

# Dyslexia Seen Through the Eyes of Teachers: An Exploratory Survey

**Susan Dymock**

*Te Kura Toi Tangata School of Education, University of Waikato, Hamilton, New Zealand*

**Tom Nicholson**

*Massey University Te Kunenga ki Purehuroa, Auckland, New Zealand*

## ABSTRACT

Arguably, the classroom teacher is an important factor, if not the most important factor, in helping students with dyslexia to read and write well, yet there is little known about whether teachers perceive that they have the knowledge and confidence to teach these students. The present study was a national online survey of schools in Aotearoa New Zealand to explore this issue through the eyes of teachers. The sample consisted of 594 school leaders and teaching staff (elementary and secondary). The design of the study and analysis of data was descriptive, combining numbers with teacher comments. They provide initial data on dyslexia in schools. On the one hand, the data indicated that teachers and leaders were generally very positive about teaching students with dyslexia, for example, many rated their classrooms as “dyslexia friendly”. Teachers rated themselves as confident to help students with dyslexia and make a difference. On the other hand, the data indicated that teachers and leaders were not satisfied with the level of training and resources available to them. Some said they were working in the dark, and largely left to their own devices. Another less positive result was that many schools did not screen for dyslexia, or have a dyslexia policy, or share information with parents. Taken together, these findings at the teacher and school level have important practical implications. Teachers and school leaders want to help. We identify teacher training as a necessary mechanism for improving outcomes for students with dyslexia.

The teacher is the first port of call for students with dyslexia to help them learn to read and write well, yet we know little about whether teachers are confident they can do this and have the training and resources to make it happen. Do teachers perceive they have enough knowledge? If they perceive they have enough, do they actually know enough? What is “enough” anyway? Do they have teaching self-efficacy, a belief that they personally can achieve things (Bandura, 1994; Marsh et al., 2019) sufficient to teach students with dyslexia? Do they have the training and skills to be effective? Do they perceive that their classrooms are dyslexia friendly and responsive to parent concerns? These are all important questions that we need to ask and that motivated the present study.

## Teacher Knowledge and Understanding of Dyslexia

In the past three decades, multiple studies have examined teachers’ understandings of the nature of dyslexia. Researchers in a number of countries have found that teachers did not know what dyslexia was or had misconceptions (e.g., Aladwani & Al Shaye, 2018; Leite, 2012; Mather et al., 2020;

Ness & Southall, 2010; Wadlington & Wadlington, 2005). There is also a growing body of research showing that teachers have serious gaps in linguistic knowledge. This includes basic language constructs and knowledge of foundational reading skills necessary to provide quality literacy instruction for these students (e.g., Cheesman et al., 2009; Fielding-Barnsley & Purdie, 2005; Goldfus, 2012; Hudson et al., 2021; Moats, 1995; Mullikin et al., 2021; Peltier et al., 2022; Washburn et al., 2016; Washburn & Mulcahy, 2014). Without sufficient linguistic and phonics knowledge to address difficulty with decoding of words, which is a fundamental problem for students with dyslexia, teachers are unlikely to be able to help students with dyslexia.

## The Wider Context

Although previous studies have documented gaps in teacher knowledge of dyslexia and misconceptions about the nature of dyslexia, the wider context is missing. One study that looked at the wider context was Worthy et al. (2016). They interviewed more than 30 kindergarten, elementary, and specialist teachers. The findings were that teachers perceived themselves to be definitely responsible for helping students with dyslexia but there were systemic barriers to helping them. Teachers' perceptions were that they received conflicting information from their district as to the nature of dyslexia. It was not clear to them what dyslexia was. The diagnostic tests they had to do for these children were too lengthy and burdensome, and they did not know if anyone made use of their data. Teachers perceived the assessments were a waste of time in that it took months, sometimes years, to result in action. One teacher said, "Sometimes it takes so long for a student to be identified, people just give up" (Worthy et al., 2016, p. 445). Districts provided scripted programs and workbooks that supposedly brought students up to level, but teachers said they did not. Teachers noted that although specialist tutors pulled students out of classes for extra lessons, the lessons made very little difference. For high stakes tests, school districts gave accommodations of extra time or a reader/writer to students with dyslexia, but in the classroom these students were less likely to receive an intervention that addressed their core difficulties. The professional development that teachers did get, if they received any at all, seemed cursory, such as a short workshop, a booklet, a script to follow, not enough for them to give meaningful support to their students. Teachers perceived there was lack of funding to provide adequate support. District funding went to hire specialist staff for students with dyslexia—but not to train teachers. Teachers mostly were confident they could deal with reading difficulties, but dyslexia made them less confident.

The Worthy et al. (2016) findings provided initial data showing that teachers wanted to help students with

dyslexia but found themselves caught in a larger web of dysfunction at the school and district level. Their study identified what seem to be insurmountable difficulties facing teachers of students with dyslexia. Is this bleak situation also the case in other places and countries? Do teachers and school leaders perceive they are unsupported and ill equipped to help their students with dyslexia? These are important questions in the broader context of the school itself that this survey also sought to answer.

The purpose of this exploratory survey was to gain further information about teacher knowledge, beliefs, and perceptions of dyslexia, and the wider situation in schools for students with dyslexia.

The research questions guiding the study were:

1. What are teachers' and school leaders' perspectives on dyslexia, beliefs, teaching self-efficacy for dyslexia, and understandings of dyslexia?
2. What is the broader context in schools in terms of policy, training, and support for students with dyslexia?

