Chapter 9
Student Engagement in Reading

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Introduction

My interest in student engagement was piqued by the impression most people have that students in remedial programmes tend to be the ones with not only low grades but also low levels of motivation and engagement. However, my research in Singapore's Learning Support Programme, a remedial reading programme for children in Primary 1 and 2, revealed quite the opposite: students are at least moderately engaged and in some cases show visible excitement to be learning how to read. This chapter is about students' level of engagement in a pull-out reading programme and the interactional patterns that are linked with high, moderate and low student engagement. In this chapter 'interactional patterns' refer to discourse features in teacher and student talk.

Background of Research

Launched in 1992, Singapore's Learning Support Programme (LSP) is a nationwide early intervention programme in all primary schools. Singapore has a quadrilingual education policy in which English is the medium of instruction and three 'mother tongue' languages are also taught as required subjects. (See Silver and Bokhorst-Heng, this volume, for an overview.) Children who participate in the LSP are identified on the basis of a screening test created by Singapore's Ministry of Education, administered as soon as they enter primary school. At the time they enter school, the Singapore Word Reading Test (SWRT) is administered, also created by Singapore's

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Ministry of Education, which determines the 'reading age' of the child (Yang 2004). For instance, for a 5-year-old with weak reading skills, the results of the SWRT could be that his/her reading age is that of a 3-year-old.

The LSP is divided into Tiers 1, 2 and 3 which are developmental: children enter in Tier 1 and exit the programme after Tier 3. Tier 1 focuses on teaching basic skills in phonics and phonemic awareness, while Tier 3 has a whole language approach (Vaish 2012). Those who teach in the LSP are called 'Learning Support Coordinators' and receive training from Singapore's Ministry of Education for 3–4 weeks in teaching reading skills. The Learning Support Coordinators are trained teachers and these 3–4 weeks are in addition to the preservice training they have already received.

The purpose of this chapter is to explore the nature of student engagement in classes conducted as part of the LSP. Through analysis of 19 h of video, I document the types of interactional patterns that engaged young learners in this programme. Through an analysis of quantitative and qualitative data, I discuss what a highly engaged class in reading looks like for the LSP.

Student Engagement and Reading

Student engagement in reading has been measured on the basis of a variety of dimensions. These include cognitive, motivational and behavioural characteristics of students. Observations of teachers' practices can also provide data about student engagement. Methodological approaches to measuring student engagement in reading are eclectic with diversity rather than consistency in the way that student engagement in reading is described and measured. Wigfield et al. (2008) found a strong correlation between engaged reading and reading comprehension: "Highly engaged readers are very strategic, using such comprehension strategies as questioning and summarizing to gain meaning from text. Likewise, highly engaged readers are internally motivated to read, while reading frequently and deeply" (p. 443).

Measuring Student Engagement

In their analysis of engagement, Wigfield et al. (2008) developed an eight-item index, the Reading Engagement Index (REI). According to this index, an engaged reader is assumed to be behaviourally active (e.g., reading frequently), internally motivated (e.g., liking to read) and cognitively active (e.g., uses strategies in reading). The response format for these items is 1 = not true to 4 = very true. The REI addresses the following characteristics for each student:

1. Often reads independently
2. Reads favourite topics and authors
3. Is easily distracted in self-selected reading

4. Works hard in reading
5. Is a confident reader
6. Uses comprehension strategies well
7. Thinks deeply about the content of texts
8. Enjoys discussing books with peers

Taylor et al. (2003) focused on cognitive engagement and teacher instructional style. They found that teaching practices in which teachers ask high-level questions (HLQs) regarding the text resulted in engaged readers in elementary school. These HLQs tend to be about making connections with prior knowledge, thematic elements of the text and interpreting character's motives. In contrast teachers who ask mainly lower-level questions (LLQs), which are about detail, tend to have disengaged readers.

Nystrand and Gamoran (1990) defined and analysed student engagement "as a cognitive phenomenon essentially having to do with the extent to which students are mentally involved with the issues and problems of academic study. Hence, it may be considered in terms of sustained mental concentration, focus, and habits of thoughtfulness…" (p. 22). They identified two types of student engagement: procedural and substantive. The former is superficial engagement that consists of students answering the teacher in Whole Class Elicitation through short phrases or single words. On the other hand, substantive engagement is manifested through sustained and probing conversations between a teacher and one student in which the teacher uses strategies like uptake to co-construct meaning and knowledge with the student. Uptake, according to Nystrand and Gamoran (1990), is a discourse feature of classroom talk in which the teacher uses utterances from a student to elaborate, clarify and/or co-construct meaning.

