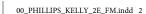


Assessment of Learners with **Dyslexic-Type**Difficulties



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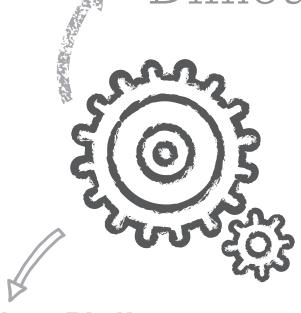


Assessment of Learners with



Dyslexic-Type

Difficulties



Sylvia Phillips & Kathleen Kelly







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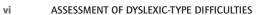






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PART I

DYSLEXIC-TYPE DIFFICULTIES AND ASSESSMENT: SETTING THE CONTEXT

The first four chapters of the book provide an overview of the need to identify and assess the learning difficulties associated with dyslexia. Attention is drawn to the fact that many learners present similar characteristics and will benefit from detailed assessment of their strengths and weaknesses in order to teach and support them more appropriately so that they may be successful in school. The first chapter provides a brief overview of the nature of dyslexia together with theories of causation. This is used as the basis for proposing the areas of assessment. The second chapter considers co-existing specific learning difficulties presenting some associated characteristics of strengths and weaknesses. The third chapter summarises some of the main purposes and types of assessment, considers models of learning difficulties including neurodiversity, and proposes a framework for the assessment process. This forms the basis for the rest of the book and applies to a process that may depend wholly on informal or formal assessment - or, more usually, involve a combination of both. Finally, the fourth chapter summarises the main aspects of legislation and policy that affect the assessment of children and young people experiencing difficulties in learning.









DYSLEXIC-TYPE DIFFICULTIES: IMPLICATIONS FOR ASSESSMENT

Cha

Chapter Overview

This chapter will enable the reader to:

- understand the relationship between general and specific learning difficulties/dyslexia;
- consider theories and research which inform the identification and assessment of literacy and numeracy difficulties in order to develop appropriate intervention.



4 ASSESSMENT OF DYSLEXIC-TYPE DIFFICULTIES

The provisional Key Stage 2 results in 2017 (DfE) showed 71% of children performed at the expected standard in reading, 75% in mathematics and 77% in grammar, punctuation and spelling. Although in all cases there was an increase from the previous year a considerable number of children are not meeting the standards. These include pupils with specific learning difficulty (dyslexia) and those who experience general learning difficulties. We have used 'dyslexic-type difficulties' as an umbrella term to describe the many common characteristics they present. However, it is important to consider individual cognitive profiles in order to determine appropriate intervention and support. This chapter focuses on considering and justifying which characteristics and skills should and can be assessed by teachers. The emphasis is on literacy because of the increasing need to 'read to learn' as a child progresses through school.

Any pupil who is experiencing difficulties in learning (i.e. not making the same progress as most of his/her peers) should not only be closely monitored but their needs should be identified and assessed so that intervention can be put in place before those difficulties become entrenched. It is essential also that assessment identifies not only strengths but also potential barriers to learning. This is true for both literacy and mathematics, as Chinn (2017) points out. Difficulties in mathematics and numeracy are only briefly mentioned here but expanded on in two dedicated chapters in Parts III and IV of this book.

Characteristics of Difficulties in Literacy and Numeracy

Difficulties in literacy

Literacy difficulties are typically characterised by poor decoding skills resulting in slow and often inaccurate reading which may lead to poor reading comprehension. There is much overlap between the difficulties in decoding often noted in learners with dyslexia (for example poor letter-sound knowledge, omission of letters or syllables when reading, losing place in reading, difficulty in skimming and scanning texts for information) and those experienced by other learners with literacy difficulties. It is a fact that many children present similar characteristics and difficulties but their underlying needs may be very different and therefore require different forms of intervention.

Rose (2006) in his review of literacy teaching in England advised the adoption of the Simple View of Reading (SVoR) model (Gough and Tunmer, 1986) as a framework for the development of literacy. This model is discussed further in Chapter 7. It emphasises that 'Reading' implies reading for meaning, i.e. reading comprehension, which is the product of two dimensions: decoding skills and language/listening comprehension. This is useful in offering an explanation of some of the differences among learners with reading difficulties, accounting for 'good' or skilled readers (with good decoding skills and language comprehension) and suggesting three broad groups of 'poor' readers:







- those with poor decoding skills but good language comprehension who can understand a text if it is read to them (most learners with dyslexia are in this group);
- those who can decode, i.e. read the text aloud, but without understanding (sometimes this is found in learners with English as an Additional Language (EAL), especially in the early stages of English language acquisition; it can sometimes be observed in children with autistic spectrum conditions and those with severe learning difficulties; it may be observed also in some learners who have weaknesses in both dimensions but whose decoding skills have improved by targeted teaching although their comprehension remains poor);
- those who have both poor decoding skills and poor language comprehension (they often have other learning difficulties).