## Method

New Zealand has a population of five million people and comprises two main islands, with most of the population in the upper half of the North Island, and many small communities that largely support the farming industry. Most of the population are *Pakeha* (European). The largest minority group are Maori, making up approximately 17% of the population. Māori are the *tangata whenua*, the indigenous population, and their culture is an integral part of school life. Maori is an official language. The other main minority groups are Pasifika (9%) and Asian (15%). The government provides free education in all public schools, and subsidized education in integrated (mainly Catholic) and private schools. Education is compulsory until age 16. There are approximately 2500 schools spread throughout the country. The largest city, Auckland, is in the North Island with 1.6 million people.

## Design

The study involved distributing an online survey to nearly 2500 elementary and secondary schools with invitations to teaching staff and school leaders to participate. There was no monetary or other incentive to participate in the survey. This was not a random survey of schools so respondents may not be representative of the overall teaching and leadership population. They were a convenience sample of school staff throughout the country who volunteered to participate. The study had a descriptive research design (Creswell, 2018) involving collection of quantitative and qualitative data. This study reports both sets of data.

## Sample

A total of 594 teaching staff and school leaders responded to the online survey (305 elementary teachers, 158 secondary teachers, and 131 school leaders). The government website Education Counts (2022) reported that in 2020, 58% (41,557) of teachers were elementary and 42% (30,172) were secondary. Of the 463 elementary and secondary respondents in this study, 66% were elementary and 34% secondary. This indicates the present sample had a slightly higher proportion of elementary and a slightly lower proportion of secondary.

Table 1 shows the demographics of respondents. In terms of gender, the government website Education Counts (2022) reported that in 2020, 76% of the teaching workforce were female and 24% male. The present sample had a higher female (93%) to male (7%) ratio for elementary but a similar female (70%) to male (30) ratio for secondary. Education Counts reported that in 2020, 45% of all teachers were below 44 years of age. The present sample was older, with only 22% of elementary and 27% of secondary teaching staff below 40 years of age.

In general, respondents were teaching in bigger towns and cities, had a graduate qualification, more than 10 years of teaching experience, and taught in State schools. Elementary respondents generally taught in small to medium size schools of up to 500 pupils and secondary in schools with more than 500 pupils.

## Measures

Pilot testing suggested the survey questionnaire would take an average of 20 min to complete, for example, among elementary teachers, 50.0% took up to 20 min. Another 35.2% took between 20 min and an hour. Some of the response times were quite long indicating that the respondent had the survey open for several days.

The first section of the survey covered socio-demographics about participants, for example, gender, age, highest qualification, years of teaching, type of school (state, private, etc.), and number of students in the school.

The second section of the survey contained seven questions, designed by the researchers, about teacher perspectives, beliefs, and understandings of dyslexia. There were also five questions on the wider context for students with dyslexia (i.e., adequacy of training and support for teachers, screening for dyslexia, parent engagement, innovative changes, whether the school had a policy on dyslexia). The questions had different response options including a Likert format with five response anchors, or a choice of options to choose, for example, “1%–10%, 11%–15%,” “agree, disagree”. Some questions had a follow up question such as “Why do you say that?” where respondents could explain their thinking in words.

The third section of the survey had six items on teaching self-efficacy for students with dyslexia, selected from other studies (Hoy & Woolfolk, 1993; Woolfolk &

**TABLE 1**  
**Demographics**

Demographics	Elementary		Secondary		Leaders	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
<b>Gender</b>						
Female	283	93.1	110	69.6	105	80.1
Male	21	6.9	48	30.4	26	19.9
<b>Age</b>						
20–29	28	9.2	13	8.2	0	0.0
30–39	40	13.2	30	19.0	11	8.5
40–49	97	31.9	41	26.0	42	32.3
50+	139	45.7	74	46.8	77	59.2
<b>Qualifications</b>						
Undergraduate	157	51.5	30	19.0	57	43.8
Graduate	131	42.9	122	77.2	72	55.4
Other	17	5.6	6	3.8	1	0.8
<b>Teaching experience</b>						
1–10 years	78	25.6	44	27.9	6	4.6
11–20 years	104	34.1	49	31.0	34	25.9
21+ years	123	40.3	65	41.1	91	69.5
<b>Location of school</b>						
Village/small town	122	40.0	28	17.7	47	35.8
Town/city	103	33.8	64	40.5	45	34.4
Large City	80	26.2	66	41.8	39	29.8
<b>Size of school</b>						
Below 50	23	7.5	3	1.9	9	6.9
51–200	78	25.6	6	3.8	28	21.4
201–500	143	46.9	34	21.5	57	43.5
Above 500	61	20.0	115	72.8	37	28.2
<b>Type of school</b>						
State	251	82.3	100	63.7	106	80.9
State integrated	44	14.4	23	14.6	21	16.0
Private	8	2.6	34	21.7	3	2.3
Alternative/other	2	0.7	0	0	0	0.8

Note. Elementary, *n* = 305 (response rate was either 304 or 305 for each question); Secondary, *n* = 158 (response rate was either 157 or 158 for each question); Leaders, *n* = 131 (response rate was either 130 or 131 for each question).

