ABSTRACT
This article examines dyslexia intervention, highlighting tension between traditional medical discourses and pedagogical perspectives. The first of these tensions is regarding views of the learner being variously negative and needs-based versus positive and strengths-based. The second tension is between an atypical, outlier, normative assessment perspective versus a competency-based, strengths-based approach. Thirdly, issues of access and provision are considered, with tensions between private or school/cluster-based approaches, psychological versus pedagogical perspectives, and sole specialist versus collaborative approaches. Policy-makers and school managers need to consider competing agendas which shape the delivery of support services. Key arguments have been summarised in favour of education services which centralise responsive dyslexia practice within an inclusive pedagogical approach.

Research paper

Keywords: dyslexia, inclusion, intervention, learning support

‘If you’re dyslexic and feel there’s something holding you back, just remember: it’s not you. It’s the way things at school or in society are presented to you … In many ways being dyslexic is a natural way to be’ (Benjamin Zephaniah, poet and actor with dyslexia, as cited in Rooke, 2015, p. 223).

INTRODUCTION
The quote from Zephaniah introducing this article represents a growing discourse describing the incidence of dyslexia as a natural human variant and an aspect of neurodiversity within the population (Griffin & Pollak, 2009; MacDonald, 2009). Research has shown that the expectation on all individuals to master text-based literacies does not align well with challenges presented by opaque orthographies such as English (Snowling & Hulme, 2013). Reading, writing, and ‘breaking the code’ in English literacy, requires complex skills which are neither innate or natural (Cain, 2010), and these skills are mastered to diverse extents within the population.

Even in the context of new knowledge on dyslexia in New Zealand and Australia, dyslexia affects an estimated 10 percent of the population (Dyslexia Foundation of New Zealand, 2018a; New Zealand Ministry of Education, 2018). While there is a growing momentous to tackle the issue in ways which centre around the learner, autonomy, identity and education rights are all being contested (Ainscow, Booth, & Dyson, 2006). In this article, I will problematise some of the key issues around medicalisation of learning difficulties and out-sourced provision: discourse issues; assessment issues; access and provision issues; intervention, and support.

In comparing pedagogical and medicalised approaches to dyslexia, the article favours inclusive pedagogy and best-practice literacy teaching for promoting equitable outcomes. An examination of medicalised views examines how notions of deficits and difference are pathologised, rationalised and maintained. The limitations of medicalised views are posed, and it is suggested that through systemic change and a strengths-based approach to dyslexia, positive educational experiences and equity may be promoted.

HOW IS DYSLEXIA DEFINED?
Defining dyslexia and classifying dyslexia as a distinct reading difficulty is the subject of ongoing debate (Elliott & Grigorenko, 2014; Hulme & Snowling, 2016; Rose, 2009). Prior to 2007, the New Zealand Ministry of Education did not recognise dyslexia (Marshall, 2008) but has since adopted a definition where dyslexia is categorised as a specific learning difficulty “when accurate and/or fluent reading and writing skills, particularly phonological awareness, develop incompletely or with great difficulty” (New Zealand Ministry of Education, 2018, para. 14). It is noted that these issues are present ‘despite access to learning opportunities that are effective and appropriate for most other children’.
This definition is supported by the views of Rose (2009), Tunmer and Greaney (2010), and the International Dyslexia Association (2018).

Although some have challenged the rationale for separating dyslexia from other categories of reading difficulties (Elliott & Grigorenko, 2014), the most useful framework for support is one which categorises skills, abilities (Hoover & Gough, 1990), and notes the students for whom the response to intervention is slow (Snowling & Hulme, 2007). It is important to recognise dyslexia as existing on a spectrum with no clear cut-off points as described by Rose (2009), where access to the ‘Three Waves of Provision’ is a critical feature of support.

AN EXAMPLE OF THE PROBLEM AT HAND

Let me begin with an illustrative example, to address the dilemma. Suppose you were a learner who had not met literacy milestones. Despite being taught the skills involved with reading and spelling, you did not progress at the same rate as your classmates. Within this context you are expected to compete with peers in a schooling system that is highly dependent on text-based literacies. It is likely that you or your family will seek specialist support which involves testing, followed by diagnosis, targeted literacy intervention and individual education planning (AUSPELD 2018; SPELD, New Zealand, 2018).