It is important to recognise that the model suggests that each dimension represents a range from good to poor and therefore there will be a variety of individual differences. However, it provides a clear framework for assessing two aspects of reading difficulties, as discussed in Chapter 7. It points also to a need to assess listening/language comprehension as well as reading comprehension.

Difficulties in numeracy

If we apply a similar framework to the development of numeracy skills, we can examine possible strengths and difficulties in mathematics. Mathematical ability could be seen as a product of:

- computational skills (number fact knowledge, speed of working, sequential skills); and
- conceptual understanding (ability to reason, see relationships and generalise).

This suggests:

- some learners may have relatively good conceptual understanding but weaknesses in computational skills due to difficulty in learning and retrieving number facts, slow processing speed or confusion with directionality (learners with dyslexia may exhibit this profile). If they have a flexible approach to mathematics, they may be able to develop strategies to support weak number fact knowledge;
- some may have poor conceptual understanding but may master the four basic rules even if they are unsure of their application;
- some others may have poor conceptual understanding (this includes children with dyscalculia and those with general learning difficulties) and may also struggle with computation.







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For further details of the characteristics of learners with dyscalculia and other mathematics-related difficulties see Chapter 12.

Who are the learners who experience difficulties?

Those most 'at risk' (in England) are children who start school with:

- limited exposure to the English language this includes many children where
 English is not spoken in the home (and for whom English is an Additional
 Language), but it also includes a high proportion of children whose first language
 is English but who have had a limited range of experiences and opportunities to
 learn to use a wide range of English expressions, often resulting in poor oral
 language skills and, in particular, a lack of knowledge and understanding of much
 of the vocabulary of school;
- poor phonological awareness and letter knowledge (this will include many learners with dyslexia but also others with general learning difficulties);
- little experience of exposure to the printed word, books or the purpose of reading;
- the possibility of having inherited dyslexia (Pennington, 2011);
- another 'specific learning difficulty', which often co-exists with dyslexia and/or leads to literacy difficulties (see Chapter 2).

Some of the children presenting these 'risk factors' also have more general learning difficulties, but many may have dyslexia or dyslexic-type difficulties.

Can we differentiate between 'poor readers' who have dyslexia and those who do not?

'Discrepancy theory' has traditionally been used to distinguish between specific and general learning difficulties. This suggested that where a learner's reading age is significantly below that predicted by their chronological age and 'IQ' score (general intelligence/ability) the child could be considered to have dyslexia, i.e. a specific learning difficulty. By comparison, learners with reading difficulties whose reading attainment could be accounted for by below-average scores of ability would be seen as having general difficulties.

Discrepancy theory has been criticised on a number of grounds including:

- the impact dyslexia itself may have on verbal ability scores (because of phonological weaknesses including naming and retrieval skills) so that some children may not be identified although they have dyslexia (MacBlain et al., 2005);
- the impact on non-verbal ability of other specific learning difficulties, e.g. visual-spatial difficulties experienced by learners with dyspraxia (Dixon and Addy, 2004), which may co-exist with dyslexia;







- the presence of co-existing conditions may mean that a learner is mistakenly perceived as having a general learning difficulty because both verbal and non-verbal ability have been depressed;
- the fact that learners of all abilities may have dyslexia but it is harder to demonstrate a 'discrepancy' if measured ability is below average;
- the fact that the behavioural characteristics of learners with reading difficulties with high and low ability scores are similar, so the need to distinguish between them is redundant (Stuebing et al., 2002).

Moreover, Snowling (2000) points out that some children with dyslexia display more difficulty with spelling and writing than with reading and may be overlooked if a discrepancy between IQ and reading only is looked for. She also pointed out that children who do not practise reading might show a discrepancy but not be dyslexic. Earlier, Stanovich (1996: 161) argued that a number of studies indicate that the processes involved in decoding (including phonological segmentation and reading non-words) are similar for poor readers regardless of intelligence, and asked:

Why is a low IQ child with demonstrated speech segmentation problems, with poor word recognition skills and hence reading comprehension, not dyslexic?

