

Submission to the Petitions Committee of the New Zealand Parliament

*Supporting the Mike Styles Petition for a Commission of Inquiry into
Dyslexia and Neurodiversity in New Zealand [1]*

Dyslexia: Its Benefits to Society and How They can be Secured for New Zealand

Submitted by:

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David Mellor is a dyslexic Professor Emeritus aged 80 years, who draws on 55 years of post-PhD scholarly experience and advisory roles as a biomedical scientist, animal welfare scientist, and bioethicist. He has also explored diverse Humanities academic disciplines and seeks to highlight dyslexia's positive attributes. David has lived in Australia (24 years), Scotland (21 years), and now New Zealand (35 years so far).

1. Introduction

- 1.1. The capabilities of people who contribute most to a society are many and varied. Expressed at a personal level, they may influence others in networks at local, regional, national or international levels. Every sphere of activity within a society is involved. A thriving society recognises its dependence on the many talents and skills possessed by its members. Moreover, it nurtures those talents and skills and supports their continuing development.
- 1.2. Here is a list of some that are possessed by entrepreneurs and other highflyers:
 - Innovative, creative “out of the Box” thinkers
 - “Big picture” thinkers who do not get bogged down with details.
 - Able to see patterns not obvious to linear thinkers
 - Able to generate large numbers of ideas and thoughts
 - Strongly solution oriented
 - Strong reasoning skills, whether in abstract or concrete terms
 - Possess high intellectual and/or practical intelligence
 - Strongly empathetic, having high “emotional intelligence”
 - Great at “reading people”
 - Strong verbal communication skills
 - Great team members – they prefer collaboration and co-operation
 - Known to be imaginative and curious
 - Driven, ambitious and persistent.
- 1.3. ***People with dyslexia often possess these attributes, and a high proportion of entrepreneurs and highflyers are well known to have dyslexia [13,14].***

2. Lighting Up Dyslexia

- 2.1. Research from around the world reveals that, *within the orbit of their own activities*, people with dyslexia often possess several, sometimes many of the talents and skills just listed for entrepreneurs. This is because the neural wiring of the dyslexic brain is different from that in the brains of most other people who are linear thinkers. It is conservatively estimated that 10-15 percent of the population have dyslexia and can *potentially* access these positive attributes.

When they can access them, they often lead rewarding and successful lives, and through that, make positive contributions to our society. Thus, they achieve *because* of their dyslexia, not *in spite* of it [2,15]. Viewed thus, dyslexia is a 'gift', both to dyslexic people and to our society.

- 2.2. Worldwide, there are very many dyslexic entrepreneurs and high achievers who exhibit these and other related talents and skills. For example, see 2,10,14,15,17, and Google "Lists of internationally-recognised entrepreneurs and high achievers who have dyslexia."

3. Why Is Dyslexia Viewed Negatively?

- 3.1. First, the name itself specifically means a word-focused learning disorder. Second, it has a neurodevelopmental origin easily *misunderstood* as a mental deficiency. Third, dyslexic youngsters have difficulty with reading, writing and spelling, which traditional teaching methods alone cannot remedy. Fourth, they are often labelled, bullied and/or publicly shamed as slow-witted by teachers, other adults, and their peers. Fifth, such cruel experiences are demotivating and demoralizing. Sixth, this saps the youngsters' confidence and self-esteem by reinforcing in their minds the perception of others that they are stupid no-hopers. Seventh, many of them leave school early, lacking confidence and ashamed of their inadequacy, carrying this burden with them into the future. These youngsters *live down* to the low expectations of their potential which surrounded them while at school, unaware of their talents and skills which virtually no one recognised or helped them to develop [13,14,15,17].
- 3.2. However, other dyslexic youngsters may be less badly affected. They have variously benefitted from: parents who could afford supportive extra teaching; family members, teachers or others who were empathetic, insightful and confidence-building; or, rarely at present, schools or teachers who use well developed, effective, dyslexia-focused learning methods that successfully help to reveal how talented these youngsters often are [5,6,13,14,15,19].