Teacher Characteristics and Student Engagement

Other scholars link teacher characteristics, student outcomes and engagement. For example, Pressley et al. (1998) identified engaged classrooms as those in which nearly all the students were productively reading and writing most of the time. At the end of 1 year of literacy instruction, these students were writing long compositions, often several pages in length, which included capitalization and punctuation, correct spelling of high-frequency words and imaginative spellings of less frequent words. These students were also reading books beyond 1st grade level. Therefore, teachers of these students were considered to be effective teachers. However, in classes where students, at the end of 1st grade, wrote only a few sentences without a clear understanding of capitalization, punctuation and spelling rules, teachers were judged to be less effective.

Pressley et al. (2001) built on Pressley et al. (1998). After a close observation of ten teachers across five states in the USA, they came up with 103 behaviours and characteristics, organized under seven categories, which were typical of highly

effective 1st grade reading teachers. These seven categories were excellent class-room management, a cooperative environment, explicit teaching (i.e., of compre-hension), emphasis on literature, large quantities of reading and writing, scaffolding, encouragement of self-regulation and making connections across the curriculum. They defined an engaged reading classroom behaviourally: 90% of the students were engaged in productive reading and writing more than 90% of the time. They claimed that the more effective teachers also had more engaged classrooms.

Non-engaged readers have also been described behaviourally. For example, sum-marizing prior research in early literacy, Bryan et al. (2003) described non-engaged readers as passive and inactive, seldom seeing reading as pleasurable and often unwilling to take risks or venture beyond their limited reading comfort zone. Some measures like 'seeing reading as pleasurable' are attitudinal, which indicates that there is some overlap between behavioural and attitudinal aspects of engagement.

While Wigfield et al. (2008) looked only at student characteristics, Taylor et al. (2003) and Nystrand and Gamoran (1990) suggested that the ways teachers and students interact can impact student engagement. Similarly, Wharton-Macdonald et al. (1998) and Pressley et al. (2001) suggested that teacher behaviours and student engagement interact; however, their definition of student engagement relied solely on student reading and writing behaviours, similar to what Nystrand and Gamoran refer to as 'procedural engagement'. Analysis of more 'substantive engagement' requires examining not only student reading and writing behaviours but also how teachers and students engage in conversations in and around literacy. Therefore, this study considers student behaviours and the interactional patterns of teachers and students in the LSP.

Given this background I explore the following questions:

1. Which types of interactional patterns and activities in the reading classroom are indicative of high, moderate and low student engagement?
2. What implications do these data have for teacher education and the structure of an intervention programme in reading?

Methodology

The study involved five teachers in the Learning Support Programme, known as Learning Support Coordinators (LSCs), and their students. Lesson observations with video recording and analysis were done using a coding scheme developed for the project. Ethical clearance for research with human subjects was obtained from the National Institute of Education (Singapore) before the start of the study, follow-ing the Institute's guidelines.

My approach was informed not only by this review but also by what was most discernible about student engagement in the videos in my data set. For instance, I began by looking for cognitive, motivational and behavioural aspects of student engagement, but realized that because of my focus on video as the primary data

source, the behavioural aspects of engagement would be a key emphasis. Repeated viewings revealed four aspects of student behaviour that indicated engagement: bidding, eye contact, student talk and excitement. At the same time, the viewings also provided evidence to support the idea that certain interactional patterns led to heightened student engagement. Given the nature of my data set, I developed my analysis within a behavioural and affective framework describing student engagement. Also, the videos reveal rich data on teachers' practices which I analysed on the basis of interactional patterns and which are linked to specific interactional patterns with high, moderate and low student engagement.

Participants and Lesson Observations

In 2010, a survey about pedagogy and teacher beliefs regarding bilingualism was sent to all the Learning Support Coordinators (LSCs) in Singapore primary schools: a total of 250 surveys which yielded 97 responses. Briefly the survey responses showed that teachers were ambivalent regarding the use of mother tongue in the teaching of English. More specifically there was an approximately 50–50 split between teachers who believed that the mother tongue could assist in the teaching of English and those who preferred total immersion in the target language (in this case English) (Vaish 2012). The last item in the survey asked if the LSCs would be willing to allow the research team to observe one unit of lessons conducted within the LSP. Nine teachers responded positively. Of these, five teachers were selected such that the project team could observe classrooms in all the three tiers of the LSP. The rationale for selecting these five teachers was logistical: though nine teachers were willing to be observed, only five of them had the time for a unit of lessons to be observed during the life of the research project.

One 'unit' of lessons is defined within this project as a series of consecutive lessons on one theme. Typically a unit is about 1 or 2 weeks of lessons and a lesson is a daily class of half an hour. The teachers were asked to choose a unit of lessons that they felt was typical of their pedagogy. For instance, in one of the schools, a series of seven consecutive lessons focused on a book titled *The Grasshopper and the Ant* (Loughead 2006). Since each lesson was half an hour, the total time that this teacher was observed was 3.5 h. Table 9.1 summarizes the data collected for each school.