Approaches to dyslexia can vary, particularly in the context of privatised provision from both medical and education domains (Clarke, 2016). This situation requires families to become skilled advocates and intermediaries, to ensure that providers are well-qualified, credible and accessible. In countries like New Zealand and Australia, learners and their families often take the ascendancy in the process, which may involve assessment and diagnosis of a learning difficulty (The Institute for Family Advocacy and Leadership Development, 2018). The New Zealand Dyslexia Foundation (2018c) notes that “dyslexic students will require strong advocacy by parents and others who wish to see them succeed and reach their potential” (para. 5).

Figure 1. considers aspects of advocacy for learners with dyslexia (Marland, 2018) and highlights the author’s view by describing a set of ideal values within the pedagogical approach to dyslexia. These ideals have been classified to suggest the need to reframe less positive views of the individual, which sit within traditional medical approaches (Neilson, 2005) or intervention-style approaches from within education (Organisation for Economic Cooperation and Development, 2018). The scope of this reframing is relevant for principals, teachers and education psychologists alike.

DISCOURSE ISSUES

As dyslexia is neurological in origin (International Dyslexia Association, 2018; Pritchard, Coltheart, Palethorpe & Castles, 2012; Rose 2009; Snowling & Hulme, 2007), it could occupy the domain of medicine as easily as education. Widely recognised as a learning difficulty that affects fluent word reading and spelling (Rose, 2009; Snowling & Hulme 2007), it has been termed a ‘hidden disability’ (Riddick, 2000; Shaywitz, 2003). The hidden disability is due to the lack of visibility of the symptoms, the relative exclusion of dyslexia from disability politics, and a denial of the syndrome by critics (MacDonald, 2009). Professionals in both medical and educational roles (Shaywitz, 2003) are often complicit in constructing a discourse of deficits, disorders and disability—a situation which calls for new inclusive approaches (Slee, 2017). So why does it matter how we frame dyslexia and the domain in which we situate the issue?

Medicalised disciplines, including psychiatry, have traditionally been interested in dyslexia diagnosis, testing and research, situating dyslexia within the physiology of the body and brain rather than as an issue for education (Aman & Werry,1982). Dyslexia has been studied through deficits related to discrepancies between norm-referenced measurements of reading age and mental age, with difficulties with reading previously being termed ‘reading retardation’ in Australia and New Zealand (Aman & Werry, 1982; Jorm, Share, Matthews, & MacLean,1986). Although this term has faded from use, the deficit approach still underpins the discourses of psychology and medical disciplines (Neilson, 2005). See Figure 1. for examples of discourse and terminology.
Alternatively, some have described dyslexia as a ‘gift’ or a strength (Davis & Braun, 1997; Dyslexia Australia, 2018; Positively Dyslexic, 2018), hypothesising that while dyslexia presents challenges, there may be the potential for individuals to seek new pathways and develop compensatory skills (Dyslexia Foundation of New Zealand, 2018a; New Zealand Ministry of Education, 2018). This positive lens for examining dyslexia draws on the cases of highly successful people who have dominated the fields of business, architecture, design, sport and entertainment (Rooke, 2015), including Richard Branson, Leonardo Da Vinci, Whoopi Goldberg, Keira Knightley and Picasso (Helen Arkell Dyslexia Centre, 2018). The positive discourse informs and aligns with pedagogical practice which is concerned with empowerment, learning potential and skills development.

Returning to Zephaniah (cited in Rooke, 2015, p. 223), dyslexia can be viewed as a common natural variation of learning differences (Hoover & Gough, 1990), one which sees strengths positioned outside text-based literacies (Davis & Braun, 1997). This view of dyslexia as a learning difference or learning style (Singer, 1999), embraces new opportunities for learners to be valued and for strengths to be explored and developed within the context of school. This is central to rights-based models of schooling where learners are entitled to have meaningful and empowering educational experiences and learning, while also offering opportunities for learning support (Hall, 1997; MacDonald, 2009). Acknowledgment that individuals with dyslexia often display unique strengths and aptitudes does not discount the practical need for access and opportunities for literacy success. Nor does it fail to recognise that the schooling system and social institutions are complicit in creating barriers which disable learners (Ainscow, Booth & Dyson, 2006; Hall, 1997).