Hoy, 1990). Each teaching self-efficacy statement had a Likert scale format with five anchors (1- strongly disagree to 5- strongly agree). Teaching self-efficacy is associated with teaching confidence, a perception that the teacher

can make a difference. The research suggests that teachers with higher teaching self-efficacy are more likely to assist lower achieving students, set attainable goals, and persist when faced with student failure (Ashton & Webb, 1986; Gibson & Dembo, 1984; Guo et al., 2012; Meijer & Foster, 1988; Soodak & Podell, 1993). Using data from the present study, internal consistency for the three internal efficacy items was  $\alpha = .84$  ( $n = 536$ ) and for the three external efficacy items was  $\alpha = .57$  ( $n = 537$ ).

The fourth section of the survey had five items on beliefs about dyslexia selected from other studies on beliefs about dyslexia (Serry & Hammond, 2015; Soriano-Ferrer et al., 2016; Vellutino, 1987; Vellutino et al., 2004; Yin et al., 2020). Each belief statement had a Likert scale from 1-definitely not true to 5-definitely true. Using data from the present study, internal consistency for this measure was  $\alpha = .53$  ( $n = 532$ ).

The five items probed what seem to be misconceptions. The first item was the misconception that students with dyslexia have lower ability/intelligence. It is a misconception because there is no clear link between dyslexia and intelligence (Stanovich, 1996). Other variables are better predictors (Gresham & Vellutino, 2010), particularly severe phonological recoding difficulties. The second item was the misconception that they come from homes that are literacy poor. This is a misconception in that many students with dyslexia are from higher socioeconomic homes that are literacy-rich (e.g., Caglar-Ryeng et al., 2020). The third item was the misconception that they have low language knowledge, but this is not correct, as Hoover and Gough (1990) pointed out, “It is quite possible to find average and even superior linguistic comprehension in the virtual absence of decoding skill, as the phenomenon of dyslexia demonstrates” (p. 128). The fourth misconception was that students with dyslexia have parents who push for more resources for their children—but this does not seem to be the case (Riddick, 1995). The fifth misconception was that students with dyslexia reverse letters and numbers—even though the research says otherwise (Echegaray-Bengoa et al., 2017; Knight, 2018; Ness & Southall, 2010; Serry & Hammond, 2015; Soriano-Ferrer et al., 2016; Yin et al., 2020). When reversals persist through the school grades, it seems to be a result of long periods of not reading very well (Krafnick et al., 2014).

## Data analysis

Analysis of quantitative data involved simple descriptive statistics (means and standard deviations, percentages, and number of participants) using SPSS software. Interpreting the qualitative data involved an inductive thematic approach, looking for patterns in the data and fitting these to the research questions, letting the data do the talking (Thomas, 2006). The authors and two external raters (a graduate student and a College lecturer) each read and examined the qualitative responses to find thematic patterns. The results

section reports the themes that seemed to have support in the open-ended response data, along with illustrative examples.

## Results

The main purpose of the study was to survey the current situation in schools regarding the teaching of students with dyslexia. The first section reports results for teacher and leader understandings of and perspectives on dyslexia. The second section reports results for the broader context of school.

### Teachers’ and School Leaders’ Understandings of and Perspectives on Dyslexia

#### Defining Dyslexia

The questionnaire presented teachers with a definition from the Ministry of Education (MoE) website, from Turner and Greaney (2010). These New Zealand researchers defined developmental dyslexia as “a persistent reading and writing difficulty in otherwise typically developing children, which occurs despite exposure to high quality, evidence-based literacy instruction and intervention, and is due to an impairment in phonological processing skills required to read and write” (p. 239). Respondents had to indicate if they agreed or disagreed. Most teachers and leaders (85%–90%) agreed with the definition (see Table 2).

#### Prevalence

This question asked, “What percentage of students in your class/school do you think are in this category of dyslexia?” Choices ranged from fewer than 10% to more than 20%. As shown in Table 3, very few respondents thought they had no students with dyslexia. The vast majority (more than 90%) thought they had some students with dyslexia.

#### Sense of Responsibility

This question asked, “How much responsibility do you perceive you have to help someone with dyslexia?” Teaching staff and school leaders rated their level of responsibility from 1-not responsible, 2-slightly responsible, 3-moderately responsible,

**TABLE 2**  
Teacher Agreement with Definition of Dyslexia

Response	Elementary		Secondary		Leaders	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Agree	264	87.1	134	85.4	120	91.6
Disagree	39	12.9	23	14.6	11	8.4

Note. Elementary,  $n = 305$  (response rate was 303); Secondary,  $n = 158$  (response rate was 157); Leaders,  $n = 131$ .

**TABLE 3**  
**Teacher Estimates of Prevalence of Dyslexia in the Classroom/School**

Response	Elementary		Secondary		Leaders	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
<1%	20	6.7	8	5.1	1	0.8
1%–10%	171	57.6	92	58.6	88	68.2
11%–20%	77	25.9	43	27.4	29	22.5
>20%	29	9.8	14	8.9	11	8.5

Note. Elementary *n* = 305 (response rate was 297); Secondary, *n* = 158 (response rate was 157); Leaders, *n* = 131 (response rate was 129).

4-very responsible to 5-highly responsible. Percentage scores for each anchor on the Likert scale are as shown in Table 4. Mean scores showed that respondents rated themselves between 4-very responsible and 5-highly responsible (Elementary,  $M = 4.65$ ,  $SD = 0.65$ ; Secondary,  $M = 4.26$ ,  $SD = 0.94$ ; Leaders,  $M = 4.69$ ,  $SD = 0.58$ ). Across groups, 91% of respondents rated themselves as 4-very or 5-highly responsible.