All observations were completed in the year 2010, though each school was observed at a different time in the year. The classrooms were cheerfully decorated with posters of high-frequency words and well equipped with audio visual equipment. The children sat either on chairs around a table or, if the teacher was conducting an activity that required kinaesthetic learning (rolling on the ground, etc.), on the floor. These classes tended to have 6–10 students.

The LSP student population is linguistically and ethnically diverse: 30% of the teachers in the LSP reported that they have foreign-born students in their class whose dominant home language is not English. Furthermore, my conversations with teachers revealed that many of the Singapore-born children also come from homes

Table 9.1 Summary of classroom observations

School[a]	Hours of observations	Teacher[a]	Tier within LSP
Qin Hua Primary	3.5	Ms. Ang Lim Sin	1
Jin Hua Primary	5	Ms. Pamela Fernandaz	2
Nan Xin Primary	3	Ms. Tan Sun Hee	
Hazelnut Primary	4	Ms. Lina Lim	
Everbest Primary	3.5	Ms. Siti	3

[a]All the names of teachers and schools are pseudonyms

where English is not their dominant home language. Teacher perceptions are that these children come to school with very little proficiency in English.

Video Analysis of Engagement and Classroom Interaction

One of the main methodological concerns in a study of student engagement through video analysis is deciding on the unit of analysis. Two choices confront the researcher: one focal student or the whole class. Repeated viewings of the videos in my data set revealed little difference in the way each of the 6–10 children interacted with the teacher or their peers in each class. Thus I took the whole class as the unit of analysis. As a result, the focus of this discussion is on the way the class interacts with the teacher at times of higher and lower engagement.

Coding Interactional Patterns and Activities

The 19 h of lessons were coded by two researchers while watching the video recordings. The researchers coded for two main variables: interactional patterns and student engagement. Interactional patterns are defined in terms of the way the teacher interacted with the class. More specifically, an interactional pattern is identified as a speech event (Hymes 1972) that lasted in the class for at least 3 min. "The term speech event will be restricted to activities, or aspects of activities, that are directly governed by rules or norms for the use of speech. An event may consist of a simple speech act, but will often comprise several" (p. 56). In other words, a speech event is a unit of discourse that can be set off from the rest of the transcript. For example, in a long transcript of teacher talk, it might be possible to look for instances of 'clarification'; each of the instances in which the teachers try to clarify a point could be considered as a separate speech event in a larger data set. Interactional patterns that occurred for less than 3 min were not coded separately but were subsumed under a longer interaction.

Coding for interactional patterns revealed seven broad patterns in the 19 h of video. Six of these were based on whole-class interaction: Whole Class Lecture, Whole Class Elicitation, Whole Class Reading and Elicitation, Whole Class Choral

Table 9.2 Definitions of whole-class interactional patterns

No.	Name of interactional pattern	Definition
1	Whole Class Lecture	The teacher delivers a monologue to the class
2	Whole Class Elicitation	The teacher asks a series of questions (usually closed questions) to check comprehension
3	Whole Class Reading and Elicitation	The teacher reads aloud. In between the reading, she asks questions as an 'elicitation'
4	Whole Class Choral Recitation	The whole class reads or recites as one voice
5	Whole Class Activity	An activity in which the whole class is involved but which does not involve role play or dramatization. For instance, the class could be given individual words what have been cut up and they have to piece the words together to make one sentence
6	Whole Class Role Play	Each student is given a role in a story to act out
7	Individual Activity	Students are given pencil and paper to write something. In all my observations, this was individual seatwork. Or the activity could be a non-writing one, e.g., the child puts magnetic letters together to form a word, but the child does this individually

Recitation, Whole Class Activity and Whole Class Role Play. Whole Class Role Play was distinguished from other types of whole-class activities not only because of a difference in its nature, as described in Table 9.2, but also because Whole Class Role Play created a lot of excitement amongst the students and thus warranted further scrutiny. The seventh interactional pattern did not involve the whole class but focused on Individual Activity: writing and non-writing. Definitions are given in Table 9.2.

In each 30-min class, each use of an interactional pattern was identified as an 'episode'. For example, if the teacher used Whole Class Lecture, followed by Whole Class Elicitation and then again Whole Class Lecture, this constituted three episodes. Thus, each episode could be set off from the others in that it mapped on to a distinct interactional pattern. Additionally, the coders described the activities in each of the episodes. For instance, for the individual activity of placing magnetic letters on the board, the coder would write a few sentences about this on the coding sheet to facilitate understanding of the classroom activities without constantly revisiting the video.

