Fluency development through extensive reading: Two case studies

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This paper compares the development of fluency from two forms of Extensive Reading (ER) in case studies of learners who had just completed five-week ER courses. These involved 1 hour per week of shared-book reading and 3.5 hours weekly of individual sustained silent reading (SSR). The two participants were preparing for university entry at an English Language Centre (ELC) and both were enthusiastic leisure readers in their first language. In the ER courses, one read intermediate-level graded readers for language growth, with the other read simplified-intermediate books for fluency development. At the conclusion of their courses, the