Current definitions of dyslexia have moved away from the discrepancy model to one that considers differences in cognitive processing. However, the debate continues as to whether *any* learner with the same cognitive processing weaknesses and literacy difficulties should be identified as having dyslexia.

Defining Dyslexia

Many definitions exist, but the current definition adopted by the British Dyslexia Association is that of the Rose Report (2009: 30), which suggested the following:

- dyslexia is a learning difficulty that primarily affects the skills involved in accurate and fluent word reading and spelling;
- characteristic features of dyslexia are difficulties in phonological awareness, verbal memory and verbal processing speed;
- dyslexia occurs across a range of intellectual abilities;
- it is best thought of as a continuum, not a distinct category, and there are no clear cut-off points;
- co-occurring difficulties may be seen in aspects of language, motor co-ordination, mental calculation, concentration and personal organisation, but they are not, by themselves, markers of dyslexia;
- a good indication of the severity and persistence of dyslexic difficulties can be gained by examining how the individual responds or has responded to wellfounded intervention.





B ASSESSMENT OF DYSLEXIC-TYPE DIFFICULTIES

Also:

In addition to these characteristics, the BDA acknowledges the visual processing difficulties that some individuals with dyslexia can experience, and points out that dyslexic readers can show a combination of abilities and difficulties that affect the learning process. Some also have strengths in other areas, such as design, problem solving, creative skills, interactive skills and oral skills.

(www.bdadyslexia.org.uk)

The emphasis on phonological processing skills implies that this should form the core of any assessment for dyslexia. However, the BDA's additional paragraph is important for drawing attention to the fact that some people with dyslexia have visual processing difficulties. The current definition acknowledges that dyslexia can occur across a range of intellectual abilities and suggests that an indication of severity can be seen by how a learner responds to intervention, although it could be argued that this approach relies on the learner failing at school before the severity of their needs is recognised. The co-occurring difficulties noted by Rose (2009) should also be assessed.

The underpinning reasons for such difficulties are many and varied and some may be beyond the control of teachers. What we know, however, is that whatever the reasons for the difficulties, in literacy in particular, the effects on the learner can be profound. Even as a very young child, failure to learn to read successfully may lead to low self-esteem and increasing inability to access the full curriculum and keep up with teachers' expectations. Indeed relationships with peers may be impaired and, in many cases, children with literacy difficulties have been susceptible to bullying. All too often, a consequence is that learners with difficulties begin to use avoidance strategies and/or misbehave. In some cases, they themselves may begin to bully others as a means of gaining 'prestige'. Others may present the behaviour known as 'learned helplessness' where they may give up *trying* to learn because 'I know I can't do it'.

Early intervention is important. As children grow older, they are expected to 'read to learn'. Many learners enter secondary school with very low levels of literacy and are unable to cope with the demands of literacy-based subjects. They may know how to use the Internet to access information but cannot read or understand the information given.

What Should We Assess?

In this chapter we focus particularly on the assessment of literacy because of its impact on all learning. The main sources for determining what to assess are:

- models of reading and spelling processes;
- models of reading and spelling development (descriptive);
- research into the nature and causes of dyslexia.







1. What do models of reading and spelling processes suggest we assess?

The Simple View of Reading model has already been discussed. Two other models of reading which can inform assessment are the dual-route model of reading (Coltheart, 2005) and the connectionist or 'triangle' model developed by Seidenberg and McClelland in 1989 (Adams, 1990; Seidenberg, 2012).

The dual-route model suggested two pathways:

- a direct, lexical route, which uses visual memory for automatic recognition of familiar words;
- an indirect, phonological processing route, which is important for decoding unfamiliar words.

An impairment or weakness in either pathway would affect the ability to 'read'/decode words.

Similarly, the connectionist model points to interactions between visual and phonological strategies and 'meanings' of words. There is, perhaps, greater explicit reference to the importance of context in this model. Both models can also form the basis of a model of spelling. A more detailed summary of these models and their application can be found in Chapters 4 (reading) and 5 (spelling) in Kelly and Phillips (2016). The value of these models is that they point to the need to assess not just the surface characteristics of literacy difficulties but also underlying cognitive processing skills, including visual and auditory perception, memory, phonological awareness and their application to and knowledge of grapheme-phoneme correspondence. The dual-route model points to the need also to investigate a learner's ability to read non-words that are phonetically regular (e.g. grib) as this can reflect phonological processing skills. About 80% of learners with dyslexia have some degree of phonological deficit and about 20% have a visual processing difficulty, although some have both.

