

How do we not communicate about dyslexia? – The discourses that distance scientists, disabilities staff, ALL advisers, students, and lecturers from one another

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While the number of students identified as dyslexic has risen dramatically in the last twenty years, dyslexia has become a grey area traversed by very disparate discourses – medical, social-constructionist, legal, technical, experiential, and pedagogical. These discourses arise out of different disciplinary and administrative cultures; focus on different aspects of the syndrome; and reveal different understandings about the nature and meaning of literacy. While each is helpful in some respect, they do not enable us adequately to address the obstacles that confront dyslexic students attempting to hold their own in a community that equates literacy with learning. This paper examines some of the problems with applying insights from competing discourses, and argues for closer communication among those responsible for current theory and practice in this area.

Keywords: dyslexia, learning disability, medical, social constructionist, discourse.

1. Introduction

In the United States, the gun lobby has a saying that “Guns don't kill people; people kill people”. Similarly, discourses do not speak or act; however, people speak and act within the context of prevailing discourses, and it can be difficult to act outside of them. In the area with which this paper is concerned – the management of dyslexia at university – this matters because of the limitations and antagonisms of the two main discourses, medical and social constructionist, that purport to explain dyslexia. The medical discourse is largely inaccessible, while the social constructionist discourse can be impractical; at the same time, neither discourse draws very effectively upon the knowledge of those most closely concerned, dyslexic students themselves. It is in the interest of academic language and learning (ALL) advisers to engage with the discourses informing disability support for students with dyslexia, because we may be in the position of directing students towards such support, and/or mediating their understanding of dyslexia. The *Singleton Report* in the UK found that around 40% of dyslexic university students became aware of their condition only when they were already embarked upon their courses (Singleton, 1999, p. 83; for Australia, see Payne & Irons, 2003, p. 14); and Pollak (2005, p. 70) found that, among dyslexic students at three British universities, while “the predominant source of expert views on dyslexia was the E[ducational] P[sychologist] (mentioned by 66 per cent)”, the next most common was “the special needs or learning support teachers/tutors (30 per cent)”. Positioned between students, lecturers, and disability services, we need to be able to communicate effectively with all of these; and the paper will suggest that our effectiveness is hampered, at the moment, by poor communication between the disparate

discourses surrounding dyslexia.

At the same time, it is encouraging to find that, where accounts by dyslexic students are available, it has often been ALL advisers (or people in roles overlapping with ALL) who have helped to draw them out, to record them, and to place them in the public domain. This paper draws, in particular, on the work of Dalton and of Pollak. This is because their involvement in this area stems from their role as academic skills advisers. This means that the motivation and orientation of their enquiry is particularly pertinent to our own work. Further, the trust engendered by this role seems to have allowed them, as they pursued their interest into postgraduate work eliciting the literacy autobiographies of dyslexic students, to tap their emotional experiences to an unusual degree and to make their reflections available to us in their own voices. Dalton later contributed, also, to a book by her former student, John O'Shea (O'Shea and Dalton, 1994), which offers a model of how we might facilitate publication by dyslexic learners without taking it over. As ALL advisers, we are well placed to contribute to this process, and should use whatever opportunities we have to do so.

Let us look first at the discourses that offer competing explanations of dyslexia, and then at the ways in which they intersect with dyslexic students' experiences.

2. The medical discourse

Knowledge about dyslexia has been dominated, since its late nineteenth century beginnings, by a medical discourse (Pollak, 2005, p. 1) that sees it as a flaw in the functioning of the brain. The assumption has been that any healthy person of normal intelligence can learn to read and write fluently, so there must be something wrong with those who cannot. Research has focussed on finding the location of the problem (in various areas of the brain); its causes (in the individual's genetic makeup); and its effects (in terms of information processing) (see, e.g., Rice & Brooks, 2004). Thanks to the growing interest in this area since the 1970s, much can now be said about the nature and workings of dyslexia, though we have no definitive answers as yet to any of the research questions above (Reid, 2003, pp. 6-7; Rice & Brooks, 2004, pp. 13-16; *A Framework for Understanding Dyslexia*, 2004). There is a general consensus, however, that dyslexia is a syndrome that manifests itself differently, and with different degrees of severity, in each person who has it (Reid & Kirk, 2001, p. 3), and that the problem commonly manifests itself in a phonological processing deficit (see e.g. Sternberg, 1999, p. 280; Snowling, 2000).

