

Dyslexia

is for

DYSLEXIA

A Guide For New Zealand Schools


Dyslexia Foundation
of New Zealand

www.dyslexiafoundation.org.nz

Version 2.1

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Foreword

Dear teachers, principals, special educators, parents and other education community members.

Welcome to Version 2.1 of our 4D Guide for Schools, a comprehensive resource designed to support improved education outcomes for the estimated 70,000 dyslexic schoolchildren in our New Zealand classrooms.

Since launching the first 4D Guide in September 2008 we've had more than 500 New Zealand schools join our revolutionary 4D Schools programme. And demand continues to grow. During June 2009 and June 2010, we had more than 2500 teachers and other educators attend our sold-out series of 4D Workshops, hosted by international dyslexia expert Neil MacKay. We had incredible feedback from these inspiring workshops, with many requests to make Neil MacKay's expertise more widely available. and with the launch of 4D Consultancy this Professional Development is now far more accessible.

This updated Guide thus incorporates further insights from Neil MacKay, based on his breakthrough thinking in characterising dyslexia as a learning preference and introduces 4D Consultancy as a key Solution Provider to schools. Brain research, including Yale and Auckland university studies, shows that dyslexic individuals tend to think in pictures not words – receiving and retrieving information in a different part of the brain to neurotypical, word based thinkers. From a learning perspective, they naturally prefer to receive, process and present information in ways that make more sense to them. This learning preference often manifests as multi-sensory: oral or visual rather than via the written word. Dyslexia in fact offers huge creative potential to deliver outstanding innovation and extraordinary out-of-the-box solutions – real assets in an increasingly multi-sensory and ICT-led world.

Neil MacKay's advice is practical, realistic and simple to implement, based on a teaching paradigm of 'notice and adjust'. This means noticing students who are getting stuck and adjusting the teaching to suit. This Guide will show you how. You can read more about Neil MacKay and this groundbreaking new teaching paradigm at our dedicated 4D Edge webspace – www.4d.org.nz/edge/. Other exciting new developments include a 4D Virtual Classroom, presenting student views on classroom changes that work for them. Overall, our 4D Schools programme is rapidly becoming the most significant programme ever developed to address dyslexia in the Kiwi classroom. We have also expanded 4D thinking to the home and the workplace, and great advice for parents, employers and employees can be accessed from the main 4D webspace at www.4d.org.nz

This Guide incorporates many of the wonderful insights gained from NZ educators, as well as key learnings from leading dyslexia researchers in the UK and US. You can read more Kiwi and international insights at www.4d.org.nz/school/. We are thankful to the many people who have contributed their time and expertise to this V2.1 Guide, and we hope that you will keep this handbook nearby to provide guidance, help and ideas throughout this school year and beyond. If you are a 4D School, your next step is to contact 4D Consultancy to request direct assistance with school policy and implementation and Professional Development for your school staff.

Kind regards



Guy Pope-Mayell
Chair of Trustees
Dyslexia Foundation of New Zealand

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Introduction

In September 2008, Dyslexia Foundation of New Zealand (DFNZ) officially launched the revolutionary 4D | For Dyslexia programme, empowering New Zealand schools to take constructive action and make meaningful changes to help students with dyslexia or dyslexic type learning preferences. To date, more than 500 schools have joined the programme.

There are many different views of what dyslexia is, from disability and difficulty through to difference and learning preference. DFNZ firmly views dyslexia as a learning preference, based on the increasing body of scientific research showing that dyslexics commonly process information in the creative right side of the brain, as opposed to the verbal left side utilised by neurotypical, word-based thinkers. It is no surprise, therefore, that they prefer to present their learnings in more visual and creative ways.

DFNZ takes a broad spectrum view of dyslexia, acknowledging that while the most immediate attribute is an issue decoding words and their meanings, there is a broader range of skills that can be impacted. These may include auditory and visual perception, planning and organising, motor skills, short-term memory and concentration. Some of these can make it especially challenging for individuals to follow instructions, turn thoughts into words and finish work on time. Overall, dyslexia's greatest difficulty is self-esteem – it only becomes a disability if not appropriately addressed.

New Zealand is at a crossroads in dealing with dyslexia. We have a choice between adopting a disability mentality and treating dyslexic individuals as part of a problem, or learning from mistakes other countries have made and embracing a solutions perspective. As a problem, incorrectly addressed dyslexia can lead to disruptive classroom behaviour, alienation, anti-social behaviour, truancy, depression, suicide, drug use and crime. As a solution, dyslexia can become a key driver for creative thinking and produce the kind of innovation and entrepreneurship sorely needed in an increasingly ICT-led world, and in challenging economic times.

Importantly, dyslexia is one of the few causes of social dysfunction that can be easily addressed. And the costs of doing so are an investment that will return huge dividends. By prioritising and addressing dyslexia in schools we avoid flow on adult related costs – social services, criminal services, mental health services and so forth.

The 4D Schools programme and this Guide are designed to assist New Zealand educators to make the 'whole school' changes necessary to put dyslexic children on the path to success. This involves a journey towards making dyslexia-aware best practice a common practice, so that no child is left behind. Success at school shouldn't depend on dyslexic students being lucky enough to be assigned a dyslexic-aware teacher: dyslexia-aware best practice should be a school-wide phenomenon. The 4D Schools programme is key to achieving this, and 2010 has demonstrated that schools seek greater guidance and support which is now provided by 4D Consultancy. Read more on page 38



Section 1: 4D in context

Action and accountability in today's education system

Debate on the precise definition of the term 'dyslexia' has occupied academics around the world for some years. This often seems to engender an attitude that until you can define dyslexia, you can't begin to address it – a stalemate which international dyslexia expert Neil MacKay refers to as “paralysis by analysis”. The 4D approach takes an alternative view, identifying constructive action that can be taken based on the significant body of research and experiential evidence that already exists on dyslexia. After-all, for the estimated 70,000 dyslexic schoolchildren in our Kiwi classrooms, actions speak much louder than words.

4D is built around a simple but highly effective philosophy of 'notice and adjust'. In the classroom, this is about noticing which students are having difficulty, and making simple adjustments to the way in which they are taught and assessed so that they can flourish. This means replacing old-school 'one-size-fits-all' thinking with individualised or personalised learning strategies, and accepting alternative evidence of achievement, perhaps oral and visual based rather than written.

These strategies are also at the foundation of the National Curriculum, which recognises that equity in education comes not through treating all students equally, but through recognising and accommodating difference within the classroom environment. And they are in tune with the self-managing schools environment, which offers schools the ability to direct resources to where they are most needed.

In terms of policy direction, recent Government initiatives have made it clear the 'gates are open' for dyslexia action in New Zealand schools. The Crusade for Literacy and Numeracy is a linchpin in this, backed by the National Curriculum and self-managing schools environment. The release in early 2009 of the Ministry of Education's Teachers Resource: About Dyslexia was a key accountability document in this area. About Dyslexia is a real blueprint for action and reflects the Government's major focus on transparency and assessment. It encourages schools (and parents) to proactively seek dyslexia solutions and it requires schools to have an inclusive school policy which accommodates dyslexic students' unique learning differences.

Happily, our 4D strategies are perfectly designed to equip schools to deliver better learning outcomes as mandated through the Crusade for Literacy and Numeracy and the About Dyslexia resource. Dyslexic students currently make up 30-50% of the estimated 20% of New Zealand students who are at the tail-end of poor literacy and numeracy results. Unless dyslexia is at the forefront of thinking and action, it will therefore be very difficult for schools to make real progress. Schools that don't act will be left behind and fail to deliver against Government expectations. DFNZ estimates the tail of poor literacy and numeracy results could be halved with best practice and appropriate classroom interventions as outlined in this 4D Guide – a good outcome for everyone.

Changes in the school environment often begin with a committed school principal, supported by an emotionally engaged 'champion' from within the staff, who together can take the whole school on a journey towards making dyslexia-aware best practice the norm, so that no child is left behind. Creation of a Dyslexia School Policy comprises the first step of the 4D Schools programme, followed by strategic application of the 'notice and adjust' approach in the classroom. You can read more about the 4D process in the 4D implementation section on page 11.

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A closer look at 4D | For Dyslexia

4D | For Dyslexia – which also stands for 4 Difference and 4 Diversity – extends the common perception of three dimensions to embrace a fourth dimension based on creativity. This fourth dimension is likened to a dyslexic or atypical way of thinking which can offer great creative gifts if addressed correctly.

The revolutionary 4D Schools programme is designed to support new thinking on dyslexia in the Kiwi classroom, and help teachers take the simple steps necessary to ensure dyslexic students harness their potential. The most advanced resource in this area ever made available to New Zealand schools, the 4D Schools programme creates a potent framework for meaningful action. It provides access to national and international learnings, insights and advice.

Based on principles of empowerment, collaboration and change, the programme also offers significant benefits for teachers. When small changes to the classroom environment can create marked improvements in student engagement and behaviour, a teaching stress is removed. The programme involves three key steps – producing a policy; outlining a strategy for classroom change; and implementation (which is monitored and tracked to ensure it is adding value for dyslexic students). Crucially, it includes close to 100 simple things teachers can do to create a positive learning environment, from reviewing seating layouts through to use of new technology.

The programme has been designed in consultation with international dyslexia expert Neil MacKay, also the architect of the acclaimed British Dyslexia Friendly Schools initiative. One of the world's leading thinkers on dyslexia, Neil MacKay is the author of the renowned resource book *Removing Dyslexia as a Barrier to Achievement*. An experienced teacher with more than 26 years experience in mainstream schools; he has been an HM schools inspector; and consults to Education Authorities and Departments in the UK, Hong Kong and Malta.

As noted in the foreword and variously in this Guide, the programme revolves around a 'notice and adjust' teaching paradigm, based on acknowledging dyslexia as a learning preference. Neil MacKay is very clear on this preference. He notes dyslexia is widespread and for life: it cannot be 'cured' and it is an insult to regard it as a disability per se. In fact, often it only becomes a disability when poorly addressed. If properly addressed, it can become the creative driver for innovation and entrepreneurship. This teaching paradigm celebrates difference and diversity and works to help dyslexic students thrive. This in turn can deliver the type of 4D Edge that is increasingly valued in a multi-sensory, visually dominant and ICT-led world. You can read more about Neil MacKay and the new teaching paradigm on the 4D Edge website at www.4d.org.nz/edge/



A closer look at 4D | For Dyslexia (continued)

So how do we help? Understanding the concept of learning preference is the critical place to start. This is about recognizing that brain research now shows that dyslexic individuals think differently, so naturally prefer to receive, process and present information in ways that make more sense to them. As they tend to think in pictures rather than words – receiving and retrieving information in a different part of the brain to neurotypical, word-based thinkers – they often prefer to receive and present orally or visually rather than via the written word. If you are interested in finding out more about the functional magnetic resonance imaging (fMRI) research that shows differences between neurotypical and dyslexic brains, the work of Yale scientist Dr Sally Shaywitz is a good place to start.