Coding for Student Engagement

Evidence of student engagement was documented in behavioural terms. The coders looked for the four components indicating student engagement in each episode: bidding, eye contact, student talk and excitement. These four components of student

engagement were as much a result of grounded analysis as they were based on the review of literature. For instance, student talk is mentioned in the literature as a demonstrable feature of student engagement (Nystrand and Gamoran 1990). At the same time, from repeated viewings of the videos, the coders were able to see that classes in which students bid enthusiastically were different from those in which students did not respond to the teacher through bidding. In other words, classes with enthusiastic bidding appeared more engaged than those in which students did not respond through bidding.

The four components were given weighted, numerical values. Three components were worth three points each: bidding, eye contact and student talk. For each of these, 0 meant that engagement was nonexistent, 1 meant it was low, 2 meant it was moderate, and 3 meant engagement was high. For example, bidding, or a show of hands in order to be nominated to answer a question, was observed closely for all the 6–10 children in each class. A high score of 3 points was awarded to those episodes in which most of the children in the class enthusiastically raised their hands to answer the question. Eye contact or eye gaze was observed in relation to the task. If the teacher was talking and most of the children were looking elsewhere, 0 points were recorded for that particular episode; however, if most of the class was looking at what the teacher was trying to highlight, e.g., a word on a flash card, then 3 points were awarded for eye contact.

An additional point was given for visible display of excitement for a total of 10 possible points for each episode. Behaviours like shivering, dancing, jumping and clapping were coded as signifiers of excitement. If these behaviours were displayed by most of the children in one episode, then 1 point was awarded to that episode (by 'most' I mean all but 1–2 children in the class). Only 1 point was allocated for excitement as this behaviour was difficult to scale reliably. I am aware that these behaviours might not always signify engagement. For instance, it is possible that student could be jumping around the class in a display of disengagement rather than being engaged with the task at hand. To counter this, the videos were reviewed to ascertain that the excitement was indeed in response to what the teacher was trying to achieve in class and thus an indication of engagement and not disengagement. The coders agreed that most of the students in one episode must show excitement for that episode to earn this extra point. If only one or two students out of a class of 6–10 showed excitement, this point was not awarded.

Thus for student engagement, each episode was coded by both coders for bidding, eye contact, student talk and excitement, and all points were tallied. Out of 10, a total score of 1–3 was determined to signify low student engagement, 4–7 indicated moderate student engagement, and 8–10 showed high student engagement. Finally, the interactional patterns and activities were examined in relation to low, moderate and high engagement to address the first question of the study.

Findings and Discussion

Overall Picture of Engagement in the LSP

Figure 9.1 shows high, moderate and low engagement in all five classes that were part of this study. The percentage refers to the percentage of episodes showing student engagement as defined above. For instance, in Everbest Primary School, 40% of all the episodes coded had high student engagement, 47% had moderate student engagement, and 13% of episodes had low student engagement. The overall picture that emerges from Fig. 9.1 is that moderate student engagement is more commonly observed across the five schools as compared with either high or low student engagement.

Figure 9.2 summarizes the student behaviour in episodes of high student engagement. One of the patterns that stands out is that the first two schools, Everbest Primary School and Qin Hua Primary School, show fairly similar trends in the way that the components of high engagement are distributed. This means that high engagement in these two schools looks quite similar. Hazelnut Primary is a bit different from these two schools in that the level of eye contact and excitement were higher.

The presence of excitement was noticeable in all three schools with episodes of high student engagement. As Fig. 9.2 shows, Hazelnut Primary School led the other two schools as 15% of the score in high engagement episodes was awarded for behaviour that displayed excitement. In Qin Hua Primary School, this score was 12%. A very small percentage of episodes with high engagement were based on displays of excitement in Everbest Primary School. There was a variety of interactional patterns in episodes with excitement: Whole Class Activity, Whole Class Elicitation and Individual Activity (Writing).
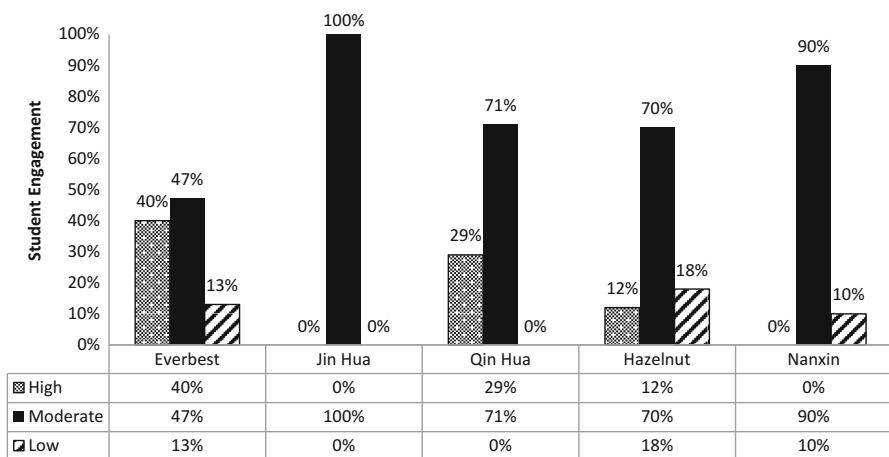