This means that people with dyslexia have difficulty with hearing language as made up of separable sounds (i.e. phonemes), as, for example, "cat" can be separated into the sounds represented by the letters "c – a – t". This difficulty makes it problematic to master an alphabetic script composed of abstract symbols for the sounds of speech. A person with dyslexia can learn the principle involved, but the rapid decoding and encoding required for reading and writing do not follow. Dyslexia is not a simple difficulty with recognising letters and matching them to phonemes, but commonly also includes limitations to short-term memory that make it difficult to hold strings of letters in mind until they add up to meaningful information (Singleton, 1999, p. 27; Samuels, 1999, p. 181; Lee & Jackson, 1992, pp. 22, 32, 47). The automaticity that most readers achieve early on, which frees them to attend to other aspects of the text, does not come easily to people with dyslexia. "Cognitive processing that for other people is effortless, automatic, and relatively painless" as Sternberg says, "can be effortful, controlled, and even painful for the reading disabled" (1999, p. 280).

Whether the ability to distinguish separate phonemes is part of the "normal" makeup of the human brain has been questioned by Olson (2001), who argues that, rather than being a prerequisite to learning to read, this ability is actually the result of reading (see also Castro-Caldas & Reis, 2003; Rice & Brooks, 2004, p. 28). Olson cites studies showing that "People who are exposed to the alphabet hear words as composed of the sounds represented by the letters of the alphabet; those not so exposed do not" (2001, pp. 119-120). This is a useful check on the assumption that everybody should be able to do something which, through nearly the whole of human history, has been done only by a few. Nevertheless, it is true that most people

can learn to read and write relatively easily, and do not find themselves in the position of – for example – John O’Shea, the dyslexic author of *Dyslexia: How do we learn?*, who recalls that, despite having tutoring in Grade Two, “It didn’t matter how many times I tried to break up the words into sounds, I couldn’t do it” (quoted in Dalton, 1994, p. 70). In the scientific discourse, it is this impairment to an individual’s phonological awareness that causes the disability we know as dyslexia.

3. The social-constructionist discourse

An alternative explanation is that the disability is socially constructed, rather than being an individual deficiency. In the words of Reid and Valle (2004, p. 467), “Learning disabilities are *not objective fact*” and even “impairment ... is ... socially determined – a cognitive-physical difference is just a difference until we make it a problem”. In this view, dyslexia is an unusual constellation of cognitive strengths and weaknesses, a manifestation of human diversity; it becomes a disability only in the context of social expectations that literacy is essential; that every intelligent person can learn it; and that to be illiterate is to be deviant (Reid & Valle, p. 469; Ong, 2001).

The institution held mainly responsible for turning the difficulty into a disability is the education system, because it relies heavily on reading to impart information to learners, and on writing to assess their learning. Moreover, by pathologising children’s failures, schools can avoid examining their own (see Dudley-Marling & Dippo, 1995). According to Christensen (1999), “it can be argued that schooling itself is disabling, that its lack of flexibility in accommodating a diverse range of student attributes helps create learning disability. In this sense, student disability results from organisational pathology rather than student pathology” (p. 237; see also Skrtic, 1999, p. 193). As Wagner and Garon (1999) put it, “If the label of reading disability is to be maintained, it ought to be applied to schools rather than children” (p. 101).

3.1. The “creation” of disability

Nonetheless, it is learners who are diagnosed and labelled, through a process that formally includes the learners and their parents, but effectively excludes them by authoritatively framing their problem as one they cannot understand (see, e.g., Christensen, 1999, p. 246). At this level of education, learners themselves have little input into this process, as John O’Shea recalls:

“Mum and Dad would be waiting out in the waiting room – this was meant to be my big chance. This was where we would all find out where the fault lay – what was causing the rattle – a bit like getting your car serviced really, when you find out – what is causing the problem you don’t tell the car you tell the owner and that’s what it felt like. ... At the time I had a strong feeling that I should have been included in those discussions” (in Dalton, 1994, p. 49).

John did not fare well in this assessment, and although his parents were, in his acute analogy, the “owners” of his problem, they too emerged dissatisfied. As his mother observes, “mothers aren’t stupid and should be listened to and worked with instead of against as we found was often the case” (Dalton, 1994, p. 48). Her experience was not atypical, as Reid and Valle (2004) have found: “Parents may struggle to understand the legal and scientific language that circulates among professionals. Their own child, described by professionals as an amalgamation of test scores, discrepancies, deficits, and limitations, may be virtually unrecognisable to them” (p. 476).

When learners are diagnosed in adulthood, they too can struggle to recognise themselves in a description of this sort. Dyslexic adults have accumulated a longer history of shame and frustration, and are not necessarily any better equipped to deal with the label of dyslexia. Although adults usually feel relieved, in the end, to know that there is an explanation for their difficulties other than the accusations of stupidity and laziness they were subjected to at school, their initial response is often “confusion and loss of confidence because they have only a vague understanding of the nature of the condition at this early stage” (Singleton, 1999, p. 134; see

also Farmer, Riddick, & Sterling, 2002, pp. 77-86).

