# TEACHERS' PERCEPTIONS OF THE DIFFERENCES IN THE READING PROFILES OF STUDENTS WITH DYSLEXIA AND THE ROLE OF DYSLEXIA ASSESSMENT FOR AN APPROPRIATE CHOICE OF TEACHING STRATEGY

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#### **Abstract**

The paper discusses how literacy teachers approach the differences in the reading profiles of their students with dyslexia, and the value of an available diagnosis of dyslexia in their choosing the most appropriate teaching methods. The research was carried out in the Greater London area in 2014. It involved interviews with six practitioners directly involved in teaching reading skills to pupils with dyslexia in various capacities. All of the participants demonstrated awareness of the wide range of difficulties on the dyslexia spectrum. This underlay their commitment to personalized teaching based on a detailed assessment of the pupils' weaknesses and strengths. Provided that such an assessment and special educational expert's recommendations for teaching were available to inform their approach, five out of the six interviewees, who were working only at a school level, did not find the availability of a diagnosis of dyslexia necessary. However, the participant with the most extensive expertise, occupying a leadership role in a borough's literacy support centre, strongly defended and insisted on the existence and the instructional necessity of the dyslexia category. The overall conclusion is that applying the most appropriate teaching strategies would depend on the availability of a detailed assessment, which poses the question how teachers who have no access to such information will be able to adjust their instruction to the needs of the particular student.

Key words: dyslexia, reading skills, differences, diagnosis, teaching

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Teaching children with dyslexia presents a number of difficulties, largely conditioned by the fact that dyslexia occurs along a continuum (Rose, 2009). Research has tried to explain the differences within the spectrum of dyslexia through the impact of certain biological, cognitive, environmental or personal factors (Frith, 1995). Besides, as Castles (2006: 49) points out, 'a complex process such as reading will be likely to fail in an equally complex range of ways'. Moreover, dyslexia is often co-morbid, occurring in combination with other developmental disorders such as dyspraxia or ADHD (Snowling, 2006). Besides having diverse causes, symptoms and manifestations, it is only one of the possible reading difficulties poor readers might have. For example, children may experience reading comprehension difficulties, which are related to higher-order language processes involving, among others, semantics and grammar (Snowling & Hulme, 2012). Therefore, a question bearing critical importance to practitioners is *how teachers should approach the differences within the dyslexia spectrum when teaching reading*.

Furthermore, recent studies on reading difficulties both in England and the USA, which inform approaches to dyslexia-friendly teaching, do not necessarily single out pupils with dyslexia and may involve other poor readers (Kelly & Philips, 2013). Also, some principles of successful interventions like focused phonics have been found to be beneficial not only for children with dyslexia, but for all beginner readers (Rose, 2009). As already pointed out, being on a continuum, dyslexia is not a 'have' or 'do-not-have' phenomenon. The absence of clear-cut boundaries is used by some authors like Elliott et al. (2008:476) drawing on Popper (1969) and Stanovich (1994) to suggest that dyslexia cannot be defined unambiguously and, as in their opinion it relies on a great number of unverified assumptions, it might be abandoned as a category of disability altogether. This is a very relevant point considering teachers' responsibility to address a variety of needs within the spectrum but also to cater for an equally complex range of reading difficulties outside it. A question that provoked the researcher's interest here is whether the availability of a diagnosis of dyslexia facilitates teachers in choosing the most appropriate methods of teaching reading.

#### Aims

The study aimed to determine how reading skills are taught to pupils with dyslexia in an English-speaking context. While the study looked for the answers to a number of research questions, the paper will discuss the findings related to two of them:

- 1. How are the differences in the reading profiles of pupils with dyslexia approached?
- 2. Do practitioners think that the availability of a diagnosis of dyslexia affects their choice of strategies in teaching reading skills?