**ASSESSMENT ISSUES**

Assessment presents complex ideological challenges and is concerned with traditional medical and interventionalist viewpoints. However, it is conceded that diagnosis for dyslexia is important for some parents or individuals (MacDonald, 2009) or it may be desired by some professionals before enacting services (SPLED Vic, 2018). It is positive that a “critical feature of education in New Zealand is that support does not depend on diagnosis” (House of Representatives, New Zealand, 2016, p.6). Thus, assessment focuses on identifying the most relevant teaching intervention, rather than just on labelling.

**Figure 2.** School & Cluster-Based Provision.

*Note. Created for this article by B. Marland, 2018.*

Figure 2 identifies an ideal assessment and support pathway in schools. This model (Marland, 2018) has been influenced by recommendations from ‘Identifying and Teaching Children and Young People with Dyslexia and Literacy Difficulties’ (Rose, 2009). The review emphasised the need for expertise and support at school level “schools need to implement and sustain such provision” (p.3). It also considers inclusive pedagogical approaches enacted within the education system opposed to segregated systems (Slee, 2017).

Following from this view of assessment, inclusive education principles suggest the purpose of assessment is related more closely to targeting skills, providing access, fostering participation and enabling students to meet learning potential (Ainscow, Booth & Dyson, 2006). By contrast, assessment can devalue learners where schools do not foster positive inclusive pedagogies. In some cases, schools can be arranged around models of typical development, with bell-curves used to suggest achievement norms (Florian, 2015). Inevitably, students in the lowest percentiles become known comparatively as underachievers and their performance measured in degrees below average (Florian, 2015). These students become outliers both on the graph-sheet of their educational assessments and in the classroom. This dilemma is also recognised by some psychologists who are seeking positive psychological approaches which mirror positive pedagogies (Nicolson, 2015).

The discourse used and the philosophies underpinning assessment have an important role to play (Singer, 1999; Slee, 2017). An education philosophy which aligns assessment with skills identification and targeted teaching is more beneficial than a philosophy that is concerned with deficits and inadequacies (Neilson, 2005). This disempowers the student from shaping their own educational experiences. Assessment needs to be constructive and identify areas for development as well as strengths...
and competencies. Zephaniah’s approach (cited in Rooke, 2015, p.223) recognises that all learners have strengths, and calls for positive pedagogies, including flexible approaches to assessment which can showcase skills unique to the individual (Davis & Braun, 1997).

Furthermore, testing for dyslexia can involve subjecting learners to rigorous and intensive assessment batteries which make them vulnerable (Florian, 2015). By casting doubt on some streams of dyslexia provision, it is conceded that education providers are susceptible to some of the same pitfalls as psychology and medicine (Slee, 2017). A culture of diagnosing and labelling individuals without well-planned stages of support should be avoided (Australian Dyslexia Association, 2018) in preference for evidence-informed assessment framed within positive discourses (Singer, 1999). In the context of emerging therapeutic approaches to diagnosing and treating dyslexia, systematic safe-guards must place the interests and well-being of the learner at the centre (Clarke, 2016).

Important safe-guards for learners includes access to routine screening tests such as vision and hearing testing in the early years (Rose, 2009), but this should be distinguished from vision therapies as described by The Royal Australian and New Zealand College of Ophthalmologists (RANZCO) (Martin et al., 2016). RANZCO have questioned the efficacy of vision therapies and alternative dyslexia therapies including “the Lawson anti-suppression device, syntonics, applied kinesiology, megavitamins and mega oils, the use of trace elements and psychostimulants” (Martin, et al., 2016, p.54). RANZCO’s position is that while vision training does not target learning difficulties, it may improve aspects of vision. “As doctors, ophthalmologists have a responsibility to help families make the best use of limited resources. We should steer families away from unproven interventions that consume resources and thus interfere with the implementation of proven methodologies such as educational and language-based therapy” (Martin et al., 2016, p.57).