This was the case for most of the thirty-three students from British universities, aged eighteen to fifty-three, whom Pollak interviewed for his doctoral research (I refer to them below by the first names Pollak has assigned to them). In the first place, some were mystified by the presentation and language of the reports; Pollak observes (2005, p. 65) that “Most EPs [Educational Psychologists] began with a tabulated summary of Wechsler Intelligence Scale results. Only a few provided a glossary or information sheet on the nature of these tests.” Robert “found the report so full of jargon that it was hard to understand” (Pollak, 2005, p. 130), and Alice told Pollak, “I didn’t understand what [the psychologist who assessed her] put in the report, to be honest” (2005, p.176).

Most damaging was the method of expressing the student’s capabilities in the form of a comparison with norms, either as a percentile position (equal to such-and-such a percentage of the population) or in terms of what is normal for a child in a particular grade at school. “Many of the informants”, Pollak tells us, “commented on the quoting of reading ages. [His informant] Jemima described her third EP as ‘really really nice’, but was ‘shocked’ by seeing her reading and spelling ages given as 11 years when she was 18. Another, Charlotte, was assessed at 19 and had a similar experience; she telephoned her mother in tears when she received the report” (2005, p. 63). For a third student, Fenella,

“It was horrific to see those [spelling and reading] ages down and I was reading about this person who was me, an adult, you know? ... It’s just shocking. I already felt that [sic] a fish out of water at university and here I am in a grown-up world, a world that I never thought I’d get to because although I wanted to, it’s really all beyond me, and who the hell do I think I am, you know, sort of doing this, and to see those ages, it just threw me back into that frightening world that I was in as a child” (Pollak, 2005, p. 169).

Interestingly, although the identification of dyslexia is usually based upon an uneven profile of cognitive strengths and weaknesses, Pollak found that “Apart from high ‘intelligence’ where relevant, very few reports mentioned students’ cognitive strengths, apart from pointing out any Wechsler subtest scores which were above the mean, although without explaining their significance” (2005, p. 66). Overall, “The effect of all the EPs’ reports was to identify the subjects as abnormal. The common thread running for the students, both as adults and as children, is that they are made to feel they are ‘flawed’, and that the academy has immutable standards to which they must struggle to conform” (Pollak, 2005, p. 68). Victoria lamented, on getting her EP’s report, “My golly, I got everything wrong ... An endless list of things I just can’t do. No sequencing, nothing. Visual, auditory perception, is it called? That’s all gone. There’s just so many things wrong. I’m amazed” (Pollak, 2005, p. 64). Alice was similarly dismayed by her report, which made her feel that “I’m never going to be able to read any better, and I’m never going to be able to find my way” (Pollak, 2005, p. 176). “It is clear”, says Pollak (2005), “that ‘diagnosis’ and labelling powerfully affect the students’ lives. Ann talked about the change in her self-image when she was ‘diagnosed’ with dyslexia: ‘Up until then I had just been bad at spelling and there was nothing really wrong with me’. Thereafter, she viewed herself as having a disability” (p. 70).

3.2. Exclusionary discourse

I think it is important to recognise that, most of the time, it was not the psychologist that was the problem for the student, but the psychology. Sympathetic and supportive though psychologists may be on a personal level, their procedures are informed by a discourse that depersonalises the “subjects” with whom they work. It is a discourse in which the actors are processes and sites in the brain, as we see in this passage from Booth and Burman’s (2005) chapter on “Using neuroimaging to test developmental models of reading acquisition”:

Activation in the fusiform gyrus during the auditory rhyming task suggests that adults automatically activate orthographic representations when they process auditory word forms, and this activation is consistent with

interactive models of word recognition that argue for bidirectional connections between orthography and phonology. Some bidirectional models argue that resonance between systems occurs when input to the orthographic system closely matches the information that is fed back from the phonological system or vice versa. (p. 141)

– or this, from Turkeltaub, Weisberg, Flowers, Basu, and Eden (2005) –

Evidence that the primary site for processing single letters lies anterior and lateral to the VWFA [the Visual Word Form Area] makes it unlikely that the VWFA alone can support word recognition. ... Finally, there is no direct evidence to date that word processing mechanisms within the VWFA develop over the course of learning to read. (p. 110)

This is a discourse that serves its users well, and it is not my purpose here to complain about the highly specialised nature of academic discourses. However, the jargon of psychology ensures that its insights remain inaccessible to non-specialists, including teachers, students, and academic support staff. Communication is in one direction only, if it occurs at all: “subjects” and their supporters may be given an explanation of their deficiency, which they must struggle to understand, but they are not expected to contribute their own knowledge to assist the authorities with their enquiries. The epistemology of the discourse, moreover, makes it uncongenial to social constructionists, for if the salient influences on the subject’s learning are located solely in the topography of the brain, there is no place for the insights offered by a social analysis of the conditions of learning. Indeed, as the editors of *Perspectives on Learning Disabilities* have noted, “For many years, biologically oriented theorists, information-processing theorists, and social-constructivist theorists did not talk with each other; the various explanatory frameworks often treat each other as hostile competitors” (Sternberg & Spear-Swerling, 1999, p. viii).