# Method

The study was qualitative and conducted within an interpretive framework (Cohen et al., 2000). The tool of data collection in the study was the semi-structured interview (Punch, 2009, Robson, 2004). The sampling was a convenience one. The study did not look for generalizability but rather to present the views of a diverse set of practitioners involved directly in teaching reading skills to pupils with dyslexia.

# **Participants**

The six participants, referred to with pseudonyms here for confidentiality, were members of four different institutions in the Greater London area. Sandy (a special educational needs coordinator or SENCO, and a learning support assistant [LST]) and Nancy (a teaching assistant [TA] and an LST) worked at primary school 1. Aimee (a SENCO and a class teacher) and Gary (a class teacher) worked at primary school 2. Kristel had a leadership role in a borough's literacy support centre and worked as a Wave 3<sup>1</sup> LST in several schools. Grace worked in a special support centre attached to a secondary school where half of the children had autism co-occurring with dyslexia. All participants, except for Gary, had received some training in teaching children with dyslexia – ranging from inschool training to a post-graduate certification in dyslexia.

http://www.thegrid.org.uk/learning/primary\_strategy/inclusion/wave3)

<sup>&</sup>lt;sup>1</sup> In England, the needs of pupils who experience difficulty in acquiring literacy skills are met via three 'waves' of intervention. Wave 3 interventions are for children who have been identified as needing special educational needs support and are designed to achieve very specific targets. They are usually taught as one-to-one or small group programmes. (See:

## **Findings**

## Differences in Reading Profiles

The study confirmed that the reading profiles of children with dyslexia presented a vast range of possibilities, or as put by an interviewee, 'a massive, massive range'. The participants were aware that this variance was shaped by cognitive, psychological and environmental factors; that 'it is so much bound up with the whole person' (Kristel).

Here are two examples illustrating the unique blends of pupils' characteristics:

Pupil 1 was depicted as incredibly articulate, imaginative, possessing wonderful language skills and massive vocabulary. She displayed a keen interest in words and stories and her being 'verbally at ease' (Kristel) empowered her with confidence. These strengths were used to work on affixes and word structure, which acted as a springboard to advance her reading abilities.

Pupil 2 was described as the most 'extreme case' Kristel had ever had because of his profound working memory difficulties. He was 'so out of the loop that none of this makes any sense to him'. Even a multisensory approach and additional home practice did not seem to enhance his learning. His teacher voiced her concern: 'That sort of situation makes me quite anxious really in the end, because – what's gonna happen?'.

And two examples of the impact that family support has on the learning outcomes:

Pupil 3 had wide general knowledge as his parents spent a lot of time and effort to plug the gaps he had with out-of-school activities, they had 'good conversations with him' (Aimee), so his progress in reading was quite fast.

Pupil 4's education did not seem to be treated with priority by his family; they did not arrange any learning activities for him outside school, and as he did not understand some concepts just because they were 'outside of his experience' (Aimee), his progress was extremely slow and tedious.

All but one of the cases the teachers described referred to what one teacher called 'the stereotype' of dyslexia – phonological deficit combined with good comprehension skills. The differences within these cases were in the sphere of difficulties with short-term memory and visual/auditory processing speed. Some other examples were given of children who displayed a wider variety of literacy difficulties. Commenting on such a case, Aimee explained that 'we have to have at least average IQ to be diagnosed with dyslexia. There's got to be a weakness that's exception to the normal level of functioning'. This comment made by a school's SENCO was surprising for the researcher as the discrepancy theory has been quite unanimously discarded in research papers and educational documents (e.g. Rose, 2009).

How did teachers approach the differences of each pupil's profile? Gary (the class teacher) and Nancy (TA/LSA) showed strong reliance and dependence on recommendations made by a statement of special educational needs, which, in England, at the time of the study was being replaced by an Education, Health and Care plan according to the new Special Educational Needs and Disabilities Code of Practice: 0 to 25 Years (DfE & DfH, 2014), or an assessment-based profile of the student. The other participants, who were often both assessors of pupils with dyslexia and designers of their programmes, demonstrated adherence to a pupil-centred approach where each individual's areas of difficulties were targeted:

I tend to decide what the children need... Making a programme for them individually... I tend to or try to tailor it to the child.