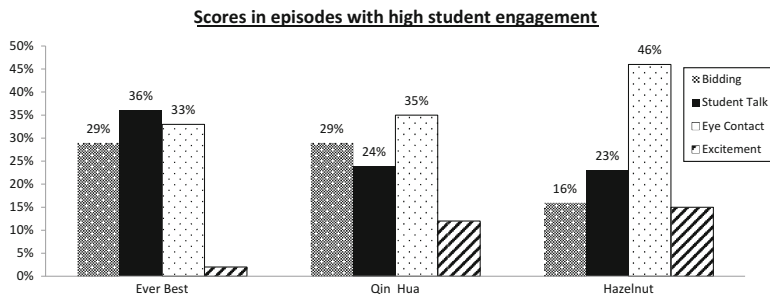|	Everbest	Jin Hua	Qin Hua	Hazelnut	Nanxin
High	40%	0%	29%	12%	0%
Moderate	47%	100%	71%	70%	90%
Low	13%	0%	0%	18%	10%

Fig. 9.1 Student engagement in five schools

Fig. 9.2 Scores in episodes with high student engagement

Interactional Patterns and Student Engagement

In this section I link interactional patterns (i.e., the way the teacher interacts with the students) with high, moderate and low student engagement.

Table 9.3 is an overall summary of the percentage of episodes showing high, moderate or low engagement by type of interactional pattern across the five participating schools. I will focus my discussion on the key findings. The first two interactional patterns in this table, Whole Class Lecture and Whole Class Elicitation, not only dominated in the types of interactional patterns found in the LSP classes but these two interactional patterns also presented an interesting contrast. In 78% of the episodes in which the teacher used Whole Class Lecture, there was low engagement in the class. Thus, it is reasonable to assume that in the LSP class, the interactional pattern of lecture does not engage these young children. A different outcome in terms of engagement was seen in episodes where the teacher used Whole Class Elicitation. With Whole Class Elicitation, the majority of episodes resulted in high or moderate student engagement (71%). This suggests that though the use of Whole Class Lecture in the LSP class is likely to result in low engagement, the use of Whole Class Elicitation manages to engage students in the lesson.

I now move on to Table 9.4, which provides more detail by showing the actual breakdown of the number of episodes in each interactional pattern. The majority of episodes in the LSP, i.e., 123, showed moderate student engagement, which led to the overall finding that in general the students in the LSP class are moderately engaged and that though there were few episodes of high engagement in these classes, there were also few episodes of low engagement.

Having established that classes in the LSP tend to be moderately engaged, Table 9.4 also shows that though in moderate and high engagement episodes, there were a variety of interactional patterns, in episodes with low student engagement, there were only two: Whole Class Lecture and Whole Class Elicitation. Thus, it is possible that one of the reasons for low engagement is that the teacher does not vary the interactional patterns. Also, by choosing mainly Whole Class Lecture and Whole Class Elicitation, the teacher was choosing interactional patterns which discouraged student interaction. In other words, the type of interaction that the teacher chose could determine how engaged the class would be.

Table 9.3 Percentage of the nature of engagement across schools

Interactional patterns	High engagement	Moderate engagement	Low engagement
Whole Class Lecture	0	4	78
Whole Class Elicitation	40	31	22
Reading and Elicitation	20	0	0
Choral Elicitation	0	39	0
Whole Class Role Play	20	4	0
Whole Class (other) Activity	10	18	0
Individual Activity	10	4	0
Total	100	100	100

Note. '0' indicates no episodes for that cell

Table 9.4 Engagement by episode type and number of episodes

Episodes of interactional patterns ($n = 174$)	High engagement		Mid engagement		Low engagement	
	No. of episodes	%	No. of episodes	%	No. of episodes	%
Whole Class Lecture	0	0	5	4	14	78
Whole Class Elicitation	13	40	38	31	4	22
Whole class Reading and Elicitation	7	21	0	0	0	0
Choral Recitation	0	0	48	39	0	0
Whole Class Role Play	7	21	5	4	0	0
Whole Class (other) Activity	3	9	22	18	0	0
Individual Activity	3	9	5	4	0	0
Total	33	100	123	100	18	100

Finally, the dominance of Whole Class Choral Recitation, as shown in Table 9.4, needs explanation. In 39% of the episodes with moderate engagement, the interactional pattern observed was Whole Class Choral Recitation. In keeping with Paige's (2011) definition (see below), Whole Class Choral Recitation was documented when the whole class answered as one voice. In contrast, when only one student answered, then this was documented as 'student talk'. In this environment Whole Class Choral Recitation is important for emergent readers as it gives them an opportunity to produce and practise their developing English language and literacy skills.