4. The legal discourse

Indeed, the distance between these discourses appears unbridgeable, and yet the management of dyslexia at university represents an odd combination of the two. It is governed by the *Disability Discrimination Act* (1992), which comes out of yet another discourse – a rights discourse – which seeks to redress social injustices by imposing legally mandated requirements on people and institutions. In the sense that the injustice of discrimination against people with disabilities is seen as socially created, this draws upon a social constructionist way of thinking. However, inasmuch as the legislation applies only to medically defined “impairments”, it is limited to a medical model that deals with accidents of birth, and does not seek to address social causes of poor literacy learning (for a discussion of the issues this raises, see Orr, 2001). With this limitation, the social constructionist elements are subsumed under the medical ones, and the management of dyslexia at university is based upon the idea that the institution should compensate for whatever is physically lacking in the student, and only if that fails, should some alternative accommodation be made available. In the case of dyslexia, note-takers may be provided to record key points in lectures, freeing the student to listen; lectures and texts may be made available electronically, so that students can change their appearance to make reading easier, or use a screenreading program to read them aloud; and computers and software may be provided to help students to plan linear presentations of their ideas and to correct the errors in their texts. All of these measures are designed to “level the playing field” by making it possible for dyslexic students to submit the same work, in the same form, that other students are required to produce. Only if these measures prove inadequate may students (sometimes, at some universities) have their work assessed by means other than writing.

5. Loss of opportunity

Unfortunately, it takes dyslexic students much longer than others to produce correct, linear texts, which makes it difficult for them to learn and to demonstrate their learning to their best advantage (Preston, Hayes, & Randall, 1996; Singleton, 1999, p. 29; Fawcett, 2004, pp. 179-180). At the same time, they are unable to use their learning strengths (which may include a

strong visual or spatial sense; a holistic grasp of a subject; and /or strong oral discussion – West, 1997) when these are not called upon in their course curricula. It is important to be aware that dyslexic students are not, as lecturers sometimes assume, *not as good* at academic work as non-dyslexic students; they are *differently good* at it. The literature focussing on particular dyslexic students' experience is regrettably thin, but it makes clear that such students can be successful at university (though possibly not as successful as they might be if allowed to work in more congenial ways). Pollak's informant Robert, for example, "became increasingly clear about his preference for focusing on global concepts and for expressing his ideas orally" (Pollak, 2005, p. 130), graduated with a 2.2 (equivalent to B-), and is now a barrister. John O'Shea teaches physical education in a university. Miles and Gilroy (1986) introduce some very successful students with whom they worked, and on several websites devoted to teaching and learning of students with disabilities, we meet (too briefly) more students who are coping well at university. Readers may like to visit, for example, DART (Disabilities: Academic Resource Tool), SCIPS (Strategies for Creating Inclusive Programs of Study), and BRAINHE (Best Resources for Achievement and Intervention re Neurodiversity in Higher Education).

Such students' abilities may not be well reflected, however, in the work they can produce with the aid of assistive technology, for many errors slip through the electronic net. Ong (2001) notes that "Since literacy is regarded as so unquestionably normative and normal, the deviancy of illiterates tends to be thought of as lack of a simple mechanical skill" (p. 19), yet mechanical means of compensating for dyslexia cannot make up for years of struggle with, and often avoidance of, written information. In courses that assume a good deal of cultural capital, as in the humanities, the appearance of dyslexic students' writing may betray a shallow acquaintance with print (as when a student who worked with me on her essays for a course in 18th and 19th century British history spelled the anti-Catholic slogan "no Popery" as "no potpourri", incurring the wrath of her lecturer and precipitating a nasty quarrel between the lecturer on the one hand, and the student, disability officer, and academic skills adviser on the other).

