“LEARNING IS HARD WORK AND SOMETIMES DIFFICULT”: What Pupils With Dyslexia Say About the Difficulties They Experience With Learning at Secondary School in Barbados

Stacey Blackman

Dyslexia has been described as a lifelong burden. The validity of this view is best assessed through an examination of the qualitative judgements pupils make about their experiences of school life. Findings from a multiple case study of 16 pupils with dyslexia at two secondary schools shed light on the challenges they have with learning. The findings suggest that pupils experience difficulties with spelling, sequencing, and remembering information—these “signs” are associated with the nature of dyslexia. This paper also suggests that the teaching/learning environment and teacher pedagogy are important influences on these pupils’ learning. In particular, what teachers do in the classroom and the ways they do it present difficulties for pupils with dyslexia. In conclusion, the findings endorse pupil perspective research as a viable way to inform and transform teacher pedagogy, and highlight the importance of teaching skills as a way of addressing teacher practices that act as barriers to the learning of pupils with dyslexia at secondary schools in Barbados.

Introduction

The signs displayed by pupils with dyslexia have been well documented by researchers such as T. R. Miles and E. Miles (1990), Peer (2001), Pollock and Waller (1994), and Reid (2003). These signs relate specifically to the nature of dyslexia itself, for example, problems with short-term memory, sequencing of information, spelling, and reading. Research by Hallahan and Kauffman (2003) on the aetiology of this language-based disorder also suggest that it has a strong genetic basis, and that, regardless of language, persons with dyslexia might also show diminished activity in some parts of the brain.

Discrepancy definitions endorsed by Goswami (2003b), T. R. Miles (1978), Snowling (2000), and Vellutino (1979) suggest that pupils with dyslexia, in spite of their sometimes high IQs, fail to acquire adequate reading skills. Many researchers and theorists debated the reasons for this for decades, but explanations were not forthcoming. New and
emerging theories from neuro-constructivist research (Goswami, 2003a; Richardson, Leppanen, Pavvo, Leiwo, & Lytinen, 2003; Wydell & Butterworth, 1999) have provided insights that might shed light on the discrepancy between IQ and reading failure. Goswami suggests that the reading failure of pupils with dyslexia might be linked to their inability to distinguish and develop an awareness of onsets and rimes. These contribute to consonant blending of sounds and syllables, and can help researchers understand why these pupils experience reading delays or a failure to read.

**The Gravity of the Situation**

The persistence of dyslexia into adulthood has been demonstrated in research by Bruck (1992); Elbro, Nielsen, and Petersen (1994); and Pennington, van Orden, Smith, Green, and Haith (1990). Frith (1997) argued that “dyslexia is not a disease which comes with school and goes away with adulthood…it is a life long burden” (p. 9). In addition to this, Hallahan and Kauffman (2003) note that the morphology of languages like English and French, which have arbitrary systems for spelling, also presents additional problems with reading, unlike Italian. Dyslexia therefore makes reading a struggle for these individuals. Within the Barbadian education context, it is therefore critical to establish how pupils perceive the challenges they experience with learning, and identify how the conditions set for learning contribute to their difficulties at the secondary school level.

The foregoing suggests that when pupils with dyslexia are not given the opportunity to realize their full academic potential, it can have deleterious effects on future career aspirations. Hellendoorn and Ruijssenaars’s (2000) study of adults with dyslexia suggests that a lack of early intervention at the school level, in combination with teachers’ low expectations, negatively impacted pupils’ need to achieve at a high level and their self-esteem. On the other hand, family support and high teacher expectations were associated with success in higher education and career goals. Research by Hellendoorn and Ruijssenaars further suggests that past experiences in school predicted the level of success that pupils with dyslexia experienced at the tertiary level and in their future careers.

In Barbados, early intervention is still determined by parents’ knowledge and familiarity with their child’s progress and stage of development in reading. The socio-economic status of the family should also be considered as it plays a pivotal role in determining who accesses private diagnostic services for dyslexia. To date, at the primary and
secondary level of schooling, there is no definitive programme to identify and make “provision”; in examinations, for example, for readers and access to technology for pupils with dyslexia. What can be noted is that these pupils are likely to experience frustration if teachers remain unaware of their existence in the classroom and how to adapt their teaching to facilitate these pupils’ learning. For those educators who are familiar with the signs that pupils manifest, the means to meet their learning needs can still be elusive.