(Sandy)

...what's most suited to them.

(Grace)

An important remark made by all participants, independently on their professional role, was that an individual approach required taking into consideration both weakness (e.g. poor knowledge of specific sounds or sound blends) *and* strengths (e.g. good oral skills). Nancy insisted that if the students' 'particular strength' was the visual channel, the weaker auditory pathway should not be overlooked. Another essential point made was that

part of the positive outcome 'was really about opportunities that they can show their true abilities..., rather than just being limited by their dyslexia' (Grace).

To sum up, participants voiced concordantly that the differences in the profiles of pupils with dyslexia could be approached through personalized, pupil-centred teaching. For such type of teaching to be applied, they relied strongly on detailed assessment. The areas to be given special attention to were presented to them, in some cases, before the school year had started, but in most cases the pupil's referral and assessment occurred after the teacher had noticed significant difficulties in the student's acquiring a level of literacy expected at their age.

## Diagnosis of Dyslexia

The findings revealed that an analysis of the student's profile was vital for an effective and targeted teaching. However, the participants repeatedly noted that some of the essential strategies for children with dyslexia suited other poor or beginner readers, too. Did, then, the availability of a dyslexia diagnosis matter in their choice of methods for teaching reading?

The research established that five of the six participants did not consider that having a diagnosis of dyslexia was necessary in order to choose an appropriate teaching method. Interestingly, their justification rested on two seemingly contrasting arguments:

a) Because the strategies for poor readers were the same:

A child can have a diagnosis of dyslexia, but another child can have learning difficulties and have no diagnosis of dyslexia and they need to be taught in the same way.

(Sandy)

Not really, because I find it works for all of them, this sort of system. It's just overlearning.

(Nancy)

... targeting them with the same interventions that we would if we were targeting someone that we would consider to be dyslexic.

(Grace)

## b) Because anyway individual programmes were followed:

In terms of what we put in, if they need it, we do it. I am not sure if it makes some massive difference to us because we try our best to meet the needs of every child.

(Aimee)

Just meeting their needs. It doesn't need that label on our side.

(Gary)

The distribution of the two opinions coincided with the teachers' belonging to the same school (Sandy and Nancy; Aimee and Gary). This may be indicative of the influence of school policy, but may also be accidental, which cannot be determined from such a small sample.

A deeper analysis of the group a) interviews, however, reveals that these participants do not associate the concept of 'sameness' with absolute identicalness. Grace clarified that the strategies are 'based on the same principles'. In a similar vein Sandy pointed out that 'They are going to use some of the same strategies' [emphases added by the researcher]. A contribution to the understanding of the superficial contradiction between the two arguments was Kristel's explanation:

I don't rewrite the programme for every single child. There's an overlap in what I would use. So therefore some children are put on the same programme... That's in a way focusing on their individual needs... If you've got children who need phonological support, then there might be differing profiles but the same aspect of that profile needs to be supported.

The issue seemed to amount to overlapping difficulties, and hence overlapping strategies to meet those difficulties. That is, certain sets or combinations of the strategies discussed would be relevant to tackle reading difficulties both within the dyslexia continuum, and outside it.

A broader perspective finding a balance between the two positions emerged in the interview with Kristel. She recognized that often dyslexia-oriented strategies were good at helping other children and that 'it is about accessibility and about inclusion really'. Still, she

pointed out that distinct approaches were needed when addressing word recognition difficulties and comprehension ones: 'on the whole, dyslexic children don't need to work on their wide language skills like semantic, pragmatic'. Reciprocally, strategies addressed specifically at poor comprehenders, for example, would not normally be as appropriate for learners with dyslexia.