These problems tend to be masked by the proliferating technical discourse around the development of assistive technology, which is in fact very helpful to many students and can make the difference between passing and failing in their studies. Christopher Lee (1992) puts this eloquently: "For me, spelling was like a door that kept me from learning how to write; the computer was the key that unlocked that door" (p. 28). However, technology cannot be solely relied upon to "level the playing field". Enormous effort may still have to be expended for an ordinary result, when more might be accomplished if the student could simply prepare notes to her own satisfaction and deliver her assessment orally. Indeed, we need not think of modes of assessment as being "either/or", e.g. written, oral, or visual. Students might usefully draw on all of these, as Pollak's (2005) informant Peggy seems to suggest in her reply to his question, "If you had a free choice of how to present your knowledge, how would you like to do it?"

P: "I think ... it's very restricting just written work. ... I think that's one skill and only one, and everything seems to be channelled into that, ... There are far more ways of expressing yourself, of putting over ideas, of learning, you know, giving or receiving education than writing and reading. I don't think you can do without them, but I think other things should be able to back it up. ... more should be made of verbal communication." (p. 171)

6. Learning from our students

What we most need to know, in fact, is how our dyslexic students learn most effectively, but this is not a question that gets much attention in the literature of either the medical or the social constructionist framework (notable exceptions are Herrington, 2001a, 2001b, and 2001c, which recount learners' joint efforts to understand and share their understandings of their dyslexia). It does appear, indirectly, in what we might call the "pedagogic" discourse on websites that offer lecturers advice on how to make their subjects more accessible to students with dyslexia (e.g., Opening All Options II; Birkbeck; DEMOS; SCIPS; BRAINHE). Such advice is based upon insights from all of the discourses so far discussed. Commonly, lecturers are informed of the legal requirement that they make "reasonable accommodation" for students with disabilities;

they are given lists of likely faults and anomalies in dyslexic students' work; and they are told how to adapt their teaching for different cognitive strengths or different learning styles. These are the resources that ALL advisers are most likely to draw upon to help lecturers better understand how to help particular students. However, the format of point-form "dos" and "don'ts" in which much of this advice is presented may not make much impression upon this academic audience, as it lacks the scientific depth needed to convey why lecturers should make the recommended adjustments, or enough material on real individual students to engage the lecturers' interest on a personal level. We could wish that students had more opportunity to share their experience with those who have so much power over the course and outcome of their studies.

It is understandable, given the challenge of writing, that not many dyslexic people publish accounts of their experience; however, some do exist (e.g., Hampshire, 1981; Simpson, 1981; Lee & Jackson, 1992; O'Shea & Dalton, 1994), and more "as-told-to" life and literacy narratives can be found reported in the work of people like Pollak and Dalton. Here, dyslexic students recount their struggles with reading and writing, but also tell of how they have learned to approach their goals in other ways. For some, their "diagnosis" was a turning point, for after the initial shock, it gave them reason to think that they might be more capable than they had seemed to be. As Fenella (Pollak, 2005) put it, "there was this kind of relief that, well, you're not bananas, you know?" (p.169), and with guidance from disabilities or academic support staff, students often develop strategies that use their strengths. As another student, Geraldine, told Pollak (2005), "I've gradually appreciated that I do think differently and that I need in fact to respect that if I'm going to actually understand something" (p. 90). Robert, meanwhile, found the computer financed by his Disabled Students Allowance very helpful, and learned to use it for voice activated word processing and concept mapping (Pollak, 2005, p. 130). When more extended narratives are available, they superimpose upon the bare-bones advice to lecturers the lives of striving people whose doggedness, humour, and frustrations and achievements command respect. This was very much in evidence at a conference I attended recently, the *Doing It Better Forum* in Melbourne in 2007, where the panel of students made the strongest and most lasting impression upon participants; and if their voices are difficult to capture in print, there is good reason to arrange for them to talk to lecturers in person whenever possible. An engaging account of how effective this can be is available in Morgan (2001).

Just as disability officers and ALL advisers are needed to help with arranging such interactions, moreover, they are also the people most likely to facilitate publication of what dyslexic students know about how they learn, providing resources to encourage and inform other current and prospective students with dyslexia, and to raise awareness and improve teaching practices among lecturing staff. In addition to the case studies discussed above, we have, among others, Preston, Hayes, and Randall (1996); Herrington (2001a, 2001b, 2001c); Herrington and Simpson (2002); Hall and Tinklin (1998); Morgan (2001); Farmer, Riddick, and Sterling (2002); Fawcett (2004); Ferri et al. (2005); and the materials by and about students on the websites of DART (Disabilities: Academic Resource Tool), SCIPS (Strategies for Creating Inclusive Programs of Study), and BRAINHE (Best Resources for Achievement and Intervention re Neurodiversity in Higher Education). Students talk openly and movingly to people who work most closely with them, in a spirit of mutual learning; and such people can draw out what students know, create opportunities and venues for them to share it, in print and online, and act as scribes and editors so that dyslexic students can compose without the obstacle of having to write accurately.