4. Other Challenges Facing People Who Have Dyslexia

- 4.1. To be clear: dyslexia is *not* related to intellectual incapacity [1]. People with *serious learning disabilities* fall into completely different categories from those who have dyslexia. For dyslexic individuals, a different neural wiring of their brains results in information being processed in different pathways from those of most other people who are linear thinkers [5,6,13,14]. This affects how people with dyslexia learn, e.g., congenial kinesthetic 'learning-by-doing' modes. Importantly, it also affects the nature of the teaching methods required for their learning to be a positive experience and successful.
- 4.2. Challenges linked to reading, writing and spelling difficulties, include, but are not limited to the following [5,6,13,14,15,19]:
 - Difficulty linking groups of letters into sounds and then into words, i.e., phonological decoding;
 - Often seeing words as pictures rather than groups of letters.
- 4.3. There are challenging non-literacy related aspects of dyslexia which are at least as significant as difficulties with phonological decoding [5,6,13,14,15].
 - Often, a slower verbal and cognitive processing speed; this is not due to intellectual inferiority; those affected just require more time for processing.

- More time may also be needed to acquire “automaticity”, i.e., the need to repeat tasks several times before they become automatic, so they can be performed without consciously focusing on them each time.
 - Short term or working memory may be a problem, i.e., holding information in the head when problem solving or working on an issue.
 - They may have a poor focus on time management and organization.
 - Sequencing, i.e., relaying events in the right order, may be difficult.
 - Responding to transitions, i.e., events like a new timetable, new teacher, new routine, new job, or promotion, can be challenging.
- 4.4. Note that the key features of dyslexia vary from one person to another. Also note, we should destigmatise ‘dyslexia’ in ways that include referring to *learning differences* or *learning difficulties*, and by using phrases like *differently abled* to recognise the distinct brain wiring that underlies the creativity and uniquely gifted ways of thinking common to many people with dyslexia [2,3,5,6,13,14]

5. Some Human, Social and Economic Costs of Dyslexia

- 5.1. *Human costs* [2,3,7,8,13,14,15,19]. The anxiety and frustration of parents and other family members when seeking understanding and support for their dyslexic children, when they are confronted with indifferent or uninformed schoolteachers who apply “one size fits all” literacy teaching methods. The cruel victimization of dyslexic youngsters regarded as under-performers, failures or “stupid no hopers” by teachers, other adults and kids at school and elsewhere. The anguish of dyslexic youngsters, demoralised, demotivated and disheartened, who carry low self-esteem and lack of confidence into their adult lives. The life-long shame of dyslexic adults who feel the need to hide their reading, writing, and spelling difficulties. The severe limits on opportunities for work experienced by such dyslexic school-leavers. The dispiriting barriers that confront them with all attempts to participate in any reading/writing-dependent activities. Their sense of great injustice when it is realized that competent dyslexia-supported teaching could have transformed their bad experience of school and helped them to secure a much brighter future.
- 5.2. *Social costs* [2,4,8,14,15,16,19]. As indicated above, dyslexic people whose schooling has sought to identify and develop their special talents and skills lays the foundation for their capacity to contribute in numerous worthwhile ways to society. In part, such teaching encourages them to engage with their individual interests (e.g., hobbies) and bolsters their confidence. The dearth of such teaching in primary and secondary schools in New Zealand [13,14] and elsewhere [2] has at least two key consequences. First, the loss to society of the entrepreneurs and highflyers (in many occupations) who have the special gifts conferred by dyslexia. This loss represents a significant cost to society as unrealised social benefits. And second, both the 50% of inmates in correctional facilities who are dyslexic, and the 30-55% of youth offenders who are dyslexic compared to ~10% of the general population [15], reveal that the inadequate early-life support for dyslexic youngsters also gives rise to significant levels of avoidable social harms.
- 5.3. Literacy is a necessary tool for operating effectively in the very many predominantly reading/writing-dependent forms of employment, daily routines, and creative and recreational pursuits. Accordingly, dyslexia can hamper civic participation as well as access to housing, financial, legal, health, family, educational and other support services [2,3,13,14,15].

- 5.4. *Economic Costs*. National and personal costs associated with poor literacy have been calculated for the UK where extensive data are available [16]. Although the quanta do not apply to New Zealand, the *literacy-related cost categories* probably do. They are as follows:
- Educational costs of special needs support
 - Educational costs of disruptive behaviour, exclusions and truancy
 - Costs of unemployment and low wages
 - Health costs, e.g., those related to depression, obesity, respiratory problems and lack of exercise
 - Costs of crime
 - Intergenerational effects (mentioned but not costed).
- 5.5. The costs in each category were considerable. Importantly, the lower the level of literacy achieved at school, the greater was the percentage of individuals represented in each category.
- 5.6. On the other hand, the *Economic Benefits* up to the age of 37 years of providing effective reading recovery support at school were huge, being 14.81 to 17.56 UK pounds return for every 1.00 pound spent in the programme [16]. A larger mark-up benefit was calculated in US dollars for successful remediation of dyslexia in California [18].