Kristel was the only teacher who saw the availability of a diagnosis as beneficial to teaching reading skills:

I think, there is enough evidence to suggest that... there is a profile which has a cognitive issue behind it, which also has an impact on learning and access to curriculum. And I don't think that should be ignored. I think because it is not a medical condition, then someone thinks it's not really there and there is no evidence. Certainly, in my experience, there is evidence...... And if we don't say that certain children have a specific difficulty then we are letting them down.'

It is possible that the other participants have underestimated the existence of such a pattern. Nevertheless, their giving little value to the dyslexia diagnosis is not interpreted by the researcher as denying the necessity of guidance in choosing appropriate teaching approaches. On the contrary, participants who made such a statement seemed to be presuming that assessments, prescribing certain teaching approaches, would be available to all pupils with persisting literacy difficulties.

#### Discussion

How are the Differences in the Reading Profiles of Pupils with Dyslexia Approached?

When addressing this question, all the participants shared the view that the different reading profiles of pupils with dyslexia required *a personalized, pupil-centred approach* to teaching, in which both *strengths and weaknesses* were accounted for.

All participants acknowledged the existence of a considerable variance in the profiles of students with dyslexia. The examples of differences they had observed was compatible with research findings that dyslexia is 'not a homogeneous disorder' (Castles, 2006: 57), and 'although children with dyslexia have some common core difficulties they do not represent an identical discrete entity with identical profiles' (Reid, 2003: 150).

These differences are conditioned by a combination of factors (Hatcher, 2006, Snowling, 2006), out of which participants acknowledged cognitive and psychological features, and importantly, made a convincing point that environmental factors like parental commitment and value of literacy in the family can facilitate or hamper the reading progress of children with dyslexia. Such influences have been expounded on in research literature (Frith, 1995, 1999, Kelly & Philips, 2013), and this study provided one more reminder of their significance. The impact of co-morbidity, acknowledged in Snowling (2006), Rose (2009) and Singleton (2009), was particularly emphasized by one participant. Working with children on the autistic spectrum, Grace made an important point that a holistic approach was necessary to make sure that chosen strategies would address and benefit each co-occurring difficulty.

None of the interviewees, however, made any attempt to categorize pupils with dyslexia in terms of sub-types (phonological vs. surface). None of them gave an example of a case that could match the features of so-called surface dyslexia – a difficulty to read exceptional words but not regular ones (Coltheart, 2006). This finding supports the claim that a distinction between such sub-categories is inoperative (Vellutino & Fletcher, 2005, Peterson et al., 2013). The examples provided in the study corresponded to the stereotypical view of dyslexia, seen as located in the upper left quadrant of the Simple View of Reading graphic (poor decoding, good comprehension) (Hoover et al., 1990). Although Rose (2009) and Vellutino et al. (2004) point out that dyslexia may be accompanied by comprehension difficulties too, such cases were not reported by the participants. Also, cases of dyslexia where phonological awareness was not compromised, an exceptional case recognized in Snowling (2006), were not reported either.

In this study, the differences among pupils with dyslexia identified by the interviewees were related to their: 1. level of decoding skills (e.g. individual letters vs. morphemic structures); 2. short-term memory; 3. processing speed, 4. strength of visual vs. auditory channel. The first three areas are typically compromised in dyslexia, and the latter have been identified as areas of possible co-occurring difficulties (BDA, 2014a, Miller-Shaul, 2005). The fact that the differences lay within the areas most seriously compromised in dyslexia is quite indicative of the challenges that the spectrum imposes.

The unanimous response to this variance was the employment of *personalized teaching*. This is in agreement with Kelly & Philips (2013) who endorse taking into consideration the *individual profile* of the child rather than a certain sub-type of dyslexia. Reid (2003), too, advises that programmes should be designed to suit the individual and not the symptom. Personalized learning is not a new concept and has been understood as 'tailor[ing] education to the individual learner's needs, interest and aptitude so as to fulfil every young person's potential' (DfES, 2004). It is in line with the international and UK major educational documents requiring personalization, differentiation and inclusion (e.g. DfE, 2013, DfE & DfH, 2014).