When asked why they gave that rating, many respondents commented that it was their job to take responsibility,

**TABLE 4**  
**Percent Scores for Teacher and Leader Self-ratings of Responsibility for Students with Dyslexia, Knowledge of Dyslexia, and Dyslexia Friendly Classrooms**

Rating	Elementary		Secondary		Leaders	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Self-ratings of own responsibility for students with dyslexia						
Very high	220	72.4	81	51.3	98	74.8
High	70	23.0	46	29.1	25	19.1
Moderate	9	3.0	25	15.8	8	6.1
Slight/low	3	1.0	2	1.3	0	0
Not responsible	2	0.6	4	2.5	0	0
Self-ratings of own knowledge of dyslexia						
Very high	19	6.7	10	6.9	1	0.8
High	56	19.9	38	26.0	20	15.4
Moderate	132	46.8	59	40.4	70	53.8
Low	55	19.5	28	19.2	33	25.4
Very low	20	7.1	11	7.5	6	4.6
Self-ratings of own classroom/school as dyslexia friendly						
Very high	21	7.9	20	14.0	8	6.2
High	84	31.7	36	25.2	32	24.6
Moderate	107	40.4	62	43.3	67	51.5
Low	39	14.7	16	11.2	19	14.6
Very low	14	5.3	9	6.3	4	3.1

Note. Elementary, *n* = 305 (response rate was between 265 and 304 for each question); Secondary, *n* = 158 (response rate was between 143 and 158 for each question); Leaders, *n* = 131 (response rate was either 130 or 131 for each question).

for example, “I am a class teacher and should be catering to all needs”; “It is my job as a teacher to assist every child to achieve”; “They won’t progress if I don’t help them.” School leaders made similar comments, for example, “We are responsible to support the learning needs of all our tamariki (children)”; “Every student deserves the best education possible.”

## Self-reported Knowledge

This question asked, “How would you rate your knowledge of how to teach students with dyslexia?” Respondents rated their knowledge from 1-very low, 2-low, 3-moderate, 4-high to 5-very high. The percentage scores for each anchor on the Likert scale are as shown in Table 4.

Mean scores showed that respondents rated themselves close to 3-moderate in knowledge (Elementary,  $M = 3.00$ ,  $SD = 0.97$ ; Secondary,  $M = 3.05$ ,  $SD = 1.01$ ; Leaders,  $M = 2.82$ ,  $SD = 0.77$ ). Across groups, among those who rated their knowledge between moderate and high, 25% rated themselves as 4-high or 5-very high in knowledge and 47% as 3-moderate in knowledge.

The follow-up question was “Why is that?” Teachers who rated their knowledge as higher mentioned previous training, for example, “I have had lots of PD (professional development) in this area.” Teachers who rated their levels of knowledge as lower mentioned lack of training, for example, “I did not receive formal training on this when I trained to be a teacher”; “No training, resourcing, or confidence in my ability to make a difference”; “I feel like I am failing my students as they don’t attain accelerated progress. They are often bright kids, and I don’t feel that they get the gains they deserve.”

School leaders who rated their staff’s knowledge as higher were praising of their staff, for example, “The staff are always looking to improve or find new ways to make learning accessible.” Leaders who rated their staff’s knowledge as moderate or lower mentioned lack of training, for example, “We do not as a staff have clear understanding of what needs to be taught and supported.”

## The Dyslexia Friendly Classroom

This question asked, “How would you rate your classroom in terms of being dyslexia friendly?” Respondents rated their classroom from 1-very low, 2-low, 3-moderate, 4-high, to 5-very high. The percentage scores for each anchor on the Likert scale are as shown in Table 4. Mean scores showed that respondents rated their classrooms as about 3-moderate in being dyslexia friendly (Elementary,  $M = 3.22$ ,  $SD = 0.97$ ; Secondary,  $M = 3.29$ ,  $SD = 1.04$ ; Leaders,  $M = 3.16$ ,  $SD = 0.86$ ). Across groups, among those who rated the friendliness of the classroom as moderate or higher, 19% rated their classroom as 4-high or 5-very high in dyslexia friendliness and 44% as 3-moderate in friendliness.

A follow-up question asked, “Why do you say that?” There was a very wide range of responses. A common response was the teacher made use of visual displays, for example, “lots of visual language cues in the room.” Among the varied responses, a number mentioned teaching of phonics. Some mentioned accommodations for example, “Chromebooks with ability to use voice typing.”

Respondents who rated their classrooms as lower in friendliness mentioned lack of knowledge of what to do, for example, “I think I do it, but I don’t really know”; “I don’t know what this would look like.” Some responses suggested that a dyslexia friendly classroom was too difficult, given the pressure of teaching, for example, “I have 25 students, struggling to manage all the teaching demands, limited time.” One teacher wrote, perhaps not entirely seriously, “Not sure what is involved in being dyslexia friendly, apart from not having things hanging in class, and using comic sans or happy monkey font.”

### Satisfaction with Training and Resources

This question asked, “In general, how satisfied are you with the training, resources and help available to you to help your students with dyslexia?” For leaders, the question asked, “In general, how satisfied are you with the training, resources, and help available to “staff” to help students with dyslexia?” Response options were either “satisfied” or “not satisfied”. As shown in Table 5, about 50% of secondary school respondents were satisfied but only about 40% of elementary and school leader respondents. Overall, elementary respondents and leader respondents were more dissatisfied.

Analysis of elementary respondents’ written comments revealed only a handful of respondents who were truly satisfied with their training and resources, for example, “Yes, I feel confident.” Many of those who chose the “satisfied” option were not always completely satisfied, for example, “Have to search for my own resources when I don’t know what is right” and “We are starting to build up resources, but it is expensive for a small school.”