A framework for dyslexia assessment, needs to ensure that methods are research-informed as well as to include positive and inclusive pedagogies. The ideology that all students have unique learning needs, which can be targeted by teaching specialists, offers scope for improved outcomes for all students including those with dyslexia. This is distinctly different from treating students within notions of ‘special education’ and ‘additional needs’ (Florian, 2015). A specialist in this context is an expert with considerable training and experience in their subject; maths teachers with expertise in dyscalculia; physical education teachers with expertise in mobility adaptions, and literacy teachers with expertise in dyslexia. Within this model, highly trained specialists share best practice in cross-curricula collaboration to develop excellence within the school, and to empower colleagues. The following reflection is one which is applicable to dyslexia policy decisions across Australasia:

“We see New Zealand at a crossroads, with a choice as to whether to proceed with a disability mentality that regards dyslexia as part of a problem or embrace a solutions perspective which sees dyslexia as key creative driver” (Dyslexia Foundation of New Zealand, 2018, para. 2).

ACCESS & PROVISION ISSUES

This article also grapples with debates around privatisation over centralised public services. In a quest to diagnose and ‘correct’ the “problem” of dyslexia, students and their families often find their way into medical offices, to paediatricians, psychologists, speech pathologists, ophthalmologists, optometrists and alternative therapists (Dyslexia Foundation of New Zealand, 2018; RANZCO, 2018). We might assume that when young people and their families engage with intervention services in the ‘marketplace’, that this equates to self-advocacy and empowerment. This is the argument offered by the proponents of privatised models of support (National Disability Insurance Scheme Australia, 2018), but underestimates the complexity of competing political and economic agendas (Ball, 2012).

Within inclusive paradigms, facilitating student support in mainstream settings is preferred over practices that segregate and exclude (The Institute for Family Advocacy and Leadership Development, 2018). The argument being made here is that dyslexia support within the school setting or cluster offers the greatest scope for inclusion. A best-practice model would involve students receiving specialist support (Rose, 2009; MacDonald, 2009), assessment with positive pedagogies (Florian 2015; Slee, 2017) and quality teaching from highly trained literacy and dyslexia teachers, ideally within their school/cluster (Rose, 2009). This argument acknowledges that dyslexia support services are enacted by specialist teachers as well as non-teaching professionals such as psychologists and speech pathologists (Dyslexia Foundation of New Zealand, 2018b; Dyslexia SPELD Foundation of Western Australia, 2018). However, central to inclusion and equity is that service providers and professionals are governed by inclusive pedagogical
approaches and specialist support is readily accessible within the education setting (Rose, 2009).

This view of inclusive access and best-practice delivery is supported by the Health and Science Committee Inquiry into the Identification and Support for Students with the Significant Challenges of Dyslexia, Dyspraxia, and Autism Spectrum Disorders in Primary and Secondary Schools (2016). The Committee recommended that the government require the Ministry of Education “investigate the provision of one-stop-shop access to specialist help, which schools can offer families once students have had learning support needs identified” (House of Representatives, New Zealand, 2016, p.8).

The rationale for a ‘one-stop-shop’ with centralised services is to address access issues. This considers broad economic, social, political and educational factors where schools and governments must champion education rights, create streamlined processes and not place the burden of advocacy onto families (The Institute for Family Advocacy and Leadership Development, 2018) which is vital for equitable outcomes.

In the context of dyslexia, equitable outcomes rely on systemic advocacy and inclusive pedagogy geared towards positive education pathways for all. This means removing barriers to access, promoting self-esteem and providing enhanced opportunities for all learners, regardless of socio-economics (Ball, 2012). The education system must provide a plethora of opportunities for students to express themselves and demonstrate their knowledge outside of conventional text-based literacies. Specifically, it is vital that learners are engaged, challenged and developed, with a focus on their unique abilities and strengths. The education of students with dyslexia must be positive, rich and meaningful—just as it is for their peers. Outcomes must also focus on positive transitions from primary school, through to post-secondary options. (SPELD Vic, 2018).