2. How can models of reading and spelling development inform assessment?

Some models of reading and spelling, particularly those of Ehri, Frith and Gentry, provide developmental frameworks that can be used for assessing literacy. These are discussed in Part III (where full references are provided) because they are particularly useful in informal assessment. They also remind us that the nature of learning and learning difficulties can change over time. Many learners with dyslexia, for example, present characteristics that are 'typical' in the literacy development of very young children (such as confusing 'b' and 'd' in spelling at a much later age than is observed in 'normal' development). Similarly, learners with dyslexia may, with good teaching, improve their decoding skills in reading and where they have good language comprehension, their reading comprehension will be good. For many, however, spelling remains a difficulty and often is their major problem at secondary school.







Early assessment and intervention is necessary for all learners who fail to acquire early literacy skills, whatever the cause, because children who find reading difficult are less likely to *want* to read. The result is likely to be that they get less practice and increasingly fall behind their peers. Stanovich (1986) refers to this as 'the Matthew effect' because the gap between good and poor readers widens.

3. How do theories of causation inform assessment?

Morton and Frith (1995) suggested that using a causal modelling framework is helpful in analysing theories of psychological and learning behaviours such as dyslexia. They identify three 'levels' of theories of causation and emphasise the interaction at all levels with the environment. This can be depicted as in Figure 1.1.

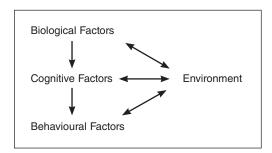


Figure 1.1 Summary of Morton and Frith's causal framework model

Kelly and Phillips (2016) provide a fuller description of theories of causation, which are summarised below.

Biological factors

There is evidence that dyslexia is a genetic, neurobiological condition. Investigations into genetic causes have also pointed to links with other specific learning difficulties (see Chapter 2). There are two main implications for assessment:

- the need to consider the possibility of co-existing conditions;
- the importance of family history (e.g. parental interviews) which should also consider support at home. Knowledge that parents/siblings have dyslexia can mean that the learner is 'at risk' of having inherited it (Pennington and Olson, 2005) but also the difficulties may be compensated for through additional support; however, it does not mean that the child *will* have dyslexia and even where early signs of dyslexic characteristics (e.g. phonological difficulties) have been identified in the children of parents with dyslexia, some do not develop literacy difficulties (Snowling et al., 2007).







Cognitive factors

The term 'cognitive processing' refers to the psychological processes involved in learning, such as phonological processing, memory, auditory and visual processing, and speed of processing information. Research has suggested a number of cognitive processing deficits that might be responsible for dyslexia and which can be assessed. One of the most researched areas is that of phonological processing deficits (Snowling, 2000; Vellutino et al., 2004). Difficulty in phonological processing is seen as a core deficit. Difficulties in distinguishing sounds in words (blending, segmenting and manipulating sounds) and in acquiring the alphabetic principle (knowing that letters/ graphemes represent sounds/phonemes) are early indicators of later literacy difficulties. Other areas of difficulty in phonological processing include limited verbal short-term memory, problems in rapid naming (the ability to name objects at speed) and poor verbal repetition ability (the ability to repeat a multisyllabic word orally without error). Snowling (2000) attributed these to difficulty in 'phonological representations' or the way that the brain codes sounds and words. In addition, she suggested that phonological coding deficits are responsible for short-term memory difficulties and that inefficient verbal rehearsal strategies may result in information being lost during transfer from short- to long-term memory. This offers an explanation for difficulties in remembering long or complex instructions, relaying messages incorrectly and recalling names or events out of sequence.

Learners with dyslexia appear to have problems in storage and retrieval of information. Gathercole and Packiam-Alloway (2008) attribute these difficulties to problems in working memory capacity, the part of memory that holds on to information until it is transferred from short-term to long-term memory. They argue that the amount of information that can be held in working memory is limited and if a learner is given information that exceeds their memory capacity, some of that information will be forgotten. They point out that not all children of the same age have the same working memory capacity. Another explanation for difficulty is that something distracts us and prevents us from attending to information in working memory (e.g. a noisy background) and information gets lost. A third possible explanation is an inability to switch attention from one activity to another. If this is more difficult for some learners then it may lead to loss of information in activities such as mental calculations where it is necessary to switch attention frequently from the calculation (manipulation of the numbers, e.g. as in rounding up) to the items being stored (the numbers to be calculated, e.g. '273 – 97'). Similarly, working memory affects reading and spelling. One implication is that assessing verbal short-term memory (the ability to recall a string of verbal information immediately after it is given) is not sufficient; we also need to assess working memory.