Nearly all the dissatisfied comments were about lack of training and support from the MoE, for example, “I haven’t gotten any! These kids are in our classrooms, and we do not know how to teach them. The school should be doing a hell of a lot more to ensure dyslexic kids don’t fall through the cracks” and “There is lots of information on dyslexia, how to

screen and pick up the traits, but what teachers really need is a how to in terms of implementing in the classroom.”

Analysis of secondary respondents’ written reasons for being satisfied revealed one common theme. More than a dozen respondents were satisfied that they could rely on their specialist Learning Support Departments and their Special Educational Needs Coordinators (SENCOs), for example, “I feel the SENCO has everything in hand, however, I’m not sure what steps I should take to intervene should the need arise.” Another theme of satisfaction, mentioned by five respondents was the wealth of information out there if you are prepared to seek it, for example, “Wealth of material that teachers can find on their own.” Among secondary school respondents not so satisfied, more than a dozen responses indicated that they would like to know more, for example, “I feel ignorant of how to assist” and “We have had little to no training, no resources to help.”

School leaders satisfied with the level of training and resources available to schools were more positive, for example, “I feel the MoE has had a good focus on dyslexia solutions for some time now.” School leaders not satisfied commented that there was not enough MoE support, for example, “There are no hui (conferences), no invitations to attend Ministry-led meetings, no leadership approach” and “There is little support for schools. There is no funding to identify if children have dyslexia and no funding to get specialist help. The MoE expects schools to make a difference but gives no guidance or support other than to send us a book in the mail.” One leader made specific suggestions on what to do about resources,

It is time that is needed for building more resources, meeting with families, resourcing our library better, meeting with teachers. More across and within school professional development, specialist teacher aide professional development, a rewriting of our literacy philosophy, more support from the Ministry of Education. An acknowledgement that we have a major issue and crisis going on.

### Schools in Transition to Change

This question asked, “What statement best describes where you think your school is at in terms of helping students with dyslexia?” As shown in Table 6, about 50% of elementary and 47% of secondary respondents thought their school was innovative or in transition and about 65% of Leaders thought this. School leader respondents were more positive than teaching staff.

### Self-efficacy in Teaching Students with Dyslexia

Table 7 shows the percent scores and mean scores for the six different statements about teaching self-efficacy for students with dyslexia. Each statement had five response anchors, 1-strongly disagree, 2-disagree, 3-not sure, 4-somewhat agree, 5-strongly agree.

**TABLE 5**  
Satisfaction with Training and Resources for Dyslexia

Response	Elementary		Secondary		Leaders	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Satisfied	107	38.9	74	52.5	49	40.8
Dissatisfied	168	61.1	67	47.5	71	59.2

Note. Elementary, *n* = 305 (response rate was 275); Secondary, *n* = 158 (response rate was 141); Leaders, *n* = 131 (response rate was 120).

**TABLE 6**  
**Statement that Best Describes Where You Think Your School is at in Terms of Helping Students with Dyslexia**

Response	Elementary		Secondary		Leaders	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Innovative	59	21.6	34	24.5	39	32.5
Transition	79	28.9	32	23.0	43	35.8
Tried once	3	1.1	1	0.7	0	0
Same ways	61	22.4	40	28.8	25	20.8
Not tried	71	26.0	32	23.0	13	10.8

Note. Innovative = We are making innovative changes; Transition = We are in transition from our traditional approach to introducing some innovative ideas; Tried once = We have tried some innovative ideas but decided not to continue with them; Same ways = We are using the same ways as in the past; Not tried = We have not tackled this question. Elementary, *n* = 305 (response rate was 273); Secondary, *n* = 158 (response rate was 139); Leaders, *n* = 131 (response rate was 120).

For internal self-efficacy, the first statement was “I am certain I am making a difference to my students with dyslexia”. Mean scores indicated that most respondents tended to agree. Across groups, 67% of respondents chose 4- agree or 5- strongly agree.

The second statement was, “I am definitely helping my students with dyslexia to make progress”. Mean scores indicated that most respondents tended to agree. Across groups, 73% of respondents chose 4- agree or 5- strongly agree.

The third statement was “I feel confident to deal with any difficulties my students have with dyslexia”. Mean scores indicated that most respondents tended to agree. Across groups, 52% of respondents chose 4- agree or 5- strongly agree.

For external self-efficacy, the first statement was “There are factors beyond my control that have a greater influence than my teaching on students with dyslexia.” Mean scores indicated that most respondents tended to agree. Across groups, 58% of respondents chose 4- agree or 5- strongly agree.

The second statement was, “There is not a lot I can do to make sure that all my students with dyslexia will make significant progress this year.” Mean scores indicated that most respondents did not agree. Across groups, 69% of respondents chose 1- strongly disagree or 2- disagree.

The third statement was, “Some of my students with dyslexia are not going to make much progress this year no matter what I do.” Mean scores indicated that most respondents did not agree. Across groups, 68% of respondents chose 1- strongly disagree or 2- disagree.

## Beliefs About Dyslexia

Table 8 shows the percent scores and mean scores for the five misconceptions about dyslexia. Each misconception had five response anchors from “1-definitely not true” to “5-definitely true”.

The first misconception was, “Students with dyslexia have lower ability”. Respondents tended to disagree with it. Mean scores indicated that most respondents thought it was not true. Across groups, 90% of respondents chose 1-definitely not true.