7. Conclusion

This paper has moved among the disparate discourses of dyslexia, from the dominating medical framework, to the social constructionist, and the legal, the technical, the experiential, and the pedagogical. All have something to offer, but none provides a full picture, nor the basis of an optimal approach to supporting the efforts of dyslexic students at university. Within the medical and legal framework governing management of disabilities at present, a student with an unusual configuration of cognitive strengths and weaknesses must undergo construction as a disabled

person in order to be recognised as a person of ability. Reid and Valle (2004, p.471) point to just the sorts of problems we have been exploring:

Current institutional and legislative discourses ... legitimize dualisms – “normal” and “abnormal”, “able” and “disabled” – as naturalized categories of individuals. The consequences of this dualistic thinking position students as either “disabled” or “nondisabled”. ... Instead, disability exists along a continuum. Dualisms perpetuate the idea of a strict legal and medical differentiation and can be harmful in the sense that they often extend deep within an individual student’s “most private deliberations about their worth and acceptability” (Linton, 1998, p. 24); the detriments of labelling are legendary.

Thus, the contradictions in this situation are exposed by the critique offered by social constructivists. However, for the purposes of working with dyslexic students at university, this kind of analysis too has limitations, and we may share the concerns of Neufeld and Hoskyn (2005) about “a new form of reductionism ... in which ... learning disabilities ... are essentially reduced to sociocultural or sociopolitical causes, which do not allow any meaningful role for the bio-physical characteristics of the individual” (p.183; see also Herrington, 2001c, p. 12). What we most need is more of the experiential discourse emanating (too infrequently) from students with dyslexia, for, as Ferri, Connor, Solis, Valle and Volpitta (2005) point out,

The professional discourse is grounded not in lived experience but in abstract, reductionist notions of L[earning] D[isability] [LD]. ... [yet] a discourse of LD grounded in lived experience and narrative has the potential to transform both our thinking and our practice. In particular, we find that individuals labelled as having LD are an important source of expertise that is often neglected in an era that values research-based practice over lived realities and perspectives. This is not to say that narrative or discursive approaches have all the answers, but, rather, that allowing multiple ways of knowing about LD would both expand and complicate the parameters of our knowledge in productive ways. (p. 75)

It is important to acknowledge, as these authors do, that the experiential discourse, like the rest, is only one source of insights to inform our work. Dyslexic students are not often very well-informed about the science of dyslexia, or the decision-making process in the education system, and it would not be useful to adopt their discourse in place of the others we have looked at. However, the fact that they are not well-informed is in itself important information for us, for psychologists, and for educationists. Each of the discourses we have examined offers useful information. From the scientific discourse, for example, we learn of the activity patterns in dyslexic and non-dyslexic brains while reading, as revealed by MRI scans, or the likelihood of genetic heritability, or the constellations of talents and difficulties encompassed in the syndrome (see, e.g., Rice & Brooks, 2004). From the social constructionist discourse we learn of the variability in ways of defining and distinguishing struggling learners, and how this variability has been related to attitudes regarding class, race, and gender (e.g., Franklin, 1987). From the experiential discourse we learn how it feels to be dyslexic in a society dominated by literate activity. Like the other discourses, this last one, too, is constructed, for while we hear the voices of dyslexic learners, they are elicited, selected, arranged and orchestrated by teachers who have, themselves, an agenda of advocacy. We must, therefore, read all of these through a critical lens, but we can learn from all of them.

Overall, I concur with Neufeld and Hoskyn (2005, p. 184), who advocate that “What the field of LD needs ... is scholarship and practices that bring people working in these different discourse communities together to learn from and with one another, not scholarship that reinforces the divides between them.” The dominance of the medical discourse, in concert with the legal framework, makes us complicit in practices that both enable and disable students with dyslexia. In order to do the best we can in this situation, we need to be able to draw constructively from scientific knowledge, as well as from social critics, experienced teachers and disability practitioners, and dyslexic students themselves.