6. An All-embracing Approach to Dyslexia is Required

- 6.1. In New Zealand, a country of about 5 million people, at least 500,000 will be dyslexic, and in the workforce of 3.5 million there will be 350,000 with dyslexia [14]. Thus, at least one person in every ten is dyslexic. Most of them are seriously hindered in managing their daily lives, unlike the rest of the populations who take reading/writing-dependent activities in their stride.
- 6.2. Motivation to respond to *the needs* of this large segment of our society can be framed in two main ways. The first is our ethical responsibility to provide humane and knowledgeable dyslexia-specific approaches at all formative life stages, the aim being to prepare dyslexic youngsters to live meaningful and satisfying lives. The second is to think pragmatically. Proven dyslexia-specific strategies, technologies, actions, methods, and other approaches would be deployed. At one level, these could minimise current hindrances posed by reading/writing-dependent routines in everyday life, thereby mainly enhancing the capacity of dyslexic people to manage daily activities more effectively. At the other end of the spectrum, the same dyslexia-specific approaches could enhance the confidence that potential highflyers would have in their own creativity and the other gifts conferred by their different brain wiring. Finally, improvements apparent throughout the spectrum of dyslexic impacts would be anticipated to provide proportionate lasting benefits for all of those affected.
- 6.3. *Screening and Counselling for Dyslexia*
 Reading, writing and spelling difficulties are the first indication that a child may be dyslexic. Early screening is recommended [2,13,14,15],19, because a positive result explains the difficulties such youngster have, shows the child that she/he is not dumb, and allows prompt intervention. This should focus on empathetic support, competent teaching and confidence-building strategies directed at discovering and enhancing the child's special talents and skills, and at coping with the cruel taunts and nasty behaviour of others. Expert parent-child counselling is also recommended, as it can be very beneficial when the counsellor is knowledgeable about dyslexia [2].

6.4. *Teaching and Teacher Training*

Clearly, early intervention is important. Nationally this must begin in primary schools and continue at the secondary level and beyond [5,6,11,12,13]. However, current tertiary teaching qualifications give virtually no attention to the special approaches needed for dyslexic children [2,13,14]. This should be rectified and supplemented with post-graduation continuing education. It would require recruitment of specialist instructors to educate the educators, as well as skilled dyslexia practitioners [13,14]. There would be benefit in having input and participation from experienced members of prominent dyslexia groups nationally and internationally. There is a wealth of information and advice on effective dyslexia-friendly teaching methods [e.g., 2,5,6,8,9,11,12,13,14,15,19].

6.5. *Accessing Information*

Most entities with a public face deploy electronic interfaces (e.g., via websites) and modes of communication (e.g., via email). Yet virtually all information is presented in written words, in a small font size and on a white background. All these features are major barriers for those dyslexic people who have significant reading difficulties [6,7,13,14]. Those who have less difficulty find reading far easier with a 14-point non-ornate font on a beige background. A preferred option would be for each website to have a press-button facility to access verbal presentations of all their information. All Governmental, regulatory, border security, immigration, aviation, social service, legal, local authority, safety, child support, health, educational, banking, commercial, insurance, professional, automobile, food industry, farming, recreational and every other entity whose roles include communicating with the public should undertake this. Dyslexic people can usually understand, assimilate and use information provided verbally, often applying it with great clarity and to the benefit to those entities.

6.6. *Advice on Strategies for Making a Difference*

In 2022, Mike Styles, a teacher, researcher and advocate in the field of dyslexia and literacy, published a 24-chapter book entitled, “*Congratulations – You have dyslexia: Great minds think differently*” [14]. The last 12 chapters provide easily understood, practical and experience-based assessments and advice on how to get appropriate recognition and remedial actions for those who have dyslexia. These chapters constitute a most helpful *manual for action*. Here is a brief synopsis of each of them.

Ch13: Taking charge at school: how parents can prepare themselves to confidently approach their child’s teachers or school as the child’s advocate; specific advice on parent-teacher interviews; managing teacher or school indifference to or ignorance of dyslexia; focusing on school dyslexia policies; having a support person with you who is knowledgeable about dyslexia.