The second misconception was, “Students with dyslexia come from homes that are literacy poor”. Mean scores indicated that most respondents thought it was not true. Across groups, 86% of respondents chose 1-definitely not true.

The third misconception was, “Students with dyslexia have lower language ability”. Mean scores indicated that most respondents thought it was not true. Across groups, 83% of respondents chose 1-definitely not true or 2-possibly not true.

The fourth misconception was, “students with dyslexia reverse numbers/letters” respondents tended to agree with it. Mean scores indicated that most respondents thought it was true. Across groups, 65% of respondents chose 4-possibly true or 5-definitely true.

The fifth misconception was, “Students with dyslexia have parents who seek more resources” Mean scores indicated that most respondents thought it was not true. Across groups, 70% of respondents chose 1-definitely not true or 2-possibly not true.

## The Broader Context—Responses from School Leaders

### School Policies

This question for leaders asked, “Does your school have a dyslexia policy?” Only 25% (*n* = 32) of leaders reported that their school had a specific policy on dyslexia; 75% (*n* = 97) did not. Leaders mentioned the constraints of other demands on the school and that dyslexia was part of their general policy, for example, “We work with the teacher, child, and family to ensure that we are doing and trying everything we can”; “Not a policy, but written in our curriculum”; “Not dyslexia specifically but persistent literacy difficulties are addressed.” Some leaders preferred not to focus on dyslexia, for example, “We tend not to label students”; “Has not been mentioned or talked about”; “It’s not required legally”; “Good teaching has been our focus”.

### Funding

This question for leaders asked, “Does your school set aside funding to help students with dyslexia?” Half of school leader respondents 50.0% (*n* = 65) reported that the school set aside some funding for dyslexia and 42.3% (*n* = 55) did not—some were not sure (7.7%, *n* = 10).

### Screening

This question for leaders asked, “Does your school screen for dyslexia?” Just over a third (36.6%, *n* = 48) reported that

**TABLE 7**  
**Average Scores and Distribution Across Ratings for Teaching Self-efficacy: Internal and External Factors**

Teaching self-efficacy	<i>M</i>	<i>SD</i>	Strongly disagree		Disagree		Not sure		Somewhat agree		Strongly agree	
			<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
<b>Internal</b>												
I am certain I am making a difference to my students with dyslexia												
Elementary	3.76	0.80	1	0.4	19	6.7	69	24.5	152	53.9	41	14.5
Secondary	3.72	0.87	1	0.7	10	7.0	45	31.4	60	42.0	27	18.9
Leaders	3.76	0.95	2	1.7	13	11.0	19	16.1	61	51.7	23	19.5
I am definitely helping my students with dyslexia to make progress												
Elementary	3.79	0.80	2	0.7	16	5.7	65	23.2	152	54.3	45	16.1
Secondary	3.85	0.87	1	0.7	9	6.3	34	23.9	65	45.8	33	23.3
Leaders	4.00	0.82	1	0.9	8	6.8	9	7.7	71	60.7	28	23.9
I feel confident to deal with any difficulties my students have with dyslexia												
Elementary	3.19	1.04	11	3.9	78	28.0	55	19.7	117	41.9	18	6.5
Secondary	3.42	0.96	4	2.8	21	14.9	42	29.8	60	42.6	14	9.9
Leaders	3.44	1.01	2	1.7	26	22.0	21	17.8	56	47.5	13	11.0
<b>External</b>												
There are factors beyond my control that have a greater influence than my teaching on students with dyslexia												
Elementary	3.62	0.95	3	1.1	35	12.5	75	26.9	118	42.3	48	17.2
Secondary	3.58	0.97	2	1.4	20	14.1	37	26.1	60	42.2	23	16.2
Leaders	3.45	1.16	4	3.4	28	23.7	21	17.8	41	34.8	24	20.3
There is not a lot I can do to make sure that all my students with dyslexia will make significant progress this year												
Elementary	2.32	1.04	59	21.2	130	46.6	38	13.6	47	16.8	5	1.8
Secondary	2.45	1.18	31	21.8	58	40.9	19	13.4	26	18.3	8	5.6
Leaders	2.02	1.04	40	33.9	55	46.6	7	5.9	13	11.0	3	2.6
Some of my students with dyslexia are not going to make progress this year no matter what I do												
Elementary	2.20	1.05	80	28.7	111	39.8	45	16.1	39	14	4	1.4
Secondary	2.31	1.16	41	29.5	47	33.8	22	15.8	25	18.0	4	2.9
Leaders	2.25	1.03	27	22.9	56	47.5	17	14.4	15	12.7	3	2.5

Note. Strongly disagree = score of 1; Disagree = score of 2; Not sure = score of 3; Somewhat agree = score of 4; Strongly agree = score of 5. Elementary, *n* = 305 (response rate was between 279 and 282 for each of the six questions); Secondary, *n* = 158 (response rate was between 139 and 143 for each of the six questions); Leaders, *n* = 131 (response rate was 117 or 118 for each of the six questions).

they screened for dyslexia. More than half (60.31%, *n* = 79) did not. A small number 3.1% (*n* = 4) were not sure.

### Keeping Parents Informed

This question for leaders asked, “What would be the main way your school keeps parents informed of the help offered to their students?” Most leaders (58.0%, *n* = 76) reported that the main way they kept in touch with parents of

students with dyslexia was through parent-teacher conferences. Another 13.7% (*n* = 18) indicated specialist reports and 1.5% indicated student progress reports. A further 26.7% (*n* = 35) mentioned other ways. A review of the “other ways” responses indicated that many schools either did all three things mentioned above or made personal contact with parents, for example, “Teachers would contact parents directly if there were any reading problems and wouldn’t wait for a formal meeting time.”