When adopting a certain personalized teaching programme, BDA (2014a), Massey (2008) and Castles (2006) stress the importance of identifying the pattern of strengths and difficulties of pupils with dyslexia. An important observation made in the study was that if one sensory modality was stronger that the rest, its intensive engagement should not imply underestimating the weaker modalities. This remark is concordant with Walker's (2000) note that although teachers are advised to use the student's strongest channel for learning, such a strategy would be inefficient if the other modalities remain unemployed.

Another reason for identifying the strengths of pupils with dyslexia is put forward by Everatt et al. (2007). Their study finds that since some individuals with learning difficulties (LD) have phonological deficits like those with dyslexia, a demarcation between the two types is possible only after taking into account the whole difficulty/strength pattern. Children with dyslexia are often found to have strengths in the area of vocabulary, semantics and visual skills and that sets them apart from other LD (ibid). The authors suggest that knowledge about the whole pattern leads to an increased understanding of the pupil's compensatory strategies. The participants in the present study did report that vocabulary and semantic skills helped many pupils with dyslexia to 'take off' in their reading development.

All in all, the researcher found a consensus among the participants that an individual approach to differences within the dyslexia spectrum had to be employed and that strategies needed to be informed by a specialist's assessment and recommendations.

Such unanimity, however, was not observed in the responses related to the second research problem that is discussed in this article.

Do Practitioners Think that the Availability of a Diagnosis of Dyslexia Affects their Choice of Strategies in Teaching Reading Skills?

Five of the six teachers stated that the availability of a pupil's diagnosis of dyslexia was not essential for their practice. Two seemingly contradictory arguments were put forward – a) that all literacy difficulties were targeted on an individual basis, and b) that the strategies used to cater for the wide range of literacy needs were the 'same' or at least based on the 'same principles'. The proponents of the second argument gave examples with strategies reinforcing and supporting verbal memory and information processing (e.g. presenting information in chunks, over-learning and structure). Such a view in the critical literature is present in Elliot et al.'s (2008), who claim that as poor short-term or working memory and slower information processing are shared with other developmental conditions, a demarcation of dyslexia is not particularly helpful for teachers.

Intervention research, however, has found not only memory supporting techniques but also focused phonics embedded in rich language curriculum to be effective both for children with dyslexia and those at risk of developing literacy difficulties, and for all beginner readers (Brooks, 2007, Rose, 2009). According to BDA (2012), practitioners report that the implementation of dyslexia-friendly teaching has benefited other poor readers as well. The applicability of certain principles or strategies for all types of poor readers has been acknowledged in the dyslexia discourse (e.g. Farrell, 2006). As it was noted earlier, teaching practices have been informed by intervention studies, most of which, notably, have not specifically addressed dyslexia (Singleton, 2009). Furthermore, Elliot et al. (2008: 483), drawing on Stanovich (1991) and Vellutino et al. (2000) claim that there is 'no clear evidence that there exists a particular teaching approach that is more suitable for a dyslexic subgroup than for other poor readers'.

In this study, however, Kristel did not support such a point of view. She remarked that often different interventions were suitable for pupils with dyslexia, who usually need support with word recognition, and for other poor readers, who often need support with comprehension. Still, she acknowledged that reading difficulties in children with dyslexia formed patterns that could be attended to with overlapping sets of techniques and

methods. She was the only participant who asserted that a *diagnosis of dyslexia is important* for choosing the teaching strategies. The strong position of such a prominent and experienced literacy support expert needs to be taken in consideration in the current debate about the rationale of the concept of dyslexia and its practical value (e.g. see *The Dyslexia Debate* by J. Elliot & E. Grigorenko (2014)).