Ch14: Reform of the education system: commentary on how most schools do not cater effectively to the special needs of students with dyslexia; excuses given when challenged; Ministerial and Ministry of Education responsibilities to provide leadership in the reforms required to cater to this large cohort of disadvantaged students.

Ch15: For teachers and institutions: excellent advice for teachers, including tips from dyslexic learners and dyslexia practitioners on teaching techniques, checking learners’ progress, and preparing for class.

Ch16: Taking charge at work: information for employers/supervisors/team leaders in the workplace; messages for the manager; the positive side of

dyslexia; implications of dyslexia for managers of staff; 12 tips to assist employees.

Ch17: Dyslexia and the future of work: an exciting future is in prospect; difficult skills for dyslexic folk; skills that dyslexic folk often have; skills that dyslexic people are able to acquire; the imminent beneficial tipping point for dyslexic people; dyslexia and social change.

Ch18: Taking charge – public institutions – considers the following: dyslexia and neurodiversity in the public service; effects of undiagnosed dyslexia on society; lack of a legislative framework covering dyslexia; the UK as an exemplar; the civil service response to dyslexia in New Zealand; how government agencies can help.

CH19: Advocating for change: your rights as a person with dyslexia; the difference between equality and equity; advocacy in higher education; making your voice heard; “*differently abled*”, taking a stand, making a difference; *Te Pāti Māori* leads the way.

Ch20: The Dyslexia-Friendly Quality Mark; The Dyslexia-Friendly Charter: making dyslexia visible.

Ch21: Dyslexic people are in great company: dyslexic achievers in sport, in the arts, in business, in politics, in other fields, and among everyday people.

Ch22: The 100,000 children Education forgot: major survey findings; the obstacles confronting parents of children with dyslexia; global experience; a status assessment of schools’ poor awareness of and resistance to introducing special educational approaches for youngsters with dyslexia; discussion of the despair, helplessness, loneliness and frustration of many parents when confronted with the resistance of most schools to implementing comprehensive dyslexia-friendly programmes.

Ch23: Dyslexia in adults; some New Zealand research: an evaluation of a *holist, wrap-around package* which made a significant difference for adults with dyslexia.

Ch24: Help and support: a list of various sources.

7. Recommendations

- 7.1. Implement the recommended actions included in the Mike Styles Petition [1].
- 7.2. Take note of the comprehensive analysis and support in the SPELD New Zealand Inc. submission [13] and use this to guide Parliamentary actions.
- 7.3. The issue of dyslexia/neurodiversity is apolitical. MPs from all Parliamentary Parties should feel comfortable participating in corrective initiatives, noting that 10-15 percent of their constituents will be dyslexic/neurodiverse. There are life-changing benefits for those affected, and when widespread corrective actions are taken, major social and economic benefits for New Zealand Inc. will follow.
- 7.4. Given 7.3 above, it is recommended that an All-Party Parliamentary Committee on Dyslexia/Neurodiversity be established, the role of which would be to promote, evaluate and assess initiatives for action along the lines recommended above.
- 7.5. Given the established national significance of dyslexia/neurodiversity, it is recommended that an experienced politician be sought to act as a Parliamentary Champion for Dyslexia/Neurodiversity Support.

Supporting literature

1. Petition to the Government: Commission of Inquiry into dyslexia & neurodiversity in New Zealand. Download at: <https://our.actionstation.org.nz/petitions/commission-of-inquiry-into-dyslexia-neurodiversity-in-new-zealand>
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10. Gershoni, G. (2019). Dyslexic Entrepreneurs are Successful by Any Measure. It's All in the Way We Think. Download at: <https://medium.com/swlh/dyslexic-entrepreneurs-are-successful-by-any-measure-its-all-in-the-way-we-think-9d8ce9562ca3>
11. International Practice in Support of Dyslexic Learners in Tertiary Education: Potential Applications in the New Zealand Context. Download at: <https://www.tec.govt.nz/assets/Reports/International-Practice-in-Support-of-Dyslexic-Learners-in-Tertiary-Education.pdf>
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13. SPELD Submission supporting the Petition of Mike Styles made to the New Zealand Parliament Petitions Committee. SPELD New Zealand Inc. (2023).
14. Styles, M. (2022). Congratulations You Have Dyslexia – Great minds think differently. Printed in New Zealand by JoynerGroup Ltd., Ashurst 4810.
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