Dr Shaywitz's was one of the first laboratories to image the dyslexic brain using functional magnetic resonance imaging (fMRI). They have imaged several thousand children and adults as they read. Their findings, combined with fMRI data from around world, show that three neural systems are used for reading, all in the left side of the brain. Dyslexics, however, have a neural signature of disruption of two neural systems in the back of the brain. Thus the posterior reading systems, especially the left occipito-temporal (word-form) region responsible for fluent, rapid reading, are disrupted in dyslexic children and adults. Other compensatory systems, in the frontal regions on both left and right hemispheres, and the right hemisphere homologue of the word form area develop, and these systems support increased accuracy over time. However, the word-form region does not develop and compensatory pathways do not provide fluent or automatic reading.

In short, this means that dyslexic students might well know the answer, but have a problem pulling the information out and articulating it. This is why accommodations of extra time for examinations and tests, for example, have a neurobiological basis and help level the playing field for dyslexic students. More on classroom accommodations and adjustments can be found in the implementation section of this Guide. More on Dr Shaywitz's work is outlined on our 4D Edge website at www.4d.org.nz/edge/.

Strengths in creativity and higher level thinking processes amongst dyslexics have become exciting areas for ongoing international research. Dr Shaywitz investigates this as part of her work. Another leading edge researcher in this area is Tom West, who is the author of two acclaimed books – *In the Mind's Eye*, and *Thinking Like Einstein* – which detail his work. He says of his work that it is time to learn from the distinctive strengths of dyslexics, rather than just focusing on their weaknesses and failures. He seeks to understand the talents of successful dyslexics and study how these talents are important for education and work, especially in our world of radical economic and technological change.

In the Mind's Eye examines the role of visual-spatial strengths and verbal weaknesses in the lives of ten dyslexic historical figures, including Albert Einstein, Winston Churchill, General George Patton and William Butler Yeats. *Thinking Like Einstein* investigates the new worlds of visual thinking, insight, and creativity made possible by computer graphics and information visualization technologies. In this book, West profiles several highly creative visual thinkers, such as James Clerk Maxwell, Nikola Tesla, and Richard Feynman, pointing out that there is a long history of using visualization rather than words or numbers to solve problems. West is also working on a third book, dealing with visual thinking, high creativity and dyslexia in several scientists and scientific families. More on Tom West's work can be accessed from the 4D Edge website at www.4d.org.nz/edge/.

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The big picture – Improving the learning environment for all

By getting it right for dyslexic students; you get it right for everyone. Sounds like a bold statement, but it is common sense if you look at it from the perspective of providing personalised or individualised learning. This type of approach is something that all students can benefit from.

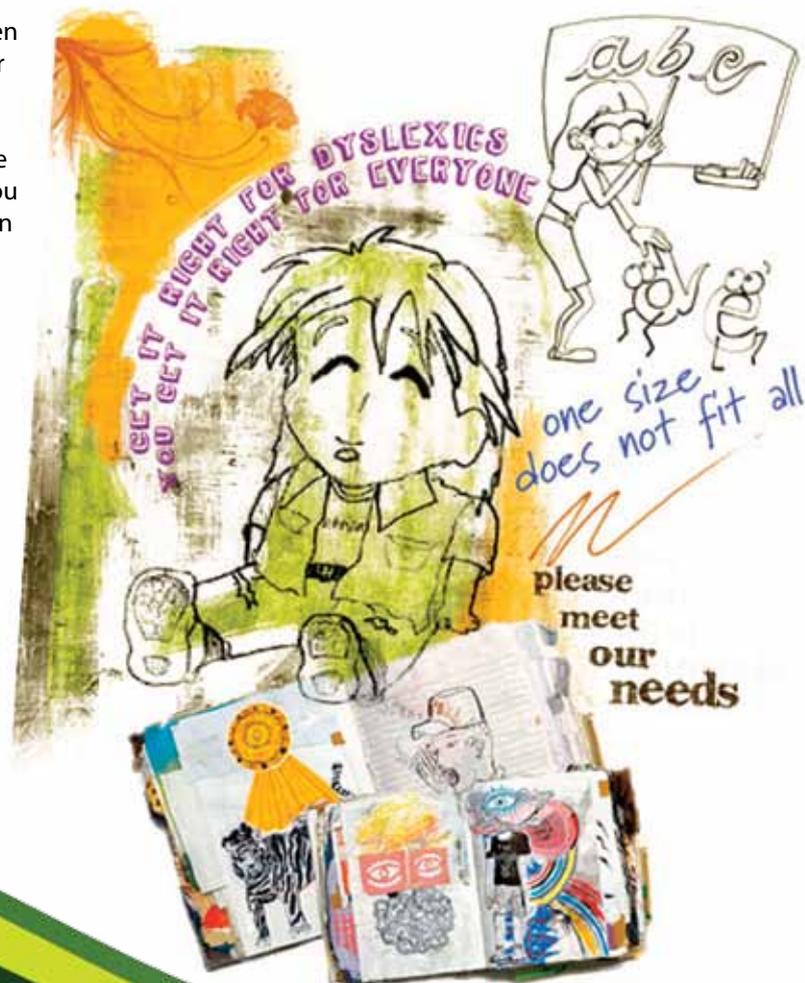
While taking action on dyslexia provides a manageable, defined group of students to deal with, the flow-on effect is a less disruptive classroom environment and more teacher-time for all students, creating greater performance across the board. Interestingly, DFNZ's nationwide survey of teachers in 2008 showed that 99% felt dyslexic-specific initiatives in the classroom would also help other, non-dyslexic students.

Maori and Pacific Island students, who historically have oral cultures, can also gain significant benefits from the 4D approach. Dyslexia aware classroom practices, based around personalisation and the right to learn differently, have the potential to make a significant difference to the education and life chances of these students.

The 4D approach is one of 'notice and adjust' – notice students who are having issues and adjust the teaching accordingly. This includes strategies based on developing comprehension through use of context, syntax and grammar, and looking at areas such as organisation of ideas, planning skills, learning to remember, raising self-esteem and valuing emotional intelligence. Multi-sensory techniques, effective use of language, chunking of tasks and instructions, assessment for learning and marking alternative evidence of achievement (work presented in forms other than writing, for example mind maps) are also valuable tools. The notice and adjust approach is covered in detail in the implementation section of this Guide.

You can learn from your students too – they often have strong views on what will work when a linear teaching style does not. Some things may be as simple as using dyslexia-friendly fonts – usually Arial, Sassoon or Comic Sans at 14 point with 1.5 line spacing! Others require a little more adjustment. You can find out more about what students have to say in our 4D Virtual Classroom at www.4d.org.nz/virtual/

UK experience shows dyslexia-appropriate strategies and accommodations deliver better exam results and improvements in attendance, punctuality and parental confidence. At the North Wales secondary school where international dyslexia consultant Neil MacKay worked, even house prices in the area also went up, reflecting the fact that parents wanted to move into the school catchment area.



The difference teachers can make

Children begin school full of curiosity and eagerness to learn but quickly become disillusioned by unexpected failure in the classroom. Teachers, therefore, have a vital role to play in identifying potentially dyslexic students in their first few months at school.

A nationwide survey of teachers conducted by DFNZ in 2008 indicated that nearly all education professionals have taught a dyslexic student, with most teaching between one and three students a year. Some 89 percent of respondents identified dyslexic students as having lower self-esteem than their non-dyslexic peers, and a further 41 percent said dyslexic students often exhibited less socially acceptable behaviour. This of course is no surprise as many students would rather be considered difficult than dumb.

The class clown is another common persona for dyslexic students.

By identifying students with dyslexic-like learning preferences early and referring them for screening when necessary, teachers can make a real difference before children begin to experience failure and frustration and integrate this as a sense of being less than others, resulting in low self-esteem and alienation. This is critical, given the potential longterm consequences of poorly addressed dyslexia. These can include truancy, depression, suicide, drug use and crime. There is already a significant body of international research in this area, much of which can be accessed at www.4d.org.nz/edge/.

Closer to home, New Zealand Principal Youth Court Judge Andrew Becroft has for several years expressed concern about links between learning difficulties and offending. In June 2009, he again said he was “seriously concerned as to the number of young offenders who have slipped through the ‘educational net’ because of undiagnosed learning disabilities, especially dyslexia. Overseas a pathway to eventual offending, originating from undiagnosed and unaddressed dyslexia is well-known.” He continues to advocate for research in this area to ascertain how many young offenders in the three youth justice custodial residences in New Zealand suffer from dyslexia or other learning disabilities.

International dyslexia expert and 4D consultant Neil MacKay also has a powerful take on the consequences of unaddressed dyslexia, identifying nine steps to ‘creating a criminal’ that schools should take care to avoid. This ironic nine-step Guide, as well as the antidote, can be accessed through www.4d.org.nz/edge/.

In the classroom, problems can arise if teachers equate weak basic skills with some sort of inability to think. If students are put into groups that are appropriate for basic skills but not for their thinking levels, they can quickly become frustrated and act out. This is because many dyslexic students think faster than they read – so putting them in low-ability groups and measuring them solely on reading ability wrongly labels them as ‘failures’, impacting self-esteem. Stress and anxiety most often caused by the learning environment is 80% of the problem, compounding insecurities and consequent bad behaviour.

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The difference teachers can make (continued)

The solution is about placing students in thinking ability appropriate groups while supporting them with basic skills. This empowers them to develop high level subject knowledge and skills while their basic skills are catching up. Through understanding their difference and integrating this through success in the classroom, 4D ultimately enables dyslexic students to help themselves. All this requires a flexible 'notice and adjust' approach to teaching, but this is perfectly in tune with the new National Curriculum which challenges schools to do things differently.

From data collected by Neil MacKay, dyslexia-aware schools in the UK are recording improvements in a range of measurable indicators, including attendance, attainment (measured through data), achievement (measured through assessment for learning), and improvement in student and parental confidence, not just for dyslexic students, but also for a wide range of vulnerable learners. In terms of assessment for learning, this refers to assessing progress throughout the lesson, rather than waiting to assess the output at the end and finding that coursework or an end of unit test has not been completed successfully.

The UK data, collected from schools engaged in the UK Quality Marking initiative – which recognises schools for the quality of their inclusive practice – shows improved attendance and punctuality once teaching styles, methods and materials are modified with a dyslexia-aware focus. This focus enables teachers to pull together a range of approaches into a coherent response; head teachers comment that once they get it right for dyslexic students, this seems to enhance the learning of a majority of pupils in the school, with or without specific learning needs. For those with dyslexia, significant gains towards closing the learning gap have been made, with improvements recorded specifically in writing, reading, maths and science following targeted support.



Section 2: Implementing the 4D Schools Programme

The 4D Schools Programme – what’s involved?

A whole school approach is an important component of the 4D Schools programme. The reasons for this are three-fold. Firstly, success at school for dyslexic students should not depend on their being lucky enough to be assigned a dyslexia-aware teacher. Secondly, success at school for all students can be greatly enhanced by the personalised learning recommended by the programme – making it in everyone’s best interests to embrace this approach. Thirdly, dyslexia impacts the student beyond their English lesson. It can present challenges in any class or situation.

Importantly, the type of personalised, or individualised, learning strategies recommended as part of the 4D ‘notice and adjust’ philosophy also lie at the foundation of the National Curriculum – which both challenges and gives permission to schools to do things differently and teach more creatively. Notice and adjust is based simply on noticing students who are having issues and adjusting the teaching to fit.