**Dyslexia at School**

**Pedagogical Issues**

This study reports on the views of secondary pupils with dyslexia, and it is important to understand how dyslexia influences the learning of pupils at this level of schooling. Research by Cogan and Flecker (2004), Mortimore (2003), Peer (2001), Peer and Reid (2001), and Stowe (2001) links the problems with school work to the nature of dyslexia itself.

According to Cogan and Flecker (2004), difficulties have been identified in subject areas at secondary school, for example, in mathematics some pupils experience problems with their times tables, sequencing of numbers, and remembering formulae. In geography, directions and map work present a challenge. In English language and literature, pupils with dyslexia find it difficult to master the reading-intensive nature of these subjects, spelling, selecting important points from passages, and articulating ideas. Other practical difficulties alluded to by Mortimore (2003) include difficulties remembering class schedules and books to be brought to school on a day-to-day basis.

When these challenges are taken into consideration, teachers’ pedagogical decisions should not create additional barriers to learning. What kinds of pedagogical issues arise when teaching pupils with dyslexia? It can be argued that one of the key issues that secondary school teachers face surrounds the kinds of strategies, decisions, and skills needed to instruct dyslexic pupils in the classroom.

What do we mean by pedagogy? Lewis and Norwich (2005) define pedagogy as the decisions, actions, and strategies employed by teachers to promote learning in the classroom. According to these researchers, pedagogy ought to be dynamic and respond to classroom situations and student needs. They suggest that “effective pedagogy is an ideal that the practicalities of classroom life may threaten or perhaps foster in unpredictable ways” (p. 7).
In this study, I suggest that a broader framework be utilized to discuss pedagogical issues. In particular, the conditions set for learning by teachers in the classroom can be included as part of the pedagogical decisions that influence the learning of all pupils in general education classrooms. Findings in this study suggest that the conditions set for learning produce additional challenges to these pupils’ learning. Another aspect of pedagogy that has been implicated by pupils’ responses is teacher strategies (Lewis & Norwich 2005). According to pupils’ responses, teachers’ approaches to teaching created additional problems apart from those associated with the nature of dyslexia itself.

The literature on teaching pupils with dyslexia has traditionally focused on multisensory approaches to teaching. These approaches were viewed as specialist oriented, and perpetuated the view that general education teachers were not “equipped” to instruct pupils with dyslexia unless they were specially trained.

Reid (2005) classifies pedagogical approaches to teaching pupils with dyslexia into four broad areas:

1. Individualized programmes – These are highly structured, for example, Alpha to Omega, Bangor Dyslexia Teaching System, and the Hickey Multisensory Language Course. These require that teachers be specially trained before instruction can occur.

2. Support approaches and strategies – These have some features of individualized programmes but may be used selectively by teachers and can be integrated into a normal school curriculum.

3. Assisted learning techniques – These programmes place a heavy emphasis on learning from others and could involve peers and adults to model effective strategies, for example, paired reading, cued spelling, and peer tutoring.

4. Whole school approaches – Here, dyslexia is viewed as a whole school concern, and policy frameworks and early intervention are key features of this pedagogical approach. Consultancy, literacy projects, and study and thinking skill programmes are examples of whole school approaches.

Research by Lewis and Norwich (2005) seems to suggest, however, that there is a need to closely examine claims that there are groups of pupils who really do require a “specialist” and individual approach to teaching. If, for example, one accepts the argument that pupils with dyslexia are a distinct category from other peers who are poor readers, then it can be suggested that an individualized approach to teaching—
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separate and distinct from others in the classroom—is warranted and even justified. If, on the other hand, approaches used for these pupils can in fact be incorporated as part of a whole school approach, or seen as part of a continuum of teacher strategies, then all pupils in the classroom can benefit.

Within our own Caribbean context, whole school approaches to dyslexia and assisted learning techniques seem to offer the more attractive way for teachers to feel empowered to teach these pupils in their classrooms. However, how these strategies will be integrated into the teachers’ repertoire, the curriculum, lesson plans, and instruction time must be part of the pedagogical decisions alluded to by Lewis and Norwich (2005).