Das (2009) maintains that in assessing cognitive processes we should move beyond phonological coding to that of sequencing. In particular, the learner's ability to sequence both sounds and letters within words and words within sentences should be considered. Stein (2001, 2008, 2015) further suggests that learners with dyslexia have impaired visual and auditory processing. Difficulty in processing rapidly changing







auditory stimuli (such as speech) can compromise phonological awareness and memory storage and result in slower work rate (Tallal, 2007; Valeo, 2008). Difficulties in visual processing can result in visual stress and sensory integration problems when trying to read (Everatt, 2002; White et al., 2006), where letters appear to blur or move about, creating difficulty in determining the order of letters in words and hence lack of reading fluency. Signs of visual stress may include headaches, eye strain, tracking difficulties, words or lines omitted when reading or copying text, difficulty remembering what has been read and poor concentration (Jordan, 2006). Such problems may be found in learners with dyspraxia (developmental co-ordination disorder - DCD) and poor concentration is a feature also of attention deficit hyperactivity disorder (ADHD), both of which can co-exist with dyslexia. (Formal assessment of visual processing difficulties is normally carried out by an optometrist/ophthalmologist.)

Slow processing speed resulting in problems in integrating and synchronising different forms of information has also been considered as a possible cause of dyslexia (Breznitz, 2008). Fawcett and Nicolson (2008) propose that learners with dyslexia might have particular difficulties when a task or activity requires the co-ordination of different brain regions, as in reading aloud (where eye movements, speech and cognitive processes such as word recognition and retrieval must be co-ordinated), spelling (in which cognitive processes such as analysing speech sounds in words and identifying the letters that represent those sounds must be co-ordinated) and writing (where eye and hand movements and cognitive processes such as organisation of ideas, sequencing of words and retrieval of spellings must be co-ordinated). They attribute such difficulties to a lack of automatic skill development, resulting not only in literacy difficulties but also problems in multi-tasking and poor motor planning and appearing clumsy and unco-ordinated. (Some would see such motor difficulties as indicators of DCD.)

Behavioural factors

These are the behaviours or characteristics of difficulties observed in the classroom that first alert teachers to look more closely at a learner's difficulties. There will be particular difficulties in decoding, i.e. in reading words aloud (word recognition), and reading may be slow, laboured and lack fluency. Spelling is often inconsistent with a similar lack of knowledge of how sounds are represented by letters, i.e. poor knowledge of grapheme-phoneme correspondence. These characteristics form the basis of observations and assessments carried out by teachers, as described in Parts II and III of this book, and inform the selection of formal tests, as detailed in Part IV.

Behavioural characteristics noted prior to formal schooling and those observed out of school make important contributions to the assessment process.

Environmental factors

The Morton and Frith model is particularly useful for reminding teachers of the impact of interaction between any 'within-child' aspect and the environment. All too often,







however, research into learning difficulties has concentrated only on the way the home environment affects learning. There are many studies that show the benefits of homes where there are positive attitudes towards learning (e.g. Snowling et al., 2007), books to read and where adults and others regularly read and visits are made to different places to extend children's experiences and vocabulary (Jennings et al., 2009). These aspects of 'parenting skills' are debated by Field (2012) and discussed in Van Voorhis et al. (2013) and Van Bergen et al. (2017).

The relationship between social class, poverty and educational achievement is well-established. Recent surveys in England, like those in the USA, show that children from lower socio-economic groups are more likely to underachieve than those from higher groups. The educational level of parents is also a significant factor. Issues of gender, ethnicity, culture and language add to the complexity of understanding how to 'create a fairer educational system' (Dyson et al., 2010). All too often, however, knowledge of this relationship is used as an 'explanation' for children's low educational achievement. Schools can and do make a difference through their teaching and learning strategies and by ensuring children have opportunities to benefit from experiences such as school visits, creative approaches to technology and after-school clubs. They also find ways of working with parents/carers. It is vital to remember that many children from disadvantaged homes may have dyslexia. This fact is sometimes overlooked when people look only at a relationship between low achievement and social disadvantage! It is, therefore, important to consider the environment at school and whether this raises barriers to learning for some children and young people. (Some would argue this is more fruitful as teachers have more control over what happens there.)