#### **Conclusions**

The study provides valuable insight into the practitioners' perception of the differences among pupils with dyslexia, the manner in which the latter inform their teaching approach, as well as of the necessity of having a diagnosis of dyslexia. All of the participants in the study were committed to personalized teaching based on a detailed assessment of the pupils' weaknesses and strengths. Provided that such an assessment was available to inform their approach, five out of the six interviewees did not find the availability of a diagnosis of dyslexia necessary. The fact that applying the most appropriate teaching strategies would depend on the availability of such a detailed assessment poses the question how teachers who have no access to such information will be able to adjust their instruction to the needs of the particular student. Primary school teachers have better chances of longer-term observation and interaction with their pupils, as well as an established procedure for referring the student for assessment. However, these opportunities are not as readily available to other practitioners, especially at university level. Information about the nature of the students' difficulties, learning style, strengths, interests, etc. may need to be obtained either from the learners' previous educational institutions, in a direct conversation with them and/or their parents, or through a consultation with a special educational needs expert.

The practitioners' considerations reported in this research could be of benefit to other teachers facing the highly demanding task of teaching reading to pupils with dyslexia in an English-speaking context. The link between teachers' choice and differences within the dyslexia spectrum made in this study has not been sufficiently explored in studies of a similar kind. Further research needs to shed more light on their relationship and on the rationale behind, and the usefulness of, identifying dyslexia as a separate category of specific learning difficulties.

#### References

- British Dyslexia Association. (2012). *Dyslexia Friendly Schools: Good Practice Guide*,
  Abridged version, British Dyslexia Association [BDA]. Retrieved from
  <a href="http://www.bdadyslexia.org.uk/common/ckeditor/filemanager/userfiles/Educator/Resources/dfs-gpg-abridged.pdf">http://www.bdadyslexia.org.uk/common/ckeditor/filemanager/userfiles/Educator/Resources/dfs-gpg-abridged.pdf</a>
- British Dyslexia Association. (2014a). *Dyslexic*. British Dyslexia Association (BDA).Retrieved from <a href="http://www.bdadyslexia.org.uk/dyslexic">http://www.bdadyslexia.org.uk/dyslexic</a>
- Brooks, G. (2007). What Works for Pupils with Literacy Difficulties? The Effectiveness of Intervention Schemes. 3<sup>rd</sup> edition, DfCSF, Ref: 00688-2007BKT-EN. Retrieved from <a href="http://catchup.org.uk/Portals/3/CU%20research/What%20works%20for%20pupils%20with%20literacy%20difficulties%202007.pdf">http://catchup.org.uk/Portals/3/CU%20research/What%20works%20for%20pupils%20with%20literacy%20difficulties%202007.pdf</a>
- Castles, A. (2006). The Dual Route Model and the Developmental Dyslexias. *London Review of Education*, *4*(1), 49-61
- Cohen, L, Manion, L., & Morrison, K. (2000). *Research Methods in Education* (5<sup>th</sup> ed), London: Routledge.
- Coltheart, M. (2006). Dual Route and Connectionist Models of Reading: An Overview. *London Review of Education, 4*(1), 5-17.
- Department for Education (DfE). (2013) *The National Curriculum in England: Key Stages 1 and 2 Framework Document*, London: Department for Education (DFE). Retrieved from <a href="https://www.gov.uk/government/publications/national-curriculum-in-england-primary-curriculum">https://www.gov.uk/government/publications/national-curriculum-in-england-primary-curriculum</a>
- Department for Education & Department for Health (DfE & DfH). (2014). *Special Educational Needs and Disabilities Code of Practice: 0 to 25 Years*, London: https://www.gov.uk/government/publications/national-curriculum-in-england-primary-curriculum (DFE).
- Department for Education and Skills. (2004). *A National Conversation about Personalised Learning*, Nottingham: Department for Education and Skills (DfES).
- Elliot, J., & Grigorenko, E. (2014). *The Dyslexia Debate.* New York: Cambridge University Press.
- Elliot, J., & Gibbs, S. (2008). Does Dyslexia Exist? *Journal of Philosophy of Education*, 42(3-4) 475-491.
- Everatt, J., Weeks, S., & Brooks, P. (2007). Profiles of Strengths and Weaknesses in Dyslexia and Other Learning Difficulties. *Dyslexia*, *14*, 16-41.
- Farrell, M. (2006) *The Effective Teacher's Guide to Dyslexia and Other Specific Learning Difficulties: Practical Strategies.* London: Routledge
- Frith, U. (1995). Dyslexia: Can We Have a Shared Theoretical Framework?. *Educational and Child Psychology*, *2*, 6-17.
- Frith, U. (1999). Paradoxes in the Definition of Dyslexia. *Dyslexia*, 5, 192-214.