FROM INTERVENTION TO SUPPORT

For those struggling to keep pace with literacy, the curriculum and learning content can quickly become inaccessible. Intensive targeted teaching known as “intervention” or more positively known as ‘learning support’ (Rose, 2009) is required to address literacy skills. Research emphasises multi-tiered approaches, such as the ‘three waves of provision’ (New Zealand Ministry of Education, 2010; Rose, 2009; Snowling & Hulme, 2007). Within the waves of support, teachers are required to observe, assess and monitor student response to targeted teaching, thus necessitating a graduated approach (New Zealand Ministry of Education, 2010).

When providing tailored support, learning material should be relevant, personalised, building in meaningful progressive steps, with opportunities for achievement self-esteem growth and fulfilment (British Dyslexia Association, 2018). The teacher must be conscious that learners can become frustrated easily if experiencing difficulties acquiring text-based skills (MacDonald, 2009; Rose, 2009). Teachers should project no more shame onto students than if they were struggling to master the fine arts or athletic ability (Ainscow, Booth & Dyson, 2006).

Outside of the education system, clinical solutions may be offered to address difficulties associated with reading and spelling acquisition, yet the scope of provision may vary widely (Clarke, 2016). Practitioners from medicalised fields may focus on aspects of physiology, neurological and optical function (Martin et al., 2016). Currently, little data exists to indicate the therapies and treatments which are being offered to individuals with dyslexia in Australia and New Zealand. At a more local level, there are record-keeping challenges for schools when diagnostic services are outsourced and decentralised (SPELD Vic, 2018).

It must also be acknowledged that access to specialist services is influenced by a skills shortage within education of highly-trained specialist dyslexia teachers in New Zealand and Australia (Department for Education and Training, Victoria, 2016; House of Representatives, New Zealand, 2016). If dyslexia support services are to be fully enacted in the context of schools, government may need to consider adopting similar strategic training schemes to England (Lipsett, 2009; Rose, 2009).

CONCLUSION

Inclusive practice must deliver equitable outcomes, while avoiding naive idealism and the over-bearing hand of those who target and construct the ‘malfunctioning’ individual. The counterargument to this assertion is that the education system should unequivocally commit to meeting the strengths of students without developing student abilities. Therefore, pedagogical approaches must be geared towards providing opportunities for students to meet their learning potential whilst ensuring that learning support does not mimic other damaging interventionist paradigms. There is a broad and important discussion to be had, on ways that schools, tertiary institutions and
employers can accommodate different learning styles to cater for those with dyslexia. Embracing the notions of Zephaniah could be a step forward in noting that the persistence of dyslexia points to the condition being a natural human variant rather than a phenomenon attached to shame and dysfunction.

In postulating that learning support is inherently positive, the emphasis on schools is to target skills and tap into ‘unfixed’ learning potential. With the persistency of dyslexia, there can be a reluctance for some to accept that learners with dyslexia may thrive in the right conditions, even when literacy remains an ongoing challenge. The onus remains on the education system to address systemic issues, to promote a pedagogical shift, and deliver high quality provision.

New Zealand and Australia have shown a willingness to articulate progressive inclusive education ideals and initiatives on dyslexia. There is an opportunity to be at the forefront of progressive thinking on inclusive education and to be part of high-level systemic critical self-development. The political education terrain, not unlike New Zealand and Australian landscapes, can be treacherous and challenging but worth the rewards for those courageous enough to commit.

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REFERENCES


Weaving educational threads. Weaving educational practice.


**AUTHOR PROFILE**

**Bec Marland**

Bec is a specialist primary and secondary teacher and PhD candidate at Victoria University, Melbourne. She gained a Masters in Specific Learning Difficulties (Dyslexia) from University College of London and is an Associate Member of the British Dyslexia Association. She has a research interest in inclusive education, policy and international education research.

Email: Rebecca.marland@live.vu.edu.au