Recent moves to make schools more dyslexia-friendly have made schools more 'learning-friendly' for all pupils. However, in undertaking assessments teachers need to consider aspects such as the levels of reading required by some of the texts/work-sheets that they use, the vocabulary used in school and the arrangements for giving additional support for those experiencing difficulty. One aspect is the 'balance' between direct teaching of reading/spelling/numeracy to those with difficulties and 'supporting' learners, particularly those with reading difficulties, by having an assistant read 'to or for' them. While this gives access to the wider curriculum and enables those with good listening/language comprehension skills, *too much* support can be seen as 'propping up' rather than helping the learner to become an independent reader. Reid (2016) emphasises the importance of understanding the demands of the curriculum and the effect that a mismatch between this and learning needs, together with time pressures, excessive noise levels, lack of appropriate aids and unrealistic expectations, can have on a learner with dyslexia.

The attitudes and expectations of teachers are very important in giving a sense of the possibility of achievement to those struggling with learning. Their attitude to those with difficulties will be conveyed not only to the learners but also their peers, thereby





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potentially giving rise to negative social interactions among learners. Asking questions of the learner and teachers/TAs in addition to direct observation in a range of lessons should all be part of the identification and assessment process.

Many learners will experience some of the difficulties described in this chapter. It is important to note that isolated difficulties may be experienced by most children and therefore teachers and TAs need to look for clusters of difficulties using checklists or observation as part of the initial identification process. However, clusters of difficulties may also be found in children with other types of learning difficulties (e.g. general learning difficulties) and some of the co-occurring difficulties mentioned in the Rose (2009) definition can overlap with other specific learning difficulties. It is important, therefore, to be aware that having identified one specific learning difficulty does not rule out the possibility of the existence of others.

Table 1.1 What should we assess when investigating dyslexic-type difficulties?

Behavioural					External factors
Reading	Spelling	Writing	Numeracy	General	Learning
Word recognition/ decoding: g-p correspondence Single word reading (regular and irregular) Non-word reading Passage reading Reading rate Comprehension	Free writing: g–p correspondence Regular words Irregular words Spelling rules	Letter formation Speed Punctuation Grammar Organisation Presentation in copying and free writing	Basic numeracy Mental maths Maths symbols Maths language Word problems Cognitive learning style	Articulation Sequencing Organisation Fine/gross motor skills Concentration Copying skills Attitude to learning Language/ listening comprehension Cognitive learning style	environment: Dyslexia friendly Teaching and learning styles Resources Distractions/ noise levels Teacher/pupil relationship Parental support Attendance at school
Cognitive	ognitive				
Memory: Short-term memory Working memory	Phonological awareness: Blending Segmenting Manipulation	Reasoning ability: Verbal Non-verbal	Processing skills: Auditory Visual (including scotopic sensitivity) Speed of processing (including rapid naming)		emotional: Self-esteem Anxiety Stress Lack of confidence
Biological Eamily, history (no					
Family history (pa Usually obtained a					







Summary

The complex nature of dyslexia requires a comprehensive assessment on which to base intervention. This chapter has provided a rationale for determining the areas to be taken into account when assessing learners presenting dyslexic-type difficulties. We summarise these in Table 1.1, using the Morton and Frith framework because this includes both observable characteristics and the need to explore some of the underlying cognitive processes. It also ensures that we consider which of a learner's experiences to date, including their school experiences, may have helped them or exacerbated their difficulties. Our model also values the contributions of learners and parents.

Points for Discussion $\Phi_{\mathbf{B}}^{\mathbf{B}}$



- Do you think there is a need to distinguish between learners with dyslexia and those presenting similar literacy difficulties but who have general learning difficulties? Why?
- What assessment procedures are currently used in your school to identify dyslexic-type difficulties?

Further Reading

Kelly, K. and Phillips, S. (2016) Teaching Literacy to Learners with Dyslexia, 2nd edn. London:

A discussion of the theories of causation of dyslexia can be found in Chapter 1 of this book. Reid, G. (2016) Dyslexia: A Practitioner's Handbook, 5th edn. London: Wiley. An excellent practical overview of many aspects of assessment and intervention for dyslexia.

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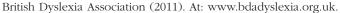
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