Classroom adjustments make a difference by:

- Demonstrating empathy, respect and understanding of students’ personalised learning needs
- Being proactive and building individual relationships with students
- Identifying the various social and learning needs of children/ students coming into school who don’t easily access learning
- Keeping these children/ students at school: happy and achieving
- Promoting and supporting self-efficacy
- Building home and school partnerships
- Ensuring the transition from preschool to school and from primary school to intermediate and high school is as successful for the child/ student as possible
- Changing benchmarks and expectations for dyslexic children to take the stress out of learning for children/ students and their families

Overall, a school-wide philosophy of putting inclusion at the heart of everything will enable the development of dyslexia-aware classrooms led by dyslexia-aware teachers. In a nutshell, being dyslexia-aware involves finding out what children are good at; giving them a chance to do more of it; and celebrating them getting it right.

The objectives for the 4D Schools programme are to:

- Enable Boards of Trustees, schools and educators to embrace a whole-school approach and adopt a ‘notice and adjust’ teaching paradigm in the classroom
- Foster understanding and acceptance of dyslexia as a learning preference, whereby dyslexic individuals prefer to present their learning in visual or multi-sensory ways because this is how their brains work, as opposed to the written word responses favoured by neurotypical thinkers
- Create informed and empowered parents, teachers, and dyslexic students with the aim of attaining confident self-advocacy by all dyslexic students before they leave secondary school
- Create a structure that allows schools to benchmark their level of engagement over time and against other schools in New Zealand
- Provide a means of engagement for parents of dyslexic students, older dyslexic students, and educators with a passion for embracing difference
- Give parents information on which to base school decisions

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The 4D Schools Programme (Continued)

The 4D Schools programme is based around three key steps: These steps are increasingly being carried out in conjunction with 4D Consultancy, whose team brings Professional Development, actual policy and assessment protocol to your school to make the process streamlined, efficient and consistent.

1. Creating a written 4D Dyslexia Policy with links to other policies
2. Producing a strategy for classroom and school-wide change which will involve professional development, and be led by a key staff member
3. Implementing the strategy, as an individual school or as a school cluster, including monitoring and tracking to ensure it is adding value for dyslexic students and all students

In terms of timeframe, there are three levels to full adoption of the programme. The level that a school has achieved is recognised on the 4D School website:

Level 1: Upon registering as a 4D School, schools are recognised as Level 1. To maintain this status schools must have by March 31 2011 or within 12 months of registering have a policy and strategy published and screened by 4D.

Level 2: Recognises that a school has both a policy and strategy in place and is in the process of implementing these, at this level, the school must be able to demonstrate PD has taken place at whole-school level.

Level 3: Recognises that "Whole School Dyslexia Best Practice" has been achieved by evaluating practice with an onsite visit from a 4D consultant.

This accreditation system is brought to you by 4D Consultancy and allows schools to measure their own progress, whilst direct assistance is provided to a cluster of schools to make PD and policy implementation as well as assessment protocol affordable and accessible. The ultimate aim is to provide PD to schools so as to avoid the "lotto effect" of dyslexia aware teachers and to create a clear road map for your school to be the best it can be for all its students - find out more at www.4d.org.nz/school/.



Creating a 4D Dyslexia Policy for your school

As noted in the previous pages, effective support for dyslexic students involves a whole school approach. This involves a journey towards making dyslexia-aware best practice a common practice, so that no child is left behind.

This approach is about replacing 'one-size-fits-all' thinking with individualised learning based on recognising and understanding dyslexia as a learning preference. And it involves the new 'notice and adjust' teaching paradigm, employing simple classroom changes to allow dyslexic students to flourish and reach their creative potential. As envisaged under the new National Curriculum, equity in education is not about treating all students equally. Rather, it is about recognising and accommodating difference within the classroom environment. More than 500 New Zealand schools already have joined the 4D Schools programme and started the journey to creating a best practice dyslexia policy. You can see a list of who is onboard at www.4d.org.nz/school/

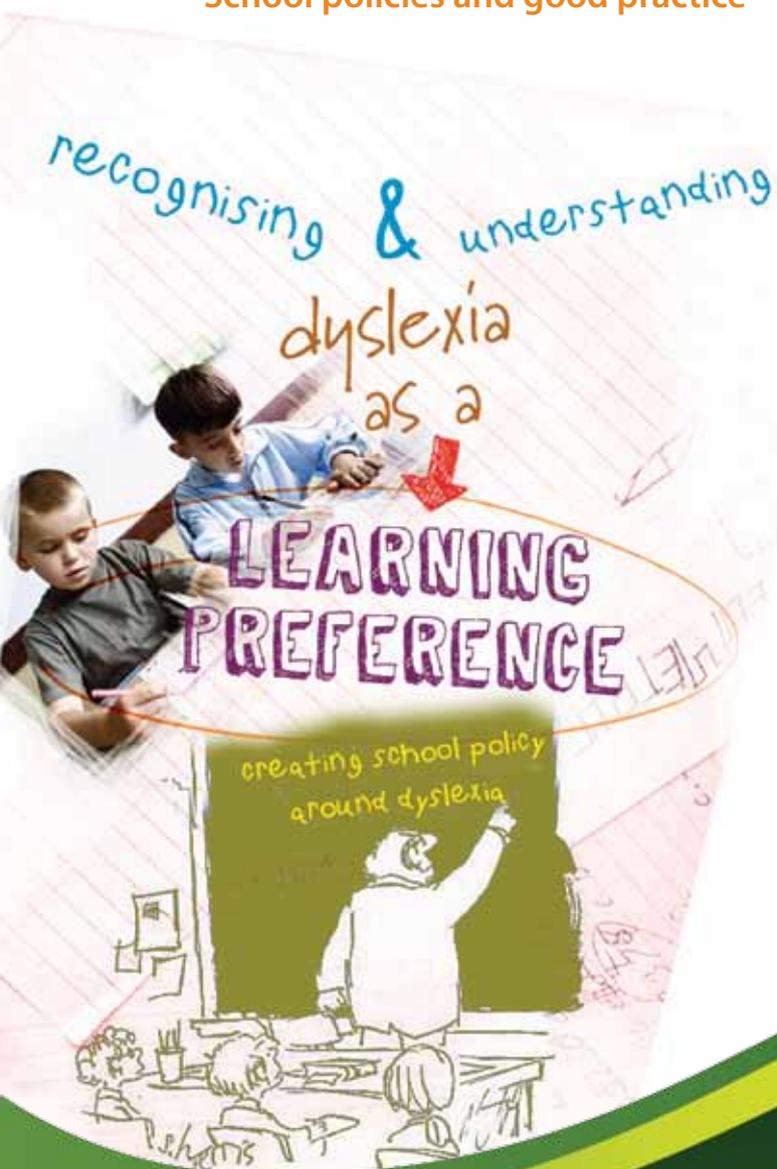
Producing a written policy statement on dyslexia is the first step to positive change through the revolutionary 4D Schools programme. This section provides useful guidance on creating a policy, and provides some additional resources which will help in formulating policy. Contact info@4d.org.nz for support.

School policies and good practice

There are many policies that are required to help a self-managing school meet its statutory and non-statutory obligations to parents, pupils, and the wider community. Policies help to ensure that the school provides effective teaching and learning, management, and care of its pupils. Although there are no hard and fast rules in producing policies it is important that the Principal, the teaching staff and the Board work together and that expertise within the school and wider community is sought to make the task less onerous.

The following broad areas should be discussed:

- Key issues
- Underlying principles
- Who will be consulted
- Process for consultation
- Lead person
- Timescales



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Formatting a policy

Following these discussions, the following format offers a clear and concise way of capturing the scope and process of your school's 4D Dyslexia Policy:

1. **Purpose** – A statement referring to the reason the policy is being produced
2. **Consultation** – This should include all the people who were consulted in the drawing up of this policy (this can also be useful when looking at reviewing a policy)
3. **Links with other policies** – Include any policies that may contain cross-referencing. This helps to ensure that policies do not contradict each other
4. **Monitoring and Evaluation** – this should indicate how frequently the policies are monitored, the method of evaluation and the lead committee/person. More information is available in the Creating School Policies section of our 4D Edge webspace, at www.4d.org.nz/edge/
5. **Dates of Establishment, Implementation and Review**

Working with the National Curriculum

Your school's 4D Dyslexia Policy provides an opportunity for your school to make a statement outlining how you will make provision for dyslexic learners according to the three key values of the New Zealand Curriculum:

- Excellence
- Innovation, enquiry and curiosity
- Respect

Specifically, your policy should provide answers to the following questions:

1. How does the school ensure that provision for dyslexic students reflects the seven statements of the New Zealand Curriculum?
 - High expectation
 - Treaty of Waitangi
 - Cultural diversity
 - Inclusion
 - Learning to learn
 - Community cohesion
 - Coherence



You can download sample policies from NZ schools from the Creating School Policies section of our 4D edge webspace, at www.4d.org.nz/edge/

2. In what ways are dyslexic learners empowered and supported to perform at ability appropriate levels within the five key competencies of the New Zealand Curriculum, despite weaknesses with certain basic skills:

- **Thinking** – becoming competent thinkers and problem solvers, reflecting on their own learning, drawing on personal experience and intuitions, ask questions and challenge the basis of assumptions and perceptions
- **Using language, symbols and texts** – developing the ability to interpret and use words, numbers, images, movements, metaphor and technologies in a range of contexts
- **Managing self** – becoming enterprising, resourceful, reliable and resilient, with self motivation and positive attitudes
- **Relating to others** – developing the ability to listen actively, being open to new learning and working effectively together
- **Participating and contributing** – participating in and contributing to the school and local community and demonstrating the confidence to participate within new contexts

To help your school create a 4D Dyslexia Policy against each of the five competencies, we've developed a table worksheet for you to record your school's position and supporting evidence, which you can download from the Creating School Policies section of our 4D edge webspace, at www.4d.org.nz/edge/

This exercise may show certain gaps or situations which are at odds with the philosophy and mission of the school. In this case, it is appropriate to identify such issues as "working towards and/or aspirations", ideally with a time bonded commitment.

The 4D Policy Challenge

In addition to formulating a policy which reflects the key competencies of the National Curriculum, many 4D schools have also found it useful to challenge the status quo by asking themselves certain key questions around dyslexia. We've put these questions in a worksheet format, including room for your responses, on the 4D website at www.4D.org.nz/school/ and download from the School Resources section.

1. What is distinctive about the way your school meets the needs of dyslexic learners/those at risk from dyslexia?
2. How well do dyslexic learners/those with dyslexic type learning needs achieve?
3. How good are dyslexic learners/those with dyslexic type learning needs' attitudes, values and personal development?

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4. How effective are teaching and learning for dyslexic learners/those with dyslexic type learning needs?
5. What is the quality of the curriculum for dyslexic learners/those with dyslexic type learning needs?
6. How well does the school ensure equality of access and opportunity for dyslexic learners/those with dyslexic type learning needs?
7. How well are dyslexic learners/those with dyslexic type learning needs cared for, guided and supported?
8. How well does the school work in partnership with parents, other schools (transition!) and the community to meet the needs of dyslexic learners/those with dyslexic type learning needs?
9. How effective is the leadership of the school in creating a “Dyslexia Aware” culture?
10. How effectively does the management of the school empower contact staff to meet the needs of dyslexic learners/those with dyslexic type learning needs?
11. How well is the school regarded by its dyslexic learners/those with dyslexic type learning needs and their parents/carers
12. In what ways does your Dyslexia Aware good practice impact on the learning of other students in the school?