Paige (2011) recommends whole-class choral reading (WCCR), a pedagogy in which the class is taught to read aloud from one text in 'one voice' like a choir to improve decoding ability and oral fluency. Before reading begins the teacher models accurate pronunciation, appropriate reading rate and prosody. At the end of the reading, the teacher provides feedback by modelling the pronunciation of difficult words and phrases and by calling attention to prosodic markers. In most LSP classes, the teacher did preface the choral reading by modelling and reciting for the children. Thus, choral reading was an important part of the output for children in the LSP class though it tended to bring about only moderate engagement.

High Student Engagement

While the quantitative data provide some evidence of student engagement in the classroom, they cannot fully capture the nuances of the classroom interactions. In this section I discuss transcripts from two lessons, both from the same teacher and same group of students, but one showing high engagement and the other showing moderate engagement.

The transcript in Example 9.1 was taken from Hazelnut Primary School, day 5. This episode, with high student engagement, had a duration of 6 min and 31 s and was taught by Ms. Lina Lim. The four components of high student engagement, namely, bidding, eye contact, student talk and excitement, are all present in this episode. Ms. Lim was introducing the six students to phonics. At the beginning of this lesson, Ms. Lina Lim had said that this lesson was on 'Magic E'. She articulated two rules about why 'E' is magical: it is silent at the end of a word and it changes the vowel. Ms. Lim gave the class examples like "Sam" which changes to 'same' if an 'E' is added to the end of the word. In Example 9.1 Ms. Lina Lim illustrated the Magic E rule with a new word: nightmare.

Example 9.1

Turn	Speaker	Utterance
1	T	OK, very good (). OK, let's see the two words that we learnt today. () let's hope you can try hunh but I will help you with some words. I need some words on the board for you
		OK. What's the word here? (most of the children raise their hands)
		Have you done this in class? What is it called? What is this word? (some children wave their raised hands)
		Nightmare.
2	S	Nightmare.
3	T	Nightmare (makes her voice sound scary).
4	S	Nightmare.
5	T	There are two () with the word: nightmare. Say here. I was afraid because I had a nightmare the previous night. And look. This is the nightmare (laughs). Yes this is the nightmare.
6	S	The ghost.
7	T	Ya, the ghost in your mind. OK, so we are going to try to start the word nightmare.
8	S	I afraid who there.
9	T/SS	Night.
10	T	What happened to my 'T'? Why is it different? And then 'mare'.
11	T/SS	Mare.
12	T	OK we try. Ready. Ready. Ready on the table. Ready go.

13	T/SS	Nightmare.
		Raj: I like this.
14	T	You think I can clean off some words. Some of this. We try
		Ok. Let's clean off the letter N. Ready let's try.
15	T/SS	Nightmare.
16	S	Let's do the scratch hand.
17	T	OK, I will clean off this one, the letter 'E'.
18	S2	Let's do it in our butt.
19	T	You want to do on the butt?? OK, come. What is this scratch
		hand? Oh you want to write on your hand, is it?
20	S	No no. The body. Body.
21	T	OK, you write on body. Those who want to write on your
		hands, write on your hand. Those who want their butt () butt.
22	S	Body.
23	T	OK, body. Ready, one, two, go: nightmare
24	T/SS	Nightmare.
25	T	OK, sit down. We are going to clean off some more words.
		Some more letters. We are only going to leave this last one
		out there. May we can try nightmare again. Ready?

T teacher, *S* student, *SS* students, *T/SS* teacher and students

The four components of high student engagement, namely, bidding, eye contact, student talk and excitement, are all present in this example. In the beginning of this episode, turn 1, there were instances where the children bid furiously. Also, their eye contact was always on the teacher when she was talking and on the task, when they were writing on the desk with their fingers.

In terms of student talk, this example shows how the teacher shared leadership in the classroom by deviating from a scripted pedagogy and allowing the students to make suggestions. In turns 16, 18 and 20, three different students made three suggestions regarding how they should write the word 'nightmare'. In turn 16 a student said, "Let's do the scratch hand". In turn 19 the teacher sought clarification for this suggestion. She asked: "What is this scratch hand?" And in the very next sentence, she answered her own question: "Oh, you want to write on your hand, is it?" Usually the children used their fingers to form the shape of the letters on their desks, but in this case the student was suggesting that they should do the same action on their hands/arms. This is evident in turn 19 when the teacher said: "Oh, you want to write on your hand, is it?", responding to the student's demonstration by using his fingers to write on his arm and hand.