Reid’s (2005) framework for whole school approaches has been called dyslexia friendly strategies (Peer & Reid, 2001) because all pupils can benefit from them. To illustrate, thinking skills, which include metacognitive training and mind mapping, are said to help pupils better organize and reduce information to facilitate its later recall. Teaching thinking skills, however, would require that teachers model such skills on a regular basis for their pupils.

In addition, study skills such as planning assignments and time management are said to help pupils complete assignments and tests within a set time frame, without feeling overwhelmed. Other accommodations that can be made for pupils with dyslexia include:

1. photocopying material to be distributed in class;
2. highlighting important pieces of information;
3. placing headings in bold to signal their importance;
4. providing pupils with a structured overview of content to be covered in the lesson.

This paper seeks to answer the question: What difficulties do pupils with dyslexia experience at secondary school in Barbados?

Methodology

The Research Strategy

This section of the paper will offer an overview of the research strategy used in the study. A multiple case study approach was utilized in the research to investigate the views of pupils with dyslexia at two secondary schools in Barbados. An overview of the case study approach is presented in Table 1.
Table 1. Case Study Approach

<table>
<thead>
<tr>
<th>Cases</th>
<th>Setting</th>
<th>Data Collection Methods</th>
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<tbody>
<tr>
<td>16 pupils – 8 females from Mallory High and 5 males and 3 females from South West High School</td>
<td>Context – 2 secondary schools focus on whole class teaching and classroom interaction. Pupils’ perspectives of teachers’ strategies</td>
<td>Interviews</td>
</tr>
<tr>
<td>Age group – 11-16 years old</td>
<td>Boundaries – limited to whole class teaching and learning</td>
<td>(Site 1) Pilot study – Three types of interviews: pair, individual, and group</td>
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This research is a multiple case study (Yin, 1981), which reports the views of 16 pupils with dyslexia ages 11–16 years old at two secondary schools in Barbados. Guba and Lincoln’s (1989) qualitative and constructivist frameworks were utilized in order to come to an understanding with pupils about the ways they interpret and understand their classroom experiences.

Pupils were a heterogeneous group with respect to the difficulties they experienced, and therefore it is difficult to argue that they represent “typical” pupils with dyslexia. Difficulties that pupils experienced included problems with spelling, reading, writing, recall, and memory (T. R. Miles & E. Miles, 1990; Pollock & Waller, 1994; Snowling, 2000). Participation in the study was on a voluntary basis, contingent on pupils’ permission and parental consent being given (Masson, 2000) to take part in the research for one term.

Data Collection Procedures

Interviews and observations were the main tools used to collect data. These were supplemented by contact summary sheets and a researcher’s journal—used to manage data and cross-check pupils’ responses during
interviews. Narrative accounts of what took place in the classroom were kept and this was used to engage pupils in discussion.

**Ethical Considerations**

Lindsay and Lewis (2000) suggest that researching the perspective of children can be an intrusive process. One issue which this raised was the level of confidentiality that was provided for the student. In order to minimize the likelihood that students could be identified and to ensure that confidentiality was maintained throughout the study, pseudonyms were used, so that the names which appear in this paper are not the real names of the students who participated in the research.

**Data Analysis**

Transcripts were analysed using data reduction procedures recommended by M. B. Miles and Huberman (1994). This process involved first- and second-level coding, memoing, audit trails, display format (partially ordered meta-matrices), and interpretation of the data.

The real strength of this approach is that it allows within-case and between-case analyses to be done in the meta-matrices almost simultaneously. Investigations of what individual pupils said about their school experiences and those of the group were easily distilled and analysed for a deeper understanding of the themes that emerged.

In addition, comparisons between pupils’ perspectives could also have been facilitated to see how similar experiences of school were across institutions.

**Descriptive Codes**

The process of data reduction was started by grounding the codes within the data. An initial set of descriptive codes were produced from a pilot study conducted during the first two weeks at Mallory High School. This approach to forming codes is called an inductive approach to data reduction (M. B. Miles & Huberman, 1994).