**TABLE 8**  
**Average Scores and Distribution Across Ratings for Beliefs about Students with Dyslexia**

Beliefs about dyslexia	M	SD	Definitely not true		Possibly not true		Not sure		Possibly true		Definitely true	
			n	%	n	%	n	%	n	%	n	%
Tend to have lower ability												
Elementary	1.17	0.53	246	87.8	25	8.9	5	1.8	3	1.1	1	0.4
Secondary	1.19	0.64	127	89.5	8	5.6	3	2.1	3	2.1	1	0.7
Leaders	1.03	0.16	115	97.5	3	2.5	0	0	0	0	0	0
Come from homes that are literacy poor												
Elementary	1.18	0.56	245	88.1	22	7.9	8	2.9	1	0.4	2	0.7
Secondary	1.35	0.83	113	80.1	15	10.6	5	3.6	7	5.0	1	0.7
Leaders	1.17	0.56	105	89.0	9	7.6	1	0.9	3	2.5	0	0
Tend to reverse numbers and letters												
Elementary	3.51	1.07	17	6.1	43	15.5	28	10.1	160	57.8	29	10.5
Secondary	3.45	1.12	11	7.9	19	13.6	24	17.1	68	48.6	18	12.8
Leaders	3.26	1.14	12	10.2	23	19.5	11	9.3	66	55.9	6	5.1
Have lower language ability												
Elementary	1.64	1.03	178	64.3	53	19.1	19	6.9	22	7.9	5	1.8
Secondary	1.82	1.04	74	52.1	35	24.6	18	12.7	14	9.9	1	0.7
Leaders	1.45	0.79	80	67.8	29	24.6	4	3.4	4	3.4	1	0.8
Parents use the dyslexia label to get extra resources for their children												
Elementary	1.83	1.05	152	54.7	49	17.6	53	19.1	21	7.5	3	1.1
Secondary	2.00	1.15	66	46.5	32	22.5	25	17.6	15	10.6	4	2.8
Leaders	2.03	1.10	54	45.8	22	18.6	27	22.9	15	12.7	0	0

Note. Definitely not true = score of 1; Possibly not true = score of 2; Not sure = score of 3; Possibly true = score of 4; Definitely true = score of 5. Elementary,  $n = 305$  (response rate was between 277 and 280 for each of the five questions); Secondary,  $n = 158$  (response rate was between 140 and 142 for each of the five questions); Leaders,  $n = 131$  (response rate was 118 for the five questions).

## Sharing Information with Parents

This question for leaders asked, “Sometimes parents say they are not given any data or much detailed information about their child’s reading issues. Does this seem something that can happen?” More than half of respondents (54.3%,  $n = 70$ ) agreed that this was something that can happen; others (45.7%,  $n = 59$ ) did not agree. Qualitative responses suggested that when schools did not give data to parents it was because they were cautious about overwhelming parents, for example, “Sometimes details can confuse.”

## Discussion

### Teacher Perspectives and Understandings

The overall findings showed that teachers’ and school leaders’ perspectives on dyslexia, understandings of dyslexia, beliefs about dyslexia and teaching self-efficacy for dyslexia were generally positive. Their strong agreement with the

survey’s definition of dyslexia, that dyslexia occurs among normally developing students who experience persistent decoding difficulties, was encouraging because this definition aligns with research (e.g., Gough & Tunmer, 1986; Hoover & Gough, 1990; Shanahan, 2021). Their strong agreement that there were students with dyslexia in classrooms was also a positive sign because it aligns with research (for example, Adlof & Hogan, 2018; Vellutino et al., 2004) and because it showed that teachers and leaders in this survey were aware of such students in classrooms.

Teachers’ self-ratings of their knowledge of dyslexia may not necessarily be actual knowledge, but it did seem a positive result that they at least perceived they had some knowledge. Their strong sense of responsibility for these students, that it was their “job” to help them, was also very positive.

Their ratings of their classrooms as dyslexia friendly did suggest they were doing their best to include students with dyslexia. In practical terms, a dyslexia friendly school or classroom suggests direct help to students, an inclusive attitude, encouraging self-confidence, being kind, and helpful (Riddick, 2006).

The results for teaching self-efficacy showed that, although respondents tended to agree some factors might be beyond their control in helping students with dyslexia, they perceived themselves to be confident they could help. This was a positive finding. Students with dyslexia benefit from teachers who will not give up on them.

Finally, results for beliefs about dyslexia showed that the vast majority of teachers and leaders did not agree with some common misconceptions people have about dyslexia, except for the misconception that students with dyslexia reverse numbers and letters. It is a prevalent misconception in the media and common among teachers (Echegaray-Bengoa et al., 2017; Ness & Southall, 2010; Serry & Hammond, 2015; Soriano-Ferrer et al., 2016; Yin et al., 2020). It is a definite misconception because while the number of reversal errors among people with dyslexia may be higher, the proportion of reversal errors as compared to total errors is no greater. It is not productive to think that these students see print backwards because it may lead to incorrect teaching. Peltier et al. (2020), however, found that challenging misconceptions like this one about reversals, using a refutation (evidence for and against) format, helps to convince teachers to think otherwise.

## The Broader Context

In the wider context, the survey showed a sense of inclusiveness because many schools said they were making innovative changes in relation to dyslexia, or were in transition toward this. This showed a positive attitude toward making schools a better place for students with dyslexia.