The second suggestion was by a student in turn 18: "Let's do it in our butt". The student had used an incorrect preposition and the teacher rephrased his suggestion with the correct one: "You want to do it on the butt? OK". Finally in turn 20, a student suggested: "No, no. The body. Body". Thus, the suggestions were that the class should write the word 'nightmare' on their hands, on their butts and on their bodies

using their fingers to write invisible letters. From turn 16 onwards, the video shows an increasing level of excitement in the class. The suggestions of the students and the openness of the teacher to these seemingly ridiculous suggestions created a fun orientation as evidenced by a class that exuded energy as the students moved their bodies around, giggling and laughing occasionally.

Example 9.2 is an illustration of moderate student engagement with the same class of students and the same teacher. The six students were sitting in front of Ms. Lim, who sat on a chair, holding a book in which the text and pictures were facing the children. Ms. Lim had read this story to the class before and they were familiar with it. In this episode Ms. Lim was checking if the class had understood the story.

Example 9.2

Turn	Speaker	Utterance
1	T	OK, let's read the sentence again.
2	T/SS	'Come back, Bingo' shouted Sam. 'You are a naughty dog'
3	T	What did he say? (two hands are raised to answer this question)
4	T/SS	'Good dog, Bingo', said Sam. 'You come back'
5	S	Little dog died.
6	T	You read the story again tomorrow.
7	S	() dog died.
8	T	No. He can swim, not ().
9	S	Dogs are very good swimmers. I saw Mickey Mouse (). The dog swims, it swims.
10	T	OK, did you like the story about Bingo?
11	SS	Yes.
12	T	OK, who did Bingo go walk with? Do you remember?
13	S	Sam and Mum.
14	T	Sam and Mum. Very good. And in the end, who did, what happened when they went for a walk? Who did they see?
15	S	The duck.
16	T	Hmm
17	S	The duck.
18	T	They saw the ducks.
19	S	Then Bingo go in the river.
20	T	He went into the river. What did he do before he went into the river? He went and what?
21	S	Run and bark.
22	T	Run and bark at who?
23	SS	The ducks.
24	T	The ducks. And then after that they went to the river. Correct or not?
25	S	Next time I am going to chase dogs.
26	T	I am going through this again with you. Then later on you have to read your sight words. We are going to create a new one for you. See next, the next few. I have 1–40 again.

| 27 | S | Very very easy |
| 28 | T | Oh, I'm so glad you think it's very easy. OK, as I had gone through with you yesterday, you have to read them yourself. OK, before I start I will give your papers. I want you to write your name and class on it. |

A number of differences are evident between Examples 9.1 and 9.2. Crucially, Example 9.2 has no kinaesthetic learning and no visible displays of excitement. The students were sitting on their chairs facing the teacher and answering her questions. As shown in Table 9.3, Whole Class Choral Recitation and Whole Class Elicitation were the dominant interactional patterns in episodes with moderate student engagement. In Example 9.2 Whole Class Choral Recitation is evident in turns 2 and 4 where the teacher reads along with the students. At the same time, she modelled correct pronunciation and prosody. In turn 12 she began a comprehension check through a series of closed 'who' and 'what' questions. For instance, in turn 12 she asked: "Who did they see?" The purpose of these questions seemed to be to scaffold the students towards a better understanding of the text.

Overall Example 9.2 shows Ms. Lim was conducting a traditional class with Whole Class Choral Recitation and closed questions that resulted in limited student responses. We might assume engagement would be low. However, a closer reading of Example 9.2 clearly shows moderate, though not high, student engagement. Students were allowed to interject as can be seen in turn 4 when a student commented about Bingo: "Little dog died". At first the teacher brushed this comment aside by saying the student should read the story again. However, when in turn 7 the student repeated himself, the teacher clarified in turn 8 by explaining that Bingo could not have died because he could swim. Now the student understood and reinforced the teacher's explanation by confirming in turn 9 that he had seen a Mickey Mouse movie that showed dogs are good swimmers. The moderate engagement in this example is evident mainly by student talk and eye contact. All six children had their eyes fixed either on the teacher when she talked or on the text book, which provided evidence that they were on task. However, there is not much evidence of bidding. In the beginning of this example, a few children did bid for turns, but the teacher did not call on them to answer her questions.