The Force Field Analysis

A further tool you can use to help raise the achievement of dyslexic learners is the Force Field analysis – a mode of analysis which allows you to lay out the changes required, while anticipating forces supporting/preventing those changes and the resulting strategies you’ll be using to implement them. A worksheet to help you conduct a Force Field analysis at your school is again available from the Creating School Policies section of our 4D edge webpage, at www.4d.org.nz/edge/

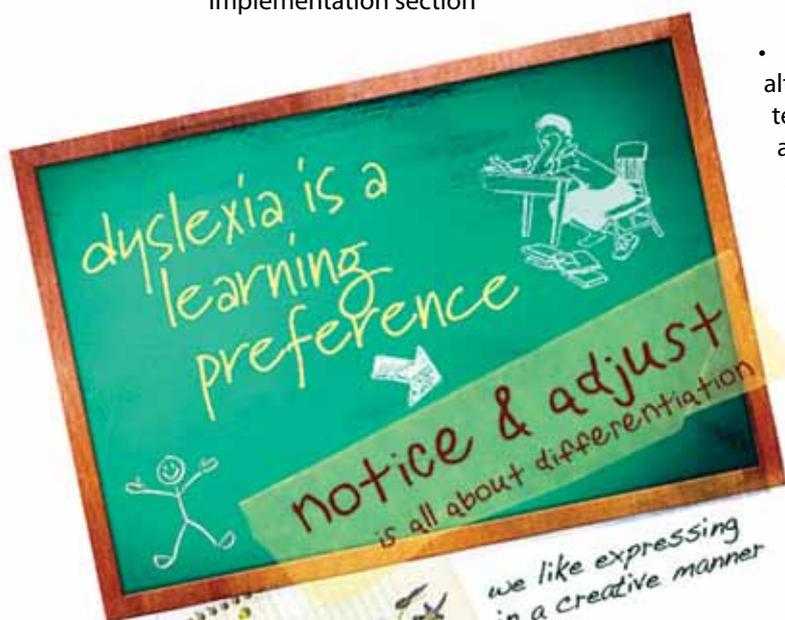


A strategy for classroom change

The second step for a 4D school is to create a strategy for implementing the 4D Dyslexia Policy throughout the school and in the classroom environment. A “point person” or persons, should be nominated to coordinate the 4D Schools programme. This key staff member(s) should be part of the senior management team with the authority to implement dyslexia-aware enhancements of policy and practice.

The strategy should put the detail to the policy statement and may include the following areas:

- Identification of ways to ensure that current weaknesses with basic skills do not prevent dyslexic students from working at ability appropriate levels
- Guidance on how to spot “unexpected difficulties” acquiring some skills in comparison to ability appropriate skill/concept acquisition in other areas
- Effective differentiation strategies – providing guidance for differentiation by outcome as well as task. “By outcome” means setting different activities for pupils based on their levels of achievement. “By task” means setting the same activity for all pupils but giving them the choice as to how they demonstrate their learning, for example by oral submissions, storyboards, mindmaps, flowcharts etc. This differentiation will dovetail into accepting alternative evidence of achievement. More detail on relevant types of strategies and accommodations is outlined in the following classroom implementation section



- Guidance for acceptance and marking of alternative evidence of achievement. Primary school teachers will have more creative licence in this area as they are not locked into the NZQA marking schedule
- Consideration as to how teachers can be supported to identify and respond to the learning needs of dyslexic students without underestimating intellect
- An appropriate dyslexia screening process, where required, and a pathway created within the school structure for its effective implementation
- Opportunities for ongoing professional development for teachers – see the ‘Measuring and continuing progress’ section later in this guide



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Classroom implementation: Notice

The third step for schools is to implement the strategic plan by moving to a 'notice and adjust' teaching paradigm within the classroom. There are many simple ways a teacher can begin to notice which students need a change of approach, and many adjustments they can make to immediately improve the learning environment, including applying personalised learning and accepting alternative evidence of achievement. In essence, we are looking to find out what children are good at; give them a chance to do more of it; and find ways to celebrate that.

Personalised learning includes strategies based on developing comprehension through use of context, syntax and grammar, and looking at areas such as organisation of ideas, planning skills, learning to remember, raising self-esteem and valuing emotional intelligence. For dyslexic students, who think in more visual and creative ways than neurotypical word-based thinkers, the ideal approach is multi-sensory – with work presented and accepted in visual forms such as video, internet, mind-maps and graphics. A full range of adjustments is available in the adjustment section of this Guide.

In the 'notice and adjust teaching paradigm, 'notice' refers to the early identification of students in the classroom who are having difficulty learning via traditional methods. This is a process which may involve both careful observation of students to distinguish dyslexia in the classroom; creation of parent partnerships; and, if necessary, formal screening.

Defining dyslexia

Brain research, including studies from Yale and Auckland universities, has shown that while it is common to use the 'verbal' left side of our brain to understand words, dyslexic people use the 'pictorial' right side – making them slower to process and understand language, but stronger in creative areas like problem solving, empathy and lateral thinking.

World dyslexia authority Sally Shaywitz, founder of the Yale Center for Dyslexia and Creativity (www.dyslexia.yale.edu) is a pioneer in this area. As noted earlier in this Guide, her laboratory was one of the first in the world to image the dyslexic brain using functional magnetic resonance imaging (fMRI). The data obtained from several thousand children and adults, combined with fMRI data from around the world, revealed a distinctive neural signature for dyslexia, with disruption in the neural systems used for reading. More on her research can be found on the 4D Edge site at www.4d.org.nz/edge/.

Bottom-line, her research shows a fundamental difference in the way the brain is organised. Dyslexics tend to be top-down rather than bottom-up thinkers, meaning they learn from getting the big picture or the overall idea or meaning first, and then fill in the specific details. People with dyslexia learn best through meaning, by understanding the overall concept rather than through rote memorisation of isolated facts. Strong visualisation skills are also an asset to those with dyslexia. These observations have critical importance in terms of how information is presented to dyslexic students, and how long they are given to understand it.

In defining dyslexia, we can note that difficulties with literacy and numeracy are a common feature of dyslexia. The most immediate attribute is a problem in decoding words and their meanings, when compared to their ability appropriate skills in other areas. However, this is still only one aspect of a broader spectrum of difficulties. And while it is important that literacy, and numeracy, are addressed, if that is all that is addressed then interventions will fail more often than succeed – because not only do dyslexics have the need for literacy intervention, they also learn differently, and this must be understood.

DFNZ supports a broad spectrum view which acknowledges that dyslexia has a proven neurobiological basis; is hereditary; impacts a wide range of skills; and occurs across a range of intellectual abilities. Skills that may be affected can include auditory and information processing, planning and organising, motor skills, short-term memory and concentration. Some of these can make it especially challenging for individuals to follow instructions, turn thoughts into words and finish certain tasks on time. Dyslexia is perhaps best thought of as a continuum of abilities and difficulties, rather than a distinct category, as there are no clear cut-off points.

In terms of the ‘notice and adjust’ teaching paradigm, dyslexia is defined as “A specific learning difference which is constitutional in origin and which, for a given level of ability, may cause unexpected difficulties in the acquisition of certain literacy and numeracy skills.”

It is important, however, not to get overly caught up or sidetracked by debate on dyslexia definitions. The DFNZ and 4D focus is very much on constructive action. This is in line with the views of renowned UK Government education consultant Sir Jim Rose, who also advocates an action approach. In his landmark report for the UK Government on Identifying and Teaching Children and Young People with Dyslexia and Literacy Difficulties (June 2009), he notes that:

“Despite different definitions of dyslexia, expert views very largely agree on two basic points. First, dyslexia is identifiable as a developmental difficulty of language learning and cognition. In other words, it is now widely accepted that dyslexia exists. Secondly, the long running debate about its existence should give way to building professional expertise in identifying dyslexia and developing effective ways to help learners overcome its effects.”

Noticing dyslexia in the classroom

Careful observation of students in order to notice those with dyslexic learning tendencies is the first step in implementing the ‘notice and adjust’ teaching approach. Teachers have a very important role to play in identifying students in this way, and in fact it is typically the school environment in which dyslexia is first picked up.

Signs to look out for, usually apparent after a year at school, include:

- Challenges with visual and/or auditory sequential working memory
- Struggling to make links with phonological awareness

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- Difficulties with making letter/sound links, spelling common words and segmenting and blending sounds
- Issues with learning sequences eg. days of week
- Fine motor coordination may be problematic, eg. tying laces, doing up buttons
- Good oral capability but difficulties, including behavioural ones, when requested to complete written exercises
- Letters or numbers reversed or confused b/d/p/q, n/u, 13/31
- Problems with labels, rhymes, sequences
- Spells/reads on one line but not on the next
- Quick thinker/doer, but not when given instructions
- Enhanced creativity
- Aptitude for constructional/technical toys
- Being slower to process and needing repeated exposures to retain learning
- Retrieval issues – learns something one moment, gone the next
- Large gap between oral and written work
- Failure to complete school work
- Tiredness
- Poor sense of direction – difficulty telling left from right
- Poor execution of work and avoidance of tasks – may be the class clown!
- Negative attitude and lack of motivation
- Lack of concentration
- Difficulties with peers and group work
- Low self-esteem and unrealistic goals
- Poor attitude to school
- ‘Homework havoc’
- May show satisfactory work in some areas
- Can appear on the ball, but is a bit of an enigma in terms of how their thought processes work

It is important to note that all lists must be viewed against a benchmark of ability appropriate achievement in other areas. This embodies the principle of “unexpected difficulties” due to dyslexic learning differences, rather than across-the-board learning difficulties due to “global delay”. Students with global delay tend to learn most things at a slower rate and require more repetition whereas students with dyslexia usually have difficulties in specific areas. Also beware of any attempts to turn lists like this – and the ones that follow below – into some form of “identification checklist”. These are fraught with danger because they invariably fail to acknowledge that some behaviours are more significant indicators than others. So some non-dyslexic student could score highly on a range of trivial items while severe dyslexics may have fewer but more significant behaviours.