**Inferential or Pattern Coding**

The next stage of the analysis clustered the descriptive codes into larger, more abstract categories, based on inferences and assumed linkages between coded materials in the data. Inferences were informed by patterns that emerged from pupils’ responses to certain questions in the transcripts; phrases and ideas were repeated sometimes and these similarities were later abstracted at a more general level.
Table 2. Data Analysis Procedure

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Description</th>
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<tbody>
<tr>
<td>Descriptive Codes – first level analysis</td>
<td>These codes emerged from the data in the pilot study and were applied to specific phrases, expressions, and paragraphs in the data</td>
</tr>
<tr>
<td>Definition – a code is a tag or label assigned to units of meaning in a transcript</td>
<td></td>
</tr>
<tr>
<td>Inferential/Pattern Coding framework – first level analysis</td>
<td>These codes classified and reduced data in descriptive coding framework into superordinate categories based on the relationships found in descriptive codes. Assumptions were made about how these codes may be related to each other in the context of the study.</td>
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<tr>
<td>Definition – a label that identifies an emergent theme</td>
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<tr>
<td>Memoing – first level analysis</td>
<td>Memos documented ideas that came to the researcher about themes that emerged and their relationship to each other as data were further reduced. This procedure was used for both descriptive and inferential/pattern coding</td>
</tr>
<tr>
<td>Definition – the theorizing write-up of ideas about codes and their relationships</td>
<td></td>
</tr>
<tr>
<td>Partially Ordered Meta-Matrix – second level analysis</td>
<td>The data were further reduced to a display format across the cases and research questions asked. This would allow for further cross-case analysis to continue</td>
</tr>
<tr>
<td>Definition – charts that assemble data from several cases in a standard format</td>
<td></td>
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<tr>
<td>Partitioning of Themes</td>
<td>Research questions and data in Meta-Matrix further broken down and displayed individually, to make inferences and understand how cases were influenced by any factors that emerged from themes</td>
</tr>
</tbody>
</table>
The Audit Trail
An audit trail was used to locate coded sections from the interviews in the main body of the transcript. It included the name of the school, name of the student, the year group that pupils were in, and a page number. This simple means of tracking data is recommended by Huberman and Miles (1994).

PartiallyOrdered Meta-Matrices
A partially ordered Meta-Matrix is a table that gives an overview of cases studied and data compressed in a précis format. The partially ordered meta-matrices utilized in the study marked the first attempt at understanding the linkages, patterns, and ideas that arose from the data. M. B. Miles and Huberman (1994) note that meta-matrices are “master charts [that] assemble descriptive data from each of the several cases in a standard format…the basic principle is the inclusion of all relevant data” (1994, p. 178).

Trustworthiness of Data Collected
In qualitative research, issues of trustworthiness are important to ensure the credibility of data. Checking interpretations with pupils on a regular basis was managed by using contact summary sheets to ask pupils about things that they said in previous interviews and things witnessed during observation. Recapping what took place in classrooms and previous interviews provided me with the opportunity to get their feedback on the meanings and interpretations that I gave to what was said and what took place in the classroom.

Findings
This section of the discussion will examine the difficulties that pupils experienced with learning in the classroom. As noted earlier in this paper, the origins of these challenges can be thought of in two ways: first, those associated with the nature of dyslexia; and second, difficulties related to pedagogy.

The Nature of Dyslexia at Secondary School
The findings indicate that pupils experienced difficulties in writing and reading intensive subjects like English language and literature. Word substitutions, remembering how to spell familiar words, and sounding out syllables were problems that pupils experienced in both of these
For Carrie, her frustration in spelling was pronounced in subjects like English literature:

[it was difficult to have] a word in your head but you can’t spell it. MH/Carrie/Year 5/p. 33

A similar experience was noted by Annabelle:

Well its not like I have a bad memory if I want to write something that I know is correct but I can’t spell it I have to change around the answer to suit the word I can’t spell. MH/Annabelle/Year 1/p. 22

In both of these excerpts, it is important to emphasize that pupils were confident of their ability to answer the question, but their poor spelling skills prevented them from doing so in a satisfactory manner. This is not surprising given that research by Frith (1981), Goswami (1991), T. R. Miles (1993), and Pollock and Waller (1994) suggests that phonemic awareness is a prerequisite skill for the development of reading and spelling skills.

