up with developments in information diversity and candidly observes that the collective field of pedagogy and andragogy should recognize that, rather than learners, it is *curricula* that is disabled and hence, needs be fixed - a standpoint that resonates with the underlying rationale that drives this PhD Project.

So my vote is with Cavanagh and the Universal Design for Learning (UDL) which appears to be tackling this issue in ways that would declare dyslexia to be much more widely recognized as a learning *difference* amongst a plethora of others, rather than a learning difficulty and that it becomes the norm for learning environments to be much more easily adaptable to learners' needs rather than the other way around - which will ultimately mean that text-related issues, difficulties and challenges that are undoubted deficits in conventional learning systems cease to have much impact in a UDL environment.

But in research, pragmatism prevails and I will have to adopt a definition of dyslexia that can frame my project and relate to the research outcomes. I will use the data collected from my Definitions of Dyslexia enquiry to determine the definition that will be best to use and given this first look of the results so far, this is likely to be aligned with the British Dyslexia Association's working definition broadly adopted across the professional community here in the UK.

References

Cavanagh, D., 2013, Outbound Train: The instructor support project, Universal Design for Learning and the role of technology, *QScience Conference Proceedings 2013*, Global Innovators Conference 2013:7,