References

- A framework for understanding dyslexia (2004). Retrieved July 2, 2007, from the Department for Education and Skills Website:
<http://www.dfes.gov.uk/readwriteplus/understandingdyslexia/>
- Birkbeck, University of London. Teaching students with dyslexia. Retrieved July 2, 2007, from
<http://www.bbk.ac.uk/disability/resources/dyslexia>
- Booth, J. & Burman, D. (2005). In H. Catts & A. Kamhi (Eds.). *The connections between language and reading disabilities* (pp. 131-154). Mahwah, NJ: Lawrence Erlbaum Associates.
- BRAINHE Best Resources for Achievement and Intervention re Neurodiversity in Higher Education. Retrieved July 2, 2007, from <http://www.brainhe.com/index.html>. For case studies, click on <http://www.brainhe.com/gallery/> or <http://www.brainhe.com/students/types/RealStories.html>
- Castro-Caldas, A., & Reis, A. (2005). The knowledge of orthography is a revolution in the brain. *Reading and Writing 16* (1), 81-97.
- Christensen, C. (1999). Learning disability: Issues of representation, power, and the medicalisation of school failure. In R. Sternberg & L. Spear-Swerling (Eds.). *Perspectives on learning disabilities: Biological, cognitive, contextual* (pp. 227-249). Boulder, CO: Westview Press.
- Cushman, E., Kintgen, E., Kroll, B., & Rose, M. (2001). Introduction: Surveying the field. In E. Cushman, E. Kintgen, B. Kroll, & M. Rose (Eds.). *Literacy: A critical sourcebook* (pp. 1-15). Boston: Bedford/St. Martin's
- Dalton, J. (1994). *Dyslexia: A Case Study*. M.Ed thesis, La Trobe University.
- DART. Disabilities: Academic Resource Tool (Loughborough University). Retrieved July 2, 2007 from <http://dart.lboro.ac.uk/tool/> For case studies, go to <http://dart.lboro.ac.uk/case.html> or http://dart.lboro.ac.uk/dart-cgi/searchcase.pl?advtype=General&disability_id=2&
- DEMOS Online Materials for Staff Disability Awareness. Retrieved June 30, 2007 from <http://jarmin.com/demos>
- Disability Discrimination Act (1992). Retrieved June 29, 2007 from the Commonwealth of Australia Law Website:
<http://www.comlaw.gov.au/ComLaw/Legislation/ActCompilation1.nsf/all/search/FC69105BAF504384CA2571400006FD7F>
- Dudley-Marling, C., & Dippo, D. (1995). What learning disability does: Sustaining the ideology of schooling. *Journal of Learning Disabilities 28* (7), 408-414.
- Farmer, M., Riddick, B., & Sterling, C. (2002). *Dyslexia and inclusion: Assessment and support in higher education*. London: Whurr.
- Fawcett, A. (2004). Individual case studies and recent research. In T. Miles (Ed.). *Dyslexia and stress* (2nd ed.) (pp. 156-187). London: Whurr.
- Ferri, B., Connor, D., Solis, S., Valle, J., & Volpitta, D. (2005). Teachers with LD: Ongoing negotiations with discourses of disability. *Journal of Learning Disabilities 38* (1), 62-78.
- Franklin, B. (Ed.) (1987). *Learning disability: Dissenting essays*. London: Falmer Press.
- Hall, J., & Tinklin, T. (1998) *Students first: The experiences of disabled students in higher education*. (SCRE Research Report 85). Scottish Council for Research in Education. Retrieved August 1, 2007 from <http://www.scre.ac.uk/resreport/rr85/index.html>
- Hampshire, S. (1981). *Susan's story*. London, Sphere.
- Herrington, M. (2001a). An approach to specialist learning support in higher education. In M. Herrington & M. Hunter-Carsch (Eds.). *Dyslexia and effective learning in secondary and tertiary education* (pp. 170-192). London: Whurr.