Turner (2001) notes that spelling in English literature is a challenge even after reading difficulties are ameliorated. They also argue that pupils are likely to view their inability to spell as evidence of a major handicap and tangible evidence of a learning difficulty.

Poor memory skills are another well-documented difficulty associated with the nature of dyslexia (T. R. Miles, 1993; Snowling, 2000). At school, Carrie noted that recalling information in a precise way was not something that she could do easily:

Q: What subjects are you confident about?
Carrie: Chemistry no way [laughs] cause I guess like with Chemistry you have to learn things off by heart. I hate learning things off by heart. MH/Carrie/Year 5/p. 35

Carrie’s difficulty with learning information by rote is not surprising. Rote memorization can be cognitively challenging and a burden if the information is too pedestrian and if the student is unable to devise a strategy to correctly remember the information.

Lynn and Sue’s comments revealed difficulties with sequencing of information. Lynn experienced difficulties with formulas, especially putting numbers in their correct order for measuring the gradients of mountains in geography:

Q: Why is calculation more difficult than writing down the formula?
Lynn: Remembering the formula is different cause I can tell you how to do it, then when I put the numbers into the formula its gonna mess me up. MH/Lynn/Year 4/p. 71
Lynn’s difficulties were more procedural in that she found it harder to remember the sequence of numbers for formulas and the steps for putting this information down correctly.

Sue also had similar difficulties with sequencing, but these were related to remembering her times tables for an equation she needed to figure out in mathematics:

Q: Do you have problems remembering your times tables?
Sue: Yes

Q: So is this what made this calculation hard?
Sue: Yes.

Q: At the board you seemed to have had some problems doing the calculation?
Sue: I forgot to cancel down and had to erase it... but the experience was okay. MH/Sue/Year 3/p. 30

Mortimore (2003) suggests that for pupils with dyslexia, times tables and following a set of mathematical steps, as Sue had to do, is a problem likely to affect pupils’ self-esteem because they are likely to struggle with things that seem automatic for other pupils in the classroom. Although I did not witness pupils in the study being belittled by their peers in light of their difficulties, the focus group interview, which was conducted prior to undertaking data collection as part of the larger PhD study, revealed that such events were not uncommon.

Q: Why somebody like you, why is it that somebody else who is good can’t help you?
Dawn: Because they wouldn’t understand where you are coming from... they would say you don’t understand that? MH/Dawn/Year 4/p. 3

Lynn: some of them would be like, Lynn is dumb let me help her, you know they have that sort of attitude. MH/Lynn/Year 4/p. 2

These comments add another dimension to the challenges that pupils encounter because they are not likely to approach peers if it means that they will be ridiculed. They are likely to seek out alliances with other pupils with learning difficulties to provide a source of comfort and support. The excerpt reveals that the nature of social interaction in this classroom was not always conducive to supporting the learning of pupils with dyslexia. This suggests that there is a need for awareness among peers in the classroom about how they can positively facilitate the learning of their classmates with dyslexia.
Difficulties Related to Pedagogy

What do teachers do that present challenges for pupils with dyslexia? The findings indicated that teachers’ choice of strategy contributed to the challenges that pupils experienced with their learning. From my observations in classrooms, it was evident that a considerable amount of time was devoted to copious notetaking in some subjects. Dictation, however, presented a number of challenges for pupils: holding words and phrases in mind, thinking about getting the spelling correct, and choosing relevant information to note down.

Natalie expressed this sentiment well:

Q: Okay let’s look at the dictation today and what did you think of that kind of instruction particularly when there are words that are difficult to spell, what did you think about that today?

Natalie: I don’t really like dictation, am it’s sort of hard to spell the words and remember them and also am, go back over it you forget and you go like “oh, should I go back over it or forget.” I guess it was okay today cause she actually slowed down a bit and actually spelt the words.

Turner (2001) and Pollock and Waller (1994) argue that dictation is not the best method to use with these pupils in the classroom. They note that “many dyslexic children do not absorb any of the content as they are so busy dealing with the actual process of holding the words in their memories, spelling and writing” (Turner, 2001). In addition, Charlene and Lynn’s comments about writing down the relevant points of the lecture are also pertinent concerns, especially when revising for examinations.