A more comprehensive guide to identifying potential dyslexia signs is provided below. This is from the UK's "Inclusion Development Programme" from the Department for Children and Schools:

Reading	Writing	Numeracy/ Time	Skills	Behaviour/ Concentration	General
Makes poor progress with reading	Poor standard of work compared with oral ability	Confusion with number order, e.g. units, tens, hundreds	Poor motor skills – weaknesses in speed, control, accuracy	Uses work avoidance tactics such as sharpening pencils, looking for books	Speed of processing
Has difficulty blending and segmenting. (Blending = combining individual sounds together to make one word for reading. Segmenting = breaking a word into syllables for spelling)	Produces messy work with lots of crossings out, words may be tried out several times	Finds symbols confusing + / x = / - / ÷	Limited understanding of non-verbal communication	Is easily distracted	Poor concentration
Has difficulty with the structure of words – knowing where to divide into syllables, recognising prefixes and suffixes	Often confused by similar letter shapes e.g. b/d, p/g, p/q, n/u, m/w	Difficulty learning sequences e.g. times tables, days of week, months of year	Confusion of left/right, up/down, etc.	May appear to be 'dreaming' instead of listening	Difficulty following instructions
Difficulty with pronunciation of longer words	Poor handwriting with reversals and badly-formed letters	Difficulty in learning to tell the time, especially with analogue clocks	May be unsure of hand preference	May act as the class clown or be disruptive or withdrawn	Word finding difficulties

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Reading	Writing	Numeracy/ Time	Skills	Behaviour/ Concentration	General
Does not recognise familiar words	Spells a word several ways in one piece of writing	Poor time keeping and awareness of time passing	Has good days and bad days	Becomes very tired due to the amount of effort and concentration required (research has shown that the dyslexic brain works four times harder than the non-dyslexic brain when processing language-based information)	Forgetful of words
Poor expression, hesitant, slow when reading aloud which can lead to poor comprehension of text and losing the point of the story	Has the right letters in a word but in the wrong order	Poor personal organisation and limited abilities to set work out clearly on a page			Does not like change e.g. a supply teacher covering for the class teacher
Cannot pick out the most important points from a passage.	Written work badly set out – wanders away from the margin	Difficulty remembering what day of the week it is, birth dates, seasons, months			
Misses out words or adds words when reading text	Uses phonetic and bizarre spelling	Difficulty with concepts e.g. yesterday, today, tomorrow, above, below, etc.			



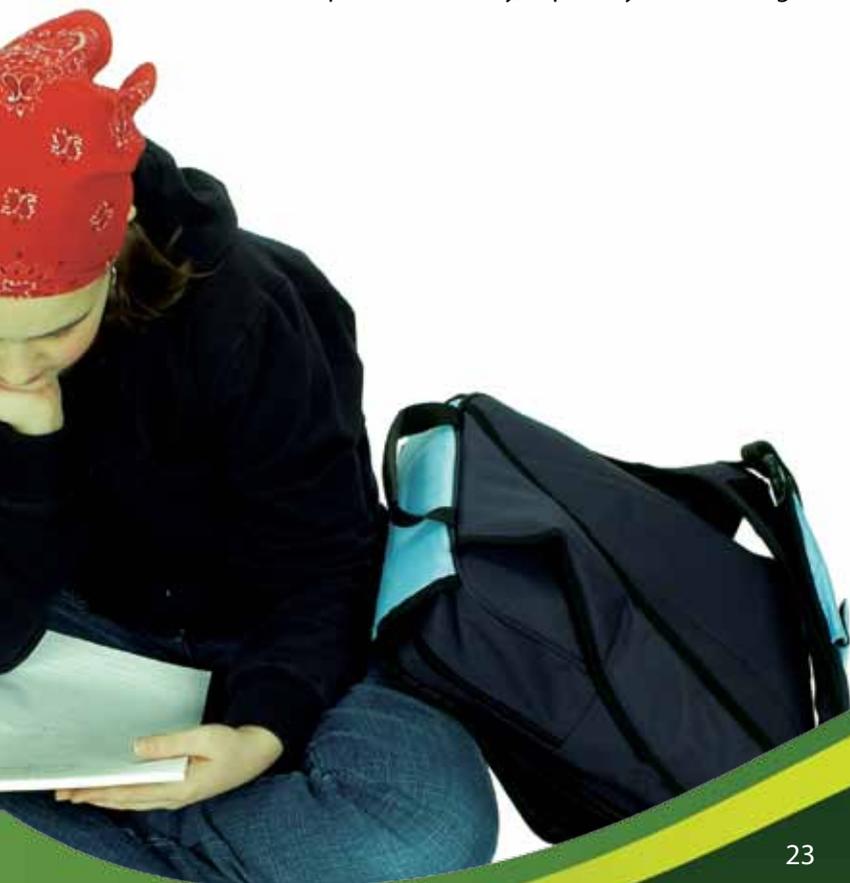
Leading US dyslexia researcher Dr Sally Shaywitz also provides guidance on noticing dyslexia and notes clues to dyslexic learning preferences can be found in both spoken language and reading:

Spoken language clues:

- Late speaking
- Mispronunciations
- Confusing words that sound alike, for saying “recession” when the individual meant to say, “reception
- Pausing or hesitating often when speaking
- Using imprecise language, for example, “stuff,” “things,” instead of the proper name of an object
- Underestimation of knowledge, if based solely on (glibness) of oral response

Reading clues:

- Inability to read small, so-called function words such as “that,” “an,” “in”
- Terrific fear of reading aloud; avoidance of oral reading
- Oral reading filled with mispronunciations, omissions, substitutions
- Oral reading that is choppy and sounds like reading a foreign language
- Disproportionate poor performance on multiple choice tests
- Inability to finish tests on time – doesn’t finish or rushes and makes careless errors; final test grade does not reflect person’s knowledge of the topic
- Messy handwriting despite what may be an excellent facility at word processing
- Extreme difficulty learning a foreign language
- Avoidance of reading for pleasure which seems too exhausting
- Requires quiet environment to concentrate on reading
- Development of anxiety, especially in test-taking situations



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Creating Parent Partnerships

Parents should be informed as soon as you suspect a student has dyslexic-type tendencies. This is the most effective way to build trust and respect, and to create effective parent partnerships which support the child in the home and so optimise the good work you do in the classroom. An acid test of a school that is working is parental confidence, and this comes as a consequence of school action and quality communication.

You don't need a formal assessment or diagnosis of dyslexia to initiate this dialogue with parents – rather, it is about noticing signs that may indicate a learning preference based on atypical thinking, and sharing your observations with parents/carers sooner rather than later. One of the things that defines a dyslexia-aware self-managing school is the willingness to proactively identify students with issues.

DFNZ also offers support for parents through a dedicated 4D Home space – www.4d.org.nz/home/. This site is designed to inform and assist parents whose child doesn't seem to be making the same progress as others at school. It also includes personal stories from parents and information on solutions providers.

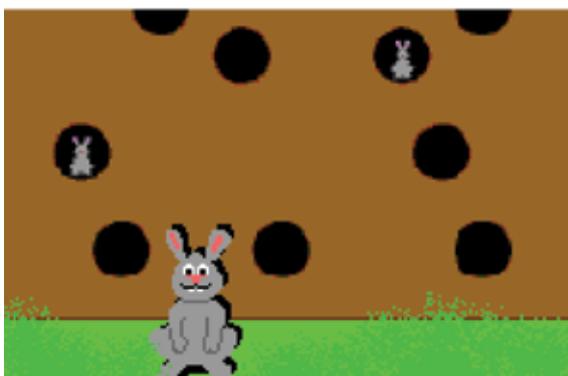


Screening for Dyslexia

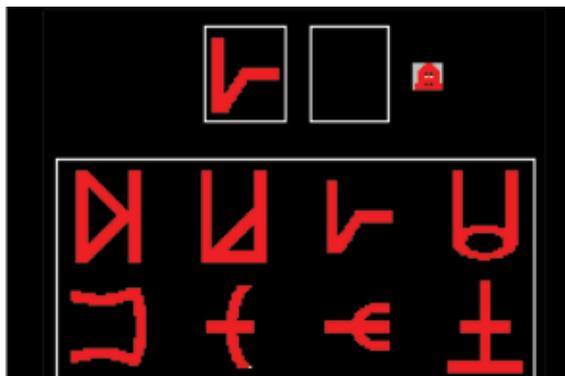
For the majority of students with a dyslexic learning preference, simple adjustments in the classroom (as detailed in the following section) will be immensely valuable in inspiring them to draw on their strengths in the classroom. However some students - estimated at around 4% (compared with the conservatively estimated 10% of the population who are dyslexic) - may need additional specialist help, screening tests and small group, or one-on-one interventions, to help them make significant progress.

There are many different tests available for screening; detailed below are those which have been recommended by international dyslexia expert Neil MacKay. One-to-one interventions may include phonetic programmes, reading recovery and Speld programmes. These should be delivered by specialist teachers such as RTLBs/RTLits and SENCOs within schools. You can read more about phonics in the further resources section of this guide. For contact details for solution providers such as Speld NZ or Kip McGrath, go to www.dfnz.org.nz/members.html

Lucid CoPs, released in 1996, is the leading computerised assessment system for children aged 4-8 years. A scientifically proven system for early screening of dyslexia, it is currently used by more than 6,000 schools in the UK and worldwide – including more than 300 New Zealand schools. CoPS comprises nine tests of fundamental cognitive skills that underpin learning. They enable teachers to produce a cognitive profile of a student which can greatly illuminate the individual pathways to learning success. Each test is presented as an enjoyable game. Lucid CoPs assesses the student's strengths and weaknesses in dealing with information presented in a variety of visual and auditory modalities. Suggestions for a wide variety of teaching strategies are also included.



Visual sequential & spatial memory test



Phonological awareness test

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LASS Junior is a multifunctional assessment system designed for children aged 8-11 years. LASS is straightforward to administer, with students completing up to eight “games”. A report is immediately available which is easy to understand and explain to parents and other staff. The report shows student attainment levels in aspects of literacy as well as cognitive readings on visual, auditory memory, phonological skills and non-verbal IQ. The Teacher Manual suggests strategies and resources in response to the reports. Pre and post testing allows teachers to measure over time how effective interventions have been.



Word Chopping (syllable segmentation) test

LASS Secondary is similar to the junior system and assesses the same parameters but the test modules are carefully designed and scientifically validated for children aged 11-15 years.

More detail on CoPS and LASS is available at www.lucid-research.com. Please note, these programs do not run on MAC's.

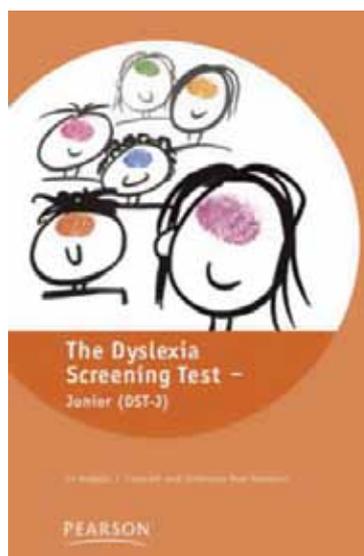
In New Zealand, these tests can be ordered from a small number of suppliers including Lexia Learning Systems: www.lexialearning.co.nz or www.itecnz.co.nz, the Learning Staircase: www.learningstaircase.co.nz, and Real Special: www.realspecial.co.nz.



Sentence reading test

Lexia run nationwide training courses in both the use and interpretation of the tests, and provide free assistance to their clients in the analysis of individual student profiles.

The Dyslexia Screening Test (DST), developed in 2004 by Dr Angela Fawcett and Professor Rod Nicolson, is a comprehensive screening of tests of attainment and ability. These determine whether a child is experiencing difficulty in areas known to be affected by dyslexia. Test results are entered into a computer, which calculates the degree of ‘risk’ in terms of dyslexic-like learning tendencies. The resulting profile of skills is both valuable in guiding support at school and – by being provided in a language that parents can understand – support at home. The results are also supported by a thorough action-oriented manual. These tests work best as a one-on-one tool for identifying sticking points and developing highly personalized responses to be delivered by a specialist teacher. Also useful in determining which students would most benefit from RTLs/RTLit support.