Conclusion

The focus of this chapter was on student engagement in a low-track reading programme in Singapore. As discussed in the review of literature, student engagement has been measured through the use of surveys that were either self-reports from the students or reports from teachers who were commenting on their students. Engagement has also been measured by coders observing a classroom and filling

out a coding sheet. Finally, test results have been an important measure of student engagement. However, there are few studies which have used video data to code a small class of 6–10 pupils in terms of behavioural engagement. My attempt has been to fill this gap in the literature by identifying and analysing engagement in students designated as low achieving. Using four major components of student engagement – bidding, eye contact, student talk and excitement – I found moderate student engagement in most classes.

As shown above, the LSP lessons with low student engagement tended to use Whole Class Lecture as the predominant interactional pattern. Thus, the main pedagogical implication of this study is that in teacher training, teachers should be sensitized to the variety of interactional patterns that are available to them in the teaching of reading in English. In this data set, Whole Class Lecture as an interactional pattern was not effective for the development of early literacy in young children. As seen in the classes of Ms. Lina Lim, she hardly used Whole Class Lecture. Instead she tended to use Whole Class Activity which created engagement in the children towards learning. She also used Whole Class Elicitation to make the children talk. Thus, interactional patterns that involve activities or more student talk appear to increase levels of engagement in classrooms. This finding was also corroborated by Nystrand and Gamoran (1990) who analysed transcripts of student and teacher talk to comment on student engagement. They found that larger quantities of student talk were one demonstrable feature of robust engagement.

Several limitations to this study should be noted. As only five teachers in five schools were observed, this study cannot speak for the entire Learning Support Programme in Singapore, which is offered in all primary schools. It is not reasonable to assume that moderate student engagement is present in the entire Learning Support Programme or indeed that there are very few classes with low student engagement. Also, the lack of survey data and test results puts the entire burden of this study on the coding of videos and a behavioural analysis of student engagement, which can be subjective. Despite these limitations, the analysis was able to link interactional patterns with student engagement to show that, within the context of the LSP, certain types of interactions result in better engagement for struggling readers.

References

Bryan, G., Fawson, P. C., & Reutzel, R. D. (2003). Sustained silent reading: Exploring the value of literature discussion with three non-engaged readers. *Literacy Research and Instruction, 43*, 47–93. doi:10.1080/19388070309558400.

Hymes, D. (1972). Models of the interaction of language and social life. In J. Gumperz & D. Hymes (Eds.), *Directions in Sociolinguistics: The ethnography of communication* (pp. 107–123). New York: Holt.

Loughead, I. (2006). *The grasshopper and the ant*. Toronto: Scholastic.

Nystrand, M., & Gamoran, A. (1990). *Student engagement: When recitation becomes conversation* (Research Report No. G-008690007). Madison: National Center on Effective Secondary Schools. Retrieved from: http://www.eric.ed.gov/PDFS/ED323581.pdf

Paige, D. D. (2011). "That sounded good!": Using whole-class choral reading to improve fluency. *The Reading Teacher, 64*, 435–438. doi:10.1598/RT.64.6.5.

Pressley, M., Wharton-McDonald, R., Allington, R., Block, C. C., & Morrow, L. (1998). *The nature of effective first-grade literacy instruction* (CELA Research Report No. 11007). Retrieved from: http://cela.albany.edu/1stgradelit/index.html1998

Pressley, M., Wharton-McDonald, R., Allington, R., Block, C. C., Morrow, L., Tracey, D., Baker, K., Brooks, G., Cronin, J., Nelson, E., & Woo, D. (2001). A study of effective first-grade literacy instruction. *Scientific Studies of Reading, 5*, 35–58. doi:10.1207/S1532799XSSR0501_2.

Taylor, B. M., Pearson, D. P., Peterson, D. S., & Rodriguez, M. C. (2003). Reading growth in high-poverty classrooms: The influence of teacher practices that encourage cognitive engagement in literacy learning. *The Elementary School Journal, 104*, 3–28. doi:10.1086/499740.

Vaish, V. (2012). Teacher beliefs on bilingualism in a reading program. *International Journal of Bilingual Education and Bilingualism, 15*, 53–69. doi:10.1080/13670050.2011.594496.

Wharton-McDonald, R., Pressley, M., & Hampston, J. (1998). Outstanding literacy instruction in first grade: Teacher practices and student achievement. *Elementary School Journal, 99*, 101–128. doi:10.1086/461918.

Wigfield, A., Gutherie, J. T., Preencevich, K. C., Taboada, A., Klauda, S. L., McRae, A., & Barbosa, P. (2008). Role of reading engagement in mediating the effects of reading comprehension instruction on reading outcomes. *Psychology in Schools, 45*, 432–445. doi:10.1002/pit520307.

Yang, T. P. C. (2004). *Effectiveness of the learning support program in a primary school*. Unpublished Master's thesis, National Institute of Education, Nanyang Technological University, Singapore.