However, other results were not so positive. Many elementary teaching staff and school leaders were not satisfied with their training and resources. Secondary respondents were somewhat more satisfied but their qualitative responses suggested that this was because secondary schools had learning centres and specialist staff who catered for students with dyslexia, rather than because secondary teachers themselves had relevant training and resources.

The concerns about lack of adequate training in this study were similar to those reported in Worthy et al. (2016). It is a concern that training is not reaching the classroom teacher. Teachers are in the front line of schooling and they have the potential to be a major driver of their students' success in literacy but their ability to provide quality instruction requires high-level training and resources that are research based and get demonstrable positive results. This is not happening. Teachers appear, in the main, to be on their own. The MoE in New Zealand employs different specialist staff to help both seriously disabled students and those with emotional and behavior issues (Enhancing Staff Capability, 2022) but does not employ specialist staff in dyslexia. It wants teachers in the classroom to help students with dyslexia. The MoE website on dyslexia is explicit

and aspirational in this regard, "As a teacher, you are more important than any programme or tool will ever be", and "Effective teachers are the most important factors contributing to student achievement" (<https://inclusive.tki.org.nz/>). Yet these words are of no significance unless backed by action. Students with dyslexia need their teachers to help them succeed but many of the teachers in this study were in the dark about how to make this happen.

A further not so positive finding was that only one third of schools screened for dyslexia and only one in four schools had a dyslexia policy. In terms of parent engagement, there was also room for improvement in that although schools did keep in touch, sometimes parents did not receive any assessment data or other detailed information to help explain why their child was having persistent reading and writing difficulties.

## Limitations of the Present Study

One limitation of this online survey was that although it went to all schools in the country, it was not necessarily a representative sample of teachers. It was an exploratory survey with a convenience sample. The results may not fully represent what New Zealand teachers and leaders think. Another limitation was the definition of dyslexia given in the survey, although in line with research, may have misled respondents into agreeing with it because it seemed "official". A third limitation was that the data were the self-reported views of the respondents. The authors do not know if their self-assessments were accurate. Some studies have found discrepancies between what teachers say they know and what they actually know (e.g., Carson & Bayetto, 2018; Cunningham et al., 2004). A fourth limitation was that although the authors and an independent assessor analyzed the open-ended responses and agreed on what seemed to be summary themes, this is nevertheless a subjective process and may not be acceptable as a scientific approach to analysis of data. A fifth limitation was that the researchers constructed the survey questionnaire and made subjective choices as to which questions and statements to use. As a result, although reliabilities were high for some parts of the survey, they were not as high as they could be for others.

## Future Research

Future research could investigate how best to upskill classroom teachers in ways that address the core difficulties of students with dyslexia and make a measurable difference to their literacy skills. Teaching staff and school leaders in the present study wanted to learn more about how to teach effectively students with dyslexia but perceived themselves to be lacking sufficient training and resources. Dyslexia is such a complex topic, there are so many different opinions and debates (e.g., Elliott & Grigorenko, 2014), it is important that teachers receive accurate information based on

the best research. To enhance staff capability will require a major investment of time, research, and commitment on the part of the MoE to avoid sending teachers on false trails that do not work in the classroom, and inadvertently encouraging misconceptions about the nature of dyslexia. Future research efforts could aim for a multi-pronged approach, providing special accommodations but also addressing the core difficulties with decoding that these students face, that is, giving front line teachers the training and resources to enable students with dyslexia to decipher and encipher print just like their peers – in a word, to read and write well.

## Conclusion

This exploratory study was unique in New Zealand in that it was a snapshot of dyslexia in schools through the eyes of teachers and leaders. By reporting quantitative and qualitative data, it was possible to present the “stories” behind the numbers. The analysis of the survey data is a hopefully accurate summary of teachers’ and leaders’ own personal thinking about dyslexia, and about the wider issues in schools for students with dyslexia. In terms of teaching self-efficacy, most teachers and leaders were confident they could make a difference for students with dyslexia. This seems very important because a positive, confident teacher and school leader will not give up on students who are struggling to read and write, even if these students have given up on themselves.

The present findings signal that dyslexia policy should focus not just on training a small number of specialist teachers but should focus directly on training teachers in classrooms. Students with dyslexia sometimes have to wait many months or even years to see a specialist but their teacher is there every day all day and has the potential to be the most important factor in their literacy success. Those responsible for teacher preparation need to give teachers adequate training and resources to make a measurable difference for students with dyslexia. The findings of the present study suggest that teachers want to help these students. Teachers perceive that it is their responsibility. Teacher training needs to capitalize on this huge source of goodwill from teachers, otherwise students with serious literacy difficulties, especially those with dyslexia, will continue to fall through the cracks of schooling.

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**SUSAN DYMOCK** (corresponding author) is a senior lecturer in the Te Kura Toi Tangata School of Education at the University of Waikato, Hamilton, New Zealand; email [sdymock@waikato.ac.nz](mailto:sdymock@waikato.ac.nz). Her research focuses on reading comprehension, reading difficulties, dyslexia, and spelling.

**TOM NICHOLSON**, College of Humanities and Social Sciences, Massey University Te Kunenga ki Purehuroa, Auckland Campus, New Zealand; email [t.nicholson@massey.ac.nz](mailto:t.nicholson@massey.ac.nz). Research interests mainly in literacy difficulties, especially the use of phonics strategies to assist in learning to read and write.