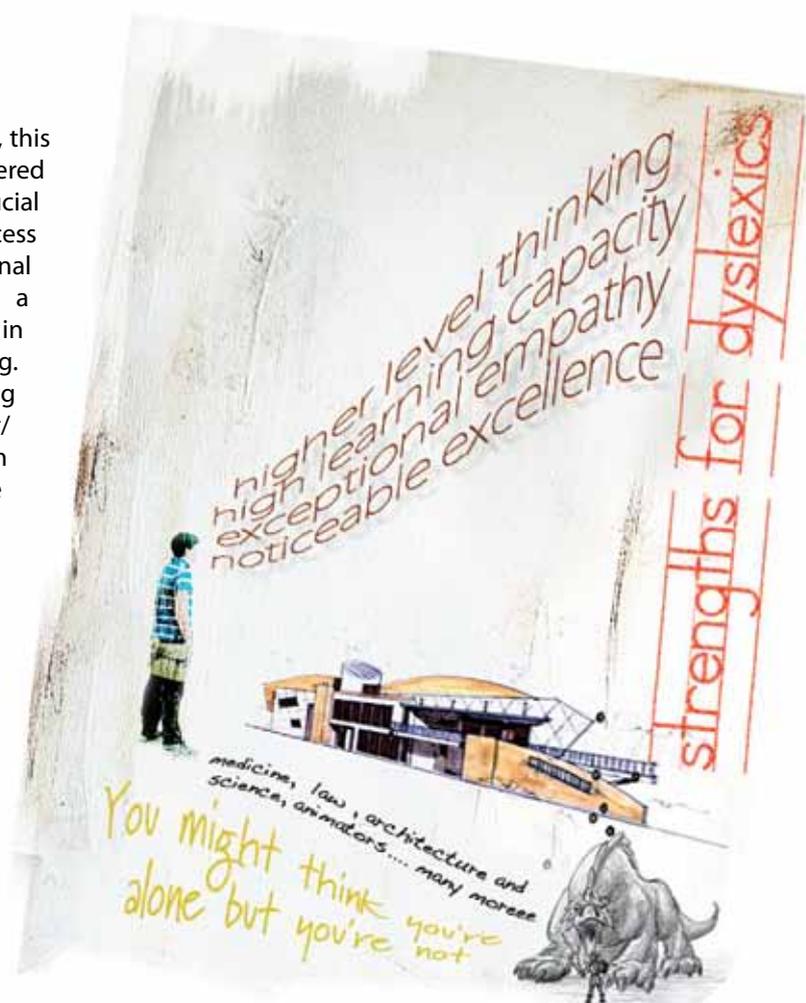
Dr Fawcett and Professor Nicolson are internationally recognized for their research into dyslexia and development of the DST. Dr Fawcett is currently Vice President of the British Dyslexia Association while Professor Nicolson is head of psychology at Sheffield University, UK.

DST comes in three levels for schoolchildren: Early (DEST 2: 4.6-6.5 years); Junior (DST-J: 6.6-11.5 years) and Secondary (DST-S: 11.6-16.5 years). There is also an adult screening test (DAST). These can be purchased through www.pearsonpschcopr.com.au, email infor@pearsonpschocorp.com.au. They also have a New Zealand contact number – 0800 942 722. You must be a registered test user to use DST, but helpful support in this process is available on the 0800 number.

Official assessment

In terms of an official assessment of dyslexia, this can currently only be provided by a registered psychologist. For senior students this official assessment is required to be able to access assistance with exams in the form of additional time, reader-writer support, and use of a word processor. This needs to be done well in advance of sitting formal examinations (e.g. NZCEA) as there must be a track record proving the student has been using the Reader/Writer support successfully for some time. An application has to be made to NZQA for the right to use Reader/Writer.

An appropriate screening process should be set by your school and a pathway created within the school structure for its effective implementation. This should form part of formulating strategy – per step two of the 4D Schools programme.



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Classroom implementation: Adjust

This section outlines a range of simple classroom adjustments that can improve the learning environment for dyslexic students. What's more, because they are based on personalised or individualised learning, other students will also benefit. For example, Maori and Pacific Island students, who historically have oral cultures, may be supported to learn more effectively if the teaching is delivered in ways that are less dominated by the written word. Moreover, because the adjustments are about personalised learning, which has benefits across the board, these adjustments can be done without having to wait for an assessment or diagnosis.

Overall, this approach is about recognising that equity in education comes through delivering to a student's individual needs, rather than treating them all the same. As US president Thomas Jefferson once commented: "There is nothing so unfair as the equal treatment of unequal children." A personalised approach also lies at the foundation of the National Curriculum.

The adjustments which are recommended below can be made at any scale, at any time and in any priority order – according to the particular circumstances and resources of the school in question. A great resource, that expands on many of these suggestions, is Neil MacKay's book "Removing Dyslexia as a Barrier to Achievement" available by emailing the Dyslexia Foundation at info@dfnz.org.nz.

Students of course have their own valuable perspectives on what works for them. Our 4D Virtual Classroom, www.4d.org.nz/virtual/, is great place to visit to hear more from students on this.

Instructions

Students with dyslexia can become overloaded when receiving instructions, finding long or complicated lists difficult to process and recall. The following adjustments can make instructions easier for them to understand and retain:

- Set clear lesson objectives. Write them on the board and refer to them frequently during the lesson, and especially at the end. Students need to have a purpose for their learning and will respond better when they know why they are doing something
- Break instructions into small, logical 'chunks' and say things in the order they should be done, ie "Fold the paper then put it in the box", not "Put the paper in the box after you have folded it"
- Slow down talking pace and reduce the amount of words used. Repeat, slowly and clearly, if necessary
- Smile before you give instructions or repeat them
- Classroom studies show some teachers talk for 90% of the time – talk less!
- Simplify sentences, don't use 30 words when ten will do
- Avoid passive phrases, sarcasm or double meanings, ie "You need to lift your game"
- Differentiate to provide opportunities for success, and differentiate by outcome as well as task. By outcome means setting different activities based on levels of achievement. By task means setting the same activity for all students but letting them choose how to demonstrate their learning
- Praise dyslexic students when they ask questions
- Use simple worksheets, with large print and clear spacing
- Check in with students soon after they commence work to ensure they've 'got it right' – if they haven't, this will ensure you put them on the right track sooner

Time

The additional time it takes for a dyslexic student to access basic skills like reading and writing can leave insufficient time to demonstrate ability in other areas (eg story telling, problem solving, comprehension). This is because the dyslexic brain is wired differently, meaning there is a neurobiological reason why extra time is an important accommodation. The following adjustments can therefore help dyslexic students to succeed:

- Provide an overview of the topic at the start and define what needs to be achieved by when
- Allow extra thinking time and more time to finish tasks
- Find ways to provide increased processing time for students, eg deliberately pausing after you ask a question
- Allow more time for dyslexic students in tests
- Visual timetables can be beneficial for dyslexic thinkers
- Use digital clocks as well as analogue
- During tests, a short break in the middle, or breaking the test into two parts to be sat on different days, can be highly beneficial
- Remember that a dyslexic child often has to work exceptionally hard to try and catch up or stay with the rest of the class. Give them some down time to recharge or structure activities so they are not required to work at their maximum capacity all the time. Structure the day with easy tasks interspersed with more difficult ones

Notetaking

Dyslexic students can find blackboard and whiteboards difficult to read from, and can easily become exhausted or fall behind if asked to copy a lot of text as part of a lesson. The following adjustments can ease or remove difficulties around notetaking:

- Minimise board copying and dictation
- If board work is needed, use black or dark markers. Avoid red or green as many students find these difficult to read
- Provide photocopied handouts/transcripts, but avoid A5 size as the text can be hard to read – slowing down information processing and comprehension
- Use handouts with gaps for students to fill in key ideas and draw their explanations and utilise 'Thin Notes' – handouts containing text down the centre of the page with large margins: plenty of room for 'picture thinkers' to draw diagrams and for 'word thinkers' to note or summarise main points
- Where possible, include pictures in handouts
- Avoid black text on white background – buff or coloured paper is easier to read
- Use at least 14pt font Arial, Sasson or Comic Sans, 1.5 line spacing for handouts
- Encourage the use of colour to help organise notes

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Creative and multi-sensory approaches

Dyslexic students are often 'picture thinkers', so may find information more interesting and easier to understand when it is supported by visual and creative material:

- Multi-sensory approaches work best – including visuals and colours
- Use video, internet, mind-maps and graphics
- Do quick drawings to illustrate concepts
- Use pictures, diagrams and charts and use coloured highlighters for emphasis
- Use real objects as props
- Show don't tell, for example by using role-plays
- Use wall displays and images to reinforce learnings – e.g. months of year, mathematical signs, geographic locations
- Have keywords around the classroom that relate to the topics being taught – this makes it easier for students to access common words and maintain their train of thought
- Technology can be a dyslexic student's best friend, enabling them to use visual strategies or overcome handwriting or spelling difficulties. A laptop to word process work and reinforce numeracy skills, a dictaphone to record work, and phonetic spell checkers can enable learning

Classwork and the classroom environment

There are a number of adjustments that will improve the learning environment, such as:

- Relocate dyslexic students to well lit areas near visual aids, but not directly under fluoro lights as these cause visual disturbance
- Ensure noise is not a distraction
- A well organised structured learning environment will also, among other benefits, help reduce distractions
- Accept work in different formats, for example mind maps, videos, photos, diagrams, powerpoint. Use oral assessments and phonetic spelling
- As a rule, 'don't give them more of what they can't do'
- Allow students to choose which piece of writing they want assessed
- Link learning tasks to previous knowledge. This is about creating 'building' blocks which show how new things relate to previous lessons. Dyslexic processors often require additional exposure to new learning to make these links and retain understanding so that they can retrieve information and apply to other settings and tasks
- Reinforce and check understanding. This also relates to 'building blocks' and showing the relationship between learning. Students need to be clear that it is ok to ask if they haven't understood something – it is likely others will be in the same position
- Establish the purpose and build a vision of the big picture for the lesson
- Summarise key points at the end of the lesson. Revisit previous learning at the start of the lesson
- Teach a range of planning techniques to support students personalising their learning style
- Use post it notes to turn non sequential thinking into kinaesthetic flow charts/mind maps.