Charlene’s comments give some insight regarding the cues she looked for in order to determine what is important to note down during the teachers’ instruction in English literature class.

Q: What do you think is the best way to write notes and what the important points are?

Charlene: I guess how she saids it, if she talking and says head up so and so and stuff so I can know whatever, continue and then she...instead of talking, talking, talking and you have to write, that does get us messed up.

These comments indicate that the cues ranged from the precarious—intonation of teachers’ voice to see where she places emphasis—to the certain—a clear indication given when the teacher says “head up” or gives subheadings to be noted down. Without these cues, Charlene is lost.
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as far as writing the important points, because it is difficult to navigate through what seems to be an “endless sea of words.”

Another area of concern related to difficulties pupils experienced with understanding concepts and their interrelationships. Knowing how and why teachers arrived at particular answers in subjects like mathematics and geography made engagement with these subjects more difficult. Nichole’s comments clearly demonstrates this point:

Q: Do you think that in some way you could see where he was going?
Nichole: I could see what he was talking about and showing and what he was trying to get at. But sometimes it is difficult to grasp even though...say in Maths like you can see oh how he got the answer but you still don’t understand why it’s there. SWH/Nichole/Year 3/ p. 29

Nichole might only have partially understood the concepts and this presented a difficulty with following the teacher’s line of reasoning.

Comments by Margaret suggested that she found it difficult to understand certain topics in biology, especially when she had to relate it to information that she had encountered the previous term. She referred to her experience as one that “throw me all about.”

Q: What is it that you think you are not understanding?
Margaret: Everything.
Q: Like topics?
Margaret: Yes like certain topics I don’t understand, like today she gave a ... on the board and from...and that throw me all about and it was like so why is it not this anymore, and then she is like why is it that we haven’t learnt anything, like its not understanding. MHH/Margaret/Year 5/ p. 37

Clearly, Margaret’s comments reveal a need for greater attention to be paid to how teachers proceed with new information and concepts, especially during the beginning of the school term and perhaps even the academic year.

Both of these pupils seem to have understood concepts independently instead of as part of an integrated whole. Ritchie (2001) notes that “if [dyslexic pupils] find it harder to understand the links between ideas [in science] their learning can be more of a patch work of concepts that may never link up” (p. 56).

Conclusion
The findings in this paper suggest that teachers’ pedagogical approaches, in particular the strategies they use to teach in the classroom, are important elements in helping pupils with dyslexia learn and negotiate challenges to their learning. The conditions set for learning should enable pupils to rise above the challenges they experience with dyslexia rather than add to them. In light of this, it is important that teachers review their use of dictation, and how they seek to facilitate understanding of concepts and their interrelationships to these pupils.

Within the Barbadian context, pupil perspective research can give teachers the leverage they need to really positively influence the learning of pupils with dyslexia. What pupils say about what teachers do and the ways they do it can be viewed as valuable data to inform pedagogical decisions. In particular, what is to be learnt and approaches teachers can use to promote the learning of dyslexic pupils in the classroom can provide indigenous solutions that best fit the individual needs of secondary school pupils in Barbadian classrooms.

At the secondary school level, Peer (2001) argues that subject teachers ought not to exempt themselves from the responsibility of helping pupils with dyslexia participate in different subjects and access the curriculum. Knowing how pedagogical decisions facilitate or hinder the learning of their pupils can give pupils with dyslexia greater access to information across different subject areas. This is a first step to actually helping teachers become responsible for these pupils’ learning.

Teaching study and thinking skills is another way that teachers can help pupils deal with the difficulties associated with the nature of dyslexia. In addition, this kind of training should help pupils correct other deficient or ineffective skills so as to improve their ability to do well in academic subjects. Clark and Uhry (1995) argue that teachers should use direct instruction to teach thinking and study skills because it is difficult for pupils with dyslexia to develop these skills on their own.

Other questions raised by this research and in need of further investigation concern the kind of classroom climate and contextual factors that might have played a part in determining pupils’ responses in the study. This research was conducted at two schools and, therefore, the findings relate only to these schools. However, it would be interesting to look at the experiences of pupils at other schools to see if findings would be similar to or different from those noted here.

References

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