- Herrington, M. (2001b). Adult dyslexia, partners in learning. In M. Herrington & M. Hunter-Carsch (Eds.). *Dyslexia and effective learning in secondary and tertiary education* (pp. 170-192). London: Whurr.
- Herrington, M. (2001c). Dyslexia: The continuing exploration: Insights for literacy educators. *RaPAL Bulletin*, 46, 10-25.
- Herrington, M. (Ed.) with Simpson, D. (2002). Making reasonable adjustments with disabled students in higher education (pdf publication). Published by Nottingham University, as part of the project *ADDS-Academic Staff Development for the Support of Disabled Students 200-2002*. Retrieved August 1, 2007, from <http://www.nottingham.ac.uk/academicsupport/adjustments/>
- Lee, C., & Jackson, R. (1992). *Faking it: A look into the mind of a creative learner*. Portsmouth, NH: Boynton/Cook.
- Miles, T., & Gilroy, D. (1986). *Dyslexia at college*. London & NY: Methuen.
- Morgan, E. (2001) Staff development in higher education: A student-centred approach. In M. Hunter-Carsch & M. Herrington (Eds.) *Dyslexia and effective learning in secondary and tertiary education* (pp. 237-247). London: Whurr Publishers.
- Neufeld, P., & Hoskyn, M. (2005). Learning disabilities and the new reductionism: A response to Reid and Valle. *Journal of Learning Disabilities* 38 (2), 183-187.
- Ong, W. (2001). Writing is a technology that restructures thought. In G. Baumann (Ed.) *The written word: Literacy in transition*. New York: Oxford University Press, 1986. 23-50. In E. Cushman, E. Kintgen, B. Kroll, & M. Rose (Eds.). *Literacy: A critical sourcebook* (pp. 19-31). Boston: Bedford/St. Martin's
- Olson, D. (2001). Writing and the mind. In Wertsch, J., Del Rio, P., & Alvarez, A. (Eds.). *Sociocultural studies of mind*. New York: Cambridge University Press, 1995. 95-123. In E. Cushman, E. Kintgen, B. Kroll, & M. Rose (Eds.). *Literacy: A critical sourcebook* (pp. 107-122). Boston: Bedford/St. Martin's
- Opening All Options II. Retrieved June 30, 2007, from <http://www.adcet.edu.au/oao>.
- Orr, S. (2001). Researching the interface between dyslexic and non-dyslexic in higher education. *RaPAL Bulletin*, 46, 3-9.
- O'Shea, J., & Dalton, J. (1994). *Dyslexia: How do we learn?* Melbourne: Hill of Content.
- Payne, T. & Irons, E. (Eds.) (2003). Learning disabilities resource package: Tools for assessing learning disability and supporting students with learning disability in Australian universities. Retrieved June 30, 2007 from the Australian Government Department of Education, Science and Training (DEST) website: http://www.dest.gov.au/sectors/higher_education/publications_resources/profiles/university_learning_disabilities_resource_package.htm
- Preston, M., Hayes, J., & Randall, M. (1996). *Four times harder: Six case studies of students with dyslexia in higher education*. Birmingham: Questions Publishing.
- Pollak, D. (2005). *Dyslexia, the self, and higher education: Learning life histories of students identified as dyslexic*. Stoke on Trent: Trentham Books.
- Reid, G. (2003). *Dyslexia: A practitioner's handbook*. (3rd Ed.) Chichester: Wiley.
- Reid, G., & Kirk, J. (2001). *Dyslexia in adults – education and employment*. Chichester: Wiley.
- Reid, K., & Valle, J. (2004). The discursive practice of LD: Implications for instruction and parent-school relations. *Journal of Learning Disabilities* 37 (6), 466-481.
- Rice, M. with Brooks, G. (2004). Developmental dyslexia in adults: A research review. Retrieved June 29, 2007 from the National Research and Development Centre website: http://www.nrdc.org.uk/uploads/documents/doc_166.pdf
- Samuels, S. (1999). Developing reading fluency in learning-disabled students. In R. Sternberg & L. Spear-Swerling (Eds.). *Perspectives on learning disabilities: Biological, cognitive, contextual* (pp. 176-192). Boulder, CO: Westview Press.

- SCIPS (Strategies for Creating Inclusive Programs of Study). Retrieved June 30, 2007 from <http://www.scips.worc.ac.uk>
- Simpson, E. (1981). *Reversals*. London: Gollancz.
- Singleton, C. (Chair) (1999). *Dyslexia in higher education: Policy, provision, and practice*. Report of the National Working Party on Dyslexia in Higher Education. HEFCE: University of Hull.
- Skrtic, T. (1999). Learning disabilities as organisational pathologies. In R. Sternberg & L. Spear-Swerling (Eds.). *Perspectives on learning disabilities: Biological, cognitive, contextual* (pp. 193-226). Boulder, CO: Westview Press.
- Snowling, M. (2000). *Dyslexia* (2nd ed). Oxford: Blackwell.
- Stanovich, K. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, 21, 36-407.
- Sternberg, R. Epilogue: Toward an emerging consensus about learning disabilities. In R. Sternberg & L. Spear-Swerling (Eds.). *Perspectives on learning disabilities: Biological, cognitive, contextual* (pp. 277-282). Boulder, CO: Westview Press.
- Swanson, H. (1999). *Interventions for students with learning disabilities: A meta-analysis of treatment outcomes*. New York: The Guilford Press.
- Turkeltaub, P., Weisberg, J., Flowers, D., Basu, D., & Eden, G. The neurobiological basis of reading: A special case of skill acquisition. In H. Catts & A Kamhi (Eds.). *The connections between language and reading disabilities* (pp. 103-130). Mahwah, NJ: Lawrence Erlbaum Associates.
- Wagner, R. & Garon, T. (1999). Learning disabilities in perspective. In R. Sternberg & L. Spear-Swerling (Eds.). *Perspectives on learning disabilities: Biological, cognitive, contextual* (pp. 83-105). Boulder, CO: Westview Press.
- West, T. (1997). *In the mind's eye: Visual thinkers, gifted people with dyslexia and other learning difficulties, computer images, and the ironies of creativity*. Amherst, NY: Prometheus Books.