- Use PMI planning tables and word wheels. PMI tables take the common format of plus/minus or for/against tables and add a third column marked 'interesting'. This opens up the thinking and allows for more flexibility. Word wheels are a simple planning technique for organising ideas, with the main idea going in the middle and other ideas go on the spokes as they come up in conversation, planning or brainstorming
- Use WALT and WILF techniques to support target setting.
WALT (What are we learning today) allows teachers to make explicit the learning of the lesson while WILF (What am I looking for) tells students what to focus on
- Try many ideas: not all will work. Clever tools include highlighted lines to aid navigation, blue tack spots for punctuation, Mnemonics, and encouraging use of the 'finger' for spacing
- Allow greater access to internet
- Encourage students to read their writing backwards to spot spelling errors
- Use peer tutoring, scribed work and paired reading to help dyslexic students keep up
- Group children based on learning ability, not based on reading/spelling ability
- Catch them doing it right - praise and encourage strengths, being specific about what a student has done right
- Display students' work (sensitively) and update regularly
- Nurture a comfort zone through preferential learning which enables a dyslexic student to build up to handling discomfort, like traditional assessments, with adjustments, time accommodations and a reader/writer for exams (ideally a reader/writer the student has met before and feels comfortable with)

Reading, writing and spelling

Difficulties and frustrations around reading, writing and spelling are often the biggest challenge for dyslexic pupils, and can unnecessarily affect their work in other areas where they should be excelling. The following suggestions can relieve the intense pressure around reading and writing skills, freeing dyslexic learners up to show what they can achieve:

- Always explain the 'three parts of a word' – what it looks like, what it sounds like and what it means
- Relax – interesting words spelt wrongly are of more value than boring words spelt right
- Don't overly focus on handwriting – neat handwriting can be difficult for dyslexic students and an obsession with neatness can detract from strengths in equally or more important areas. The priority is effective communication in whatever medium is being used
- When marking, adopt the "less is more" approach and feed-forward – tell them how to do it next time rather than what they've done wrong
- Don't equate assessment with writing – there are alternative ways for a student to "show what they know"
- When it comes to gathering evidence, remember that there are alternative ways to get it down on paper
- Promote reading for a range of purposes – and let the student choose their own reading material when the activity is about reading for pleasure
- Provide alternative strategies and media.
- Access audio book resources
- Use Paired Reading to help students experiencing difficulties to keep up with the class

See also the reading accuracy and phonics information in the further resources section of this Guide.

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Marking

Marking is another area where simple adjustments can significantly assist dyslexic students. Consider the following:

- Mark 'target' spellings only – avoid death by deep marking! Apply an 80% accuracy standard, allowing students to 'pass' where they have made a good attempt
- Focus on big picture success, rather than word or spelling accuracy ie encourage 'thinking', not just 'reading' accuracy – in the right context 'butifull' is much better than 'nice'
- Identify two successes – the "wow" factors: "We need more of this please!"
- Give a maximum of two tips – in positive, affirmative, doable language in order to: "define those functions which are almost within reach"
- Finally, ask the student to "tell me something you did well/would change next time to make it even better"

Self-esteem

Even more debilitating than having difficulty with basic skills can be an accompanying feeling of failure or low-self worth. The following can help:

- Remember dyslexia's greatest difficulty is self-esteem – be aware of potential issues around emotional and behavioural needs as well as self-esteem
- Emphasise strengths of student's work, with specific praise
- Develop pupils' knowledge of their own language abilities and needs, and of what to do when things go wrong
- Support target setting and celebrate success
- Encourage students to take a role of responsibility that showcases a strength that they have. If the expectation is for the child to read or give feedback to the whole class, give them warning a few days prior so they have a chance for adequate practice. Don't put them on the spot. If they are resistant do not insist
- Try to provide feedback, not failure – "criticism kills"
- Empathy is the key. When a student feels understood and supported they can be encouraged to take learning risks. From comfort to discomfort. From non-traditional / alternative educational outputs to the ability to sit traditional exams!

Homework

Dyslexic pupils often find homework intimidating – forgetting or not comprehending what is expected of them. Make the following adjustments around homework to improve outcomes for dyslexic students:

- Issue clear instructions for homework and give a realistic time allocation
- Set homework that reinforces basic skills and provide supporting material – ideally, give homework as a handout
- Include the family in the communication loop. If the student and their parents are comfortable, discuss openly with the student that you are aware they are dyslexic or think differently – and ask how best you can support them
- Set homework at start of lesson and remind again at the end
- Provide an extra text book – one for home and one for school

Section 3: Further resources

Reading accuracy and the role of phonics

Too much focus on reading accuracy can be detrimental for dyslexic students, particularly those whose skills may be weak in this area but strong in others. This is because it risks damaging self-esteem by giving them more and more of what they find extremely difficult to achieve. Likewise, a reliance on one form of phonics over another may be problematic if the chosen method simply does not suit the student. The most important thing is that students learn, so again personalised or individualised approaches work best. Some introductory information on reading accuracy and the role of phonics is provided below.

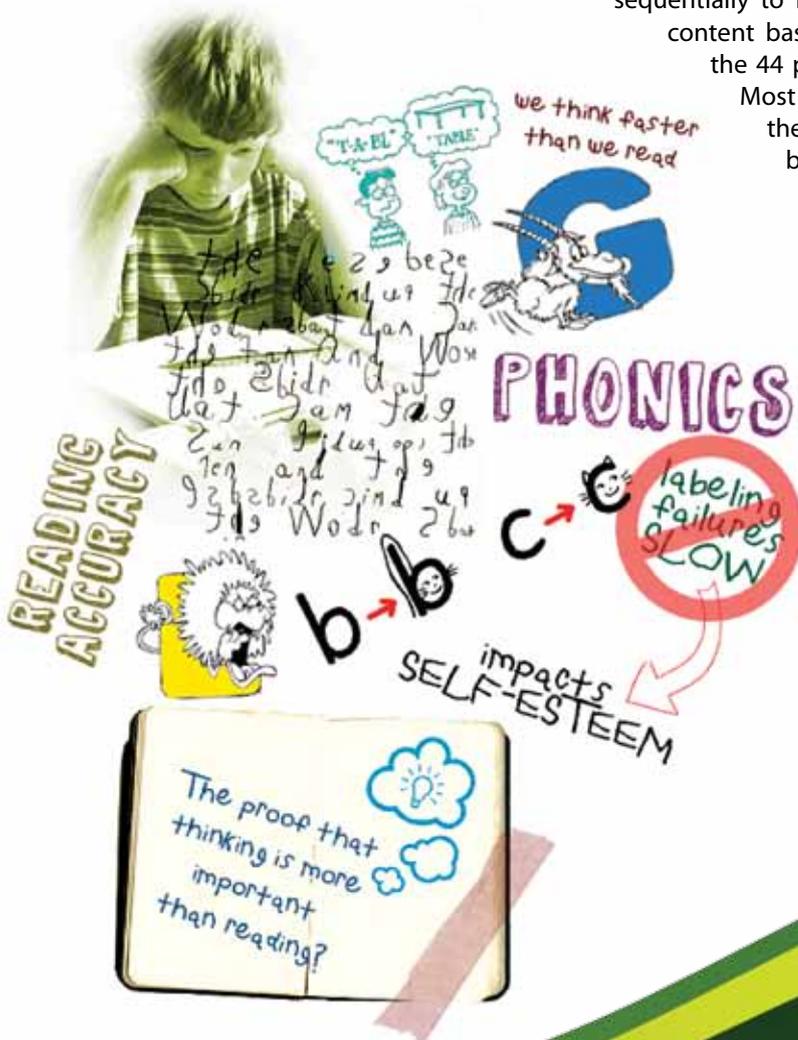
Firstly, we should note that dyslexic students think faster than they read – so putting them in low-ability groups and measuring them solely on reading ability wrongly labels them as ‘failures’ or ‘slow’, impacting self-esteem. Experience shows us that we can push and push a child to improve reading accuracy up to a point, but there comes a time when the law of diminishing returns kicks in. Teaching harder does not work, we need to teach differently.

At this point, the best approach – based on the ‘notice and adjust’ philosophy – is about teaching students to use their literacy skills in the best way they can. The proof that thinking is more important than reading? Weak readers who can think and who are valued for their intellect go on to achieve their potential. Strong readers who can’t think go nowhere.

Synthetic and analytical phonics and the ‘whole word’ approach

Synthetic phonics teaches children to identify the letters making up a word, and the sounds those letters make, and then put those sounds together sequentially to form a word. There is typically a strong aural content based around the ability to hear and reproduce the 44 phonemes that make up the English language.

Most popular phonic programmes are based around the principles of synthetic phonics though it is becoming increasingly apparent that, while synthetic phonic programmes improve reading accuracy, it may be at the expense of comprehension. There is also a danger that some students try to decode everything rather than develop the ability to read whole words as sight words.



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Analytic phonics is a more visual approach which looks to break words into sound syllables, and uses similar sounding words to help a child learn to generalise and thereby expand his/her vocabulary. It is potentially a quicker learning process but it does rely on the student's ability to recognise similarities and make appropriate generalizations (mastery of c+at gives f+at, m+at etc). While arguably more effective for developing comprehension skills this can come at the expense of word attack skills. Typically students with an over reliance on analytic phonics struggle to cope with words they have not seen before.

Overall, synthetic phonics provides a foundation of letter names and sounds and blending, while analytic techniques seed the ability to generalise words from those previously learnt. Another technique is the 'whole word' approach, which is based on the assumption that reading develops naturally in the same way as speaking. Many very effective readers learnt this way, through very early exposure to books in the home – effectively they 'caught' reading through this process and became very effective decoders. However, they risk failing to develop comprehension skills. Students with no background of synthetic and analytic phonics are particularly vulnerable when confronted with unfamiliar words.

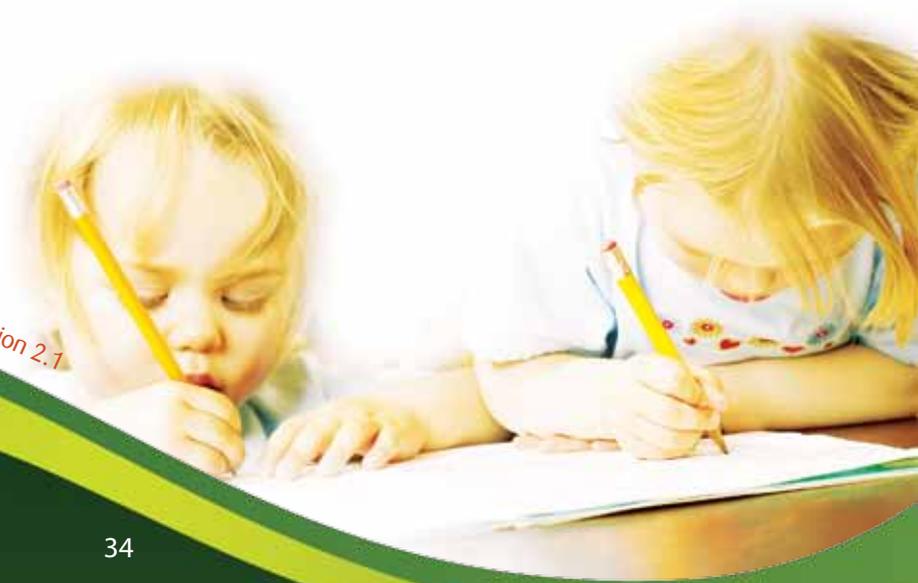
There is no 'one way' that works for the decoding or spelling of all words in our language just as there is no 'one way' that works best for all learners. Students with strong auditory linguistic skills learn well synthetically – students with strong visual skills often prefer a more analytic approach.

There are powerful arguments for the inclusion and promotion of both approaches at your school – they each involve and develop different skills, and each of these skills is important to effective and efficient development of reading and spelling.

Effective reading for dyslexic students

As their ability grows, the most effective readers no longer need to use synthetic or analytic techniques unless strictly necessary. Instead they rely on cues from the first and last letter of each word, the shape of the word and from the "comprehension big picture" afforded by context, syntax and grammar.

This is why, when a student cannot read a word in a passage, it is often helpful to say "Miss out the word and read to the next full stop." Usually knowledge of context, grammar and syntax will enable an informed guess. If that does not work the student can go back to analytic techniques and refer to previously learnt words with a similar patten or try to sound out the letters using synthetic approaches. For dyslexic students struggling to read an unfamiliar word in a passage there is a strong pragmatic case for suggesting they use "miss out and read on" as the initial strategy, followed by analytic and synthetic techniques when context has not helped.