- Hatcher, J. (2006). Managing the Needs of Pupils with Dyslexia in Mainstream Classrooms. In M. Snowling & J. Stackhouse (Eds.), *Dyslexia: Speech and Language* (2<sup>nd</sup> ed). London: Whurr Publishers.
- Hoover, W. A., & Gough, P. B. (1990). The Simple View of Reading. *Reading and Writing, 2,* 127-60.
- Kelly, K., & Phillips, S. (2013). *Teaching Literacy to Learners with Dyslexia: A Multisensory Approach.* London: Sage.
- Massey, J. (2008). *Meeting the Needs of Students with Dyslexia*. London: Network Continuum.
- Miller-Shaul, S. (2005). The Characteristics of Young and Adult Dyslexics Readers on Reading and Reading Related Cognitive Tasks as Compared to Normal Readers. *Dyslexia*, 111, 132-151.
- Peterson, R., Pennington, B., & Olson, R. (2013). Subtypes of Developmental Dyslexia: Testing the Predictions of the Dual-Route and Connectionist Frameworks. *Cognition*, *126*, 20-38.
- Punch, K. (2009). Introduction to Research Methods in Education. London: Sage.
- Reid, G. (2003). *Dyslexia: A Practitioner's Handbook* (3<sup>rd</sup> ed). Chichester: John Wiley and Sons.
- Robson, C. (2004). Real World Research (2nd ed). Oxford: Blackwell.
- Rose, J. (2009). *Identifying and Teaching Children and Young People with Dyslexia and Literacy Difficulties (The Rose Report)*. Nottingham: DCSF Publications.
- Singleton, C. (2009). *Intervention for Dyslexia. A Review of Published Evidence on the Impact of Specialist Dyslexia Teaching*, University of Hull. Retrieved from <a href="https://www.lucid-research.com/documents/research/report acad InterventionForDyslexia09.pdf">https://www.lucid-research.com/documents/research/report acad InterventionForDyslexia09.pdf</a>
- Snowling, M. (2006). Language Skills and Learning to Read: The Dyslexia Spectrum. *Dyslexia: Speech and Language* (2<sup>nd</sup> ed). West Sussex: Whurr Publishers Ltd.
- Snowling, M., & Hulme, Ch. (2012). Interventions for Children's Language and Literacy Difficulties. *Int J Lang Commun Disord*, *47*(1), 27-34.
- Walker, J. (2000). Teaching Basic Reading and Spelling. In J. Townend & M. Turner (Eds.), *Dyslexia in Practice*. London: Kluwer Academic/Plenum Publishers.
- Vellutino, F.R., Fletcher, J.M., Snowling, M.J., & Scanlon, D.M. (2004). Specific Reading Disability (Dyslexia): What Have We Learned in the Past Four Decades?. *Journal of Child Psychology and Psychiatry*, 45(1), 1-40.
- Vellutino, F.R., & Fletcher, J.M. (2005). Developmental Dyslexia. In, M.J. Snowling & C. Hulme (Eds.), *The Science of Reading: A Handbook.* Malden: Blackwell Publishing.