Additional tools and further resources

As noted in the screening section of this Guide, while the majority of students with a dyslexic learning preference will respond positively to simple adjustments to teaching, some will require extra assistance and support. This group of students - around 4% (compared with the conservatively estimated 10% of the population who are dyslexic) - can benefit from specialist help, screening tests and small group, or one-on-one interventions.

Many schools will already have in place specific interventions for students who have clearly identified learning needs that cannot be met within the traditional classroom as regards reading, handwriting, spelling, maths, memory, coordination etc. Bringing a dyslexia-aware perspective to these can enhance them and create greater progress.

In addition to physical and environmental changes in the classroom, there are some dyslexia-specific learning interventions that can be useful. These need to be matched appropriately to the student's needs and schools need to ensure that they are effective.

There are many programmes (computer and non-computer) which will help in supporting areas of difficulty. Talk to other schools about which ones work for them. Some are expensive but can be viewed as an investment.

Ensure Teacher-aides have adequate training and understanding of the issues and how best to tailor a programme if a child is to be removed for one-on-one support. If a programme is not working, more of the same does not work! In terms of personnel, RTLBs (Resource Teachers Learning and Behaviour) and RTLits (Resource Teachers Literacy) and SENCOs (special educational needs coordinators) are a valuable resource for schools that are engaged with the dyslexia agenda. It can also be useful to ask a known dyslexic, maybe a parent, to come and talk to staff as a whole to share their perspective on how it is for them, their experiences and things that help.

Some parents opt for support from tuition offered from outside the school. Encourage this tutoring to be done at school if possible and in school time. Thus it isn't seen as a punishment by the child in having to do it in "their own time". Also, the child is fresh and not tired after a day at school. Many of these interventions provide significant benefit to the student and the student's family and the dyslexia-aware classroom teacher will acknowledge this and help integrate any new learnings back into the classroom environment.

The DFNZ website has information and contact details for organisations which provide understanding, tools and skills to enable dyslexic individuals to address learning and other differences. You can find these on the Solutions & Assessments page at www.dfnz.org.nz

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Measuring progress

You'll notice the difference that a 'notice and adjust' approach makes straight away, but it is also important that progress is celebrated and shared. Making the changes and improvements transparent will foster pride amongst staff and students; help parents engage positively with your school; and even inspire other schools. Keeping stakeholders informed is also important in terms of the accountability and transparency mandated under the Government's Crusade for Literacy and Numeracy.

Once dyslexia-aware classroom practice becomes part of everyday learning and teaching it is important to be able to measure progress. The quickest impact is likely to be seen in the quality/quantity of work produced – the evidence of achievement. So gathering "before and after" work samples, or taking digital photos of them, is an excellent piece of informal assessment for learning. This could also include taking some hard data, for example on reading and spelling levels - and redoing the tests after an allotted timeframe.

Requiring alternative evidence of achievement – for example testing understanding/recall via a mindmap, storyboard or flowchart instead of a formal paragraph is often a powerful way of measuring the impact of changes in approach. Dyslexic pupils who may struggle to show what they know through traditional sentences and paragraphs often demonstrate ability appropriate understanding and recall of concepts and content when allowed to present in preferred ways. When this occurs it is clear evidence that any apparent problems are not with learning and teaching but the traditional assessment process.

In general, effective monitoring and tracking of dyslexic learners should be based on an awareness of what is "expected progress" for each individual student set against a profile of strengths, weaknesses and learning preferences.

The concept of expected progress is based upon a range of measures, including comparing performance across a range of subjects and skills to identify 'unexpected difficulties in relation to ability' in some areas compared with ability appropriate performance in other subject. If a student is 12 months behind with reading/spelling, making a 'month's gain in a month' does not impact on the learning gap so the challenge is to intervene to better close the gap and demonstrate real progress. It is also important to identify ability appropriate achievement in other subjects which may not be so heavily dependent upon literacy skills. Overall, it is essential that conceptually able dyslexic students are supported to interact with ideas and issues at the ability appropriate levels, while at the same time receiving assistance to address any basic skill weaknesses.

Other ways to measure progress may include:

- Asking the student to rank themselves in each subject areas and also get information from them on their performance, how they feel about school, are they progressing etc
- Talking to parents/caregivers and getting their perspective on progress
- Appointing a teacher aide to prepare templates for gathering anecdotal data on progress, and to gather the data
- Monitoring attitudinal changes, including better punctuality and less absenteeism



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Professional development for teachers



Professional Development (PD) for NZ teachers is the key to unlocking the learning potential of our dyslexic students. It is through knowledge that we gain the power to make informed decisions and adjustments in the classroom. 4D Consultancy has developed a series of PD packages for schools to allow for the upskilling of teachers in both Primary and Secondary schools.

4D Consultancy was set up following a track record of sell-out nationwide workshops and considerable demand for professional development covering dyslexia & other learning preferences from NZ schools. Schools want leadership and guidance and now is the time to take action.

Contact is made with your school to discuss 'where your school is at' and then Professional Development Packages are designed in consultation with the Principal and 4D Contact person from the school.

PD packages focus on proceeding to Level 2 Accreditation of a "Dyslexia Friendly School" through:

- Consultation to set out the road map for your school's Action Plan
- Developing a school wide policy so that Best Practice becomes Common Practice 'Get it Right for Dyslexics- Get it Right for All'. Links with other policies including, Reading Recovery, Special Education and ORRS Policy, etc
- On-site Professional Development for all school staff through interactive workshops
- On-Site Parent Evening to inform parents of how to support their child in and out of school
- 'Unsticking' the 4% - Assessment Protocol in your school for those students who need more than just a 'dyslexic friendly' teacher and help in choosing appropriate interventions

PD packages are bespoke to your school's needs and are a cost-effective approach to getting it right. To find out more or to book in for on-site PD email: esther.whitehead@4d.org.nz or info@4d.org.nz

Through a consultative process, discover how your school can deliver Best Practice and become a dyslexic friendly, level 3 school. 4D Consultancy – Giving you direct support at the chalkface. PD, Policy and Practice from nationwide consultants.

More details can be found at www.4d.org.nz/consultancy/



4D Consultancy Services

Helping you to take action

Our team brings Professional Development (PD) direct to your school, and gives you a road map for school wide changes in Policy and Practice.

Best Practice becomes Common Practice as all teachers are upskilled and empowered with our unique resources and cost effective approach.

The PD package is designed to make life at the chalkface simpler and more effective whilst creating successful outcomes for all students: Get it Right for Dyslexics; Get it Right for All.

Onsite workshops for all school staff, with a corresponding evening workshop for parents to build this critical partnership.

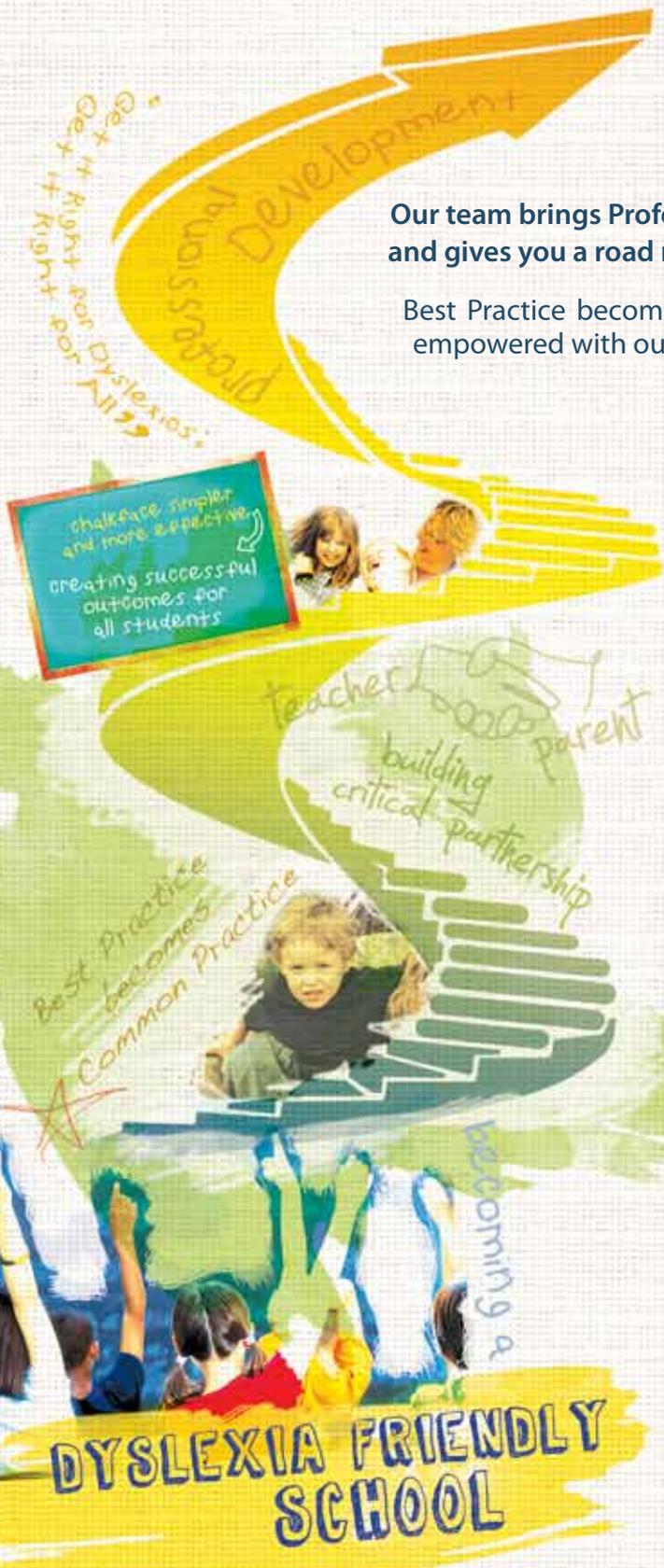
Provision of Whole School Policy, Special Education Policy and Assessment Protocol, with follow-up support and guidance.

Guidance through the accreditation process to become a 'Dyslexia Friendly School' - a 4D School where greater success is experienced by both students and teachers and parents are supporting the school.

If your school is already listed as a 4D school, Policy Creation, Implementation and PD are your next steps so contact esther.whitehead@4d.org.nz to develop your school's action plan and find out more about costs and content.

4D consultancy is seeking expressions of interest from organisations and/or individuals who share the same passionate motivations and desire for outcomes as 4D, to enhance school services and provide greater consistency throughout NZ schools.

Please contact Esther Whitehead of 4D Consultancy on the email above.



Get it Right for Dyslexics; Get it Right for All

chalkface, simpler and more effective creating successful outcomes for all students

Teacher - parent building critical partnership

Best Practice becomes Common Practice

becoming a

DYSLEXIA FRIENDLY SCHOOL

How you can help the 70,000 New Zealand children affected by dyslexia:

- Make sure your school is signed up for 4D
- Let the Ministry of Education know you're behind DFNZ – and that dyslexia-specific funding is critical for our children's future

Find out more at

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DYSLEXIA

Our school - taking the next step

www.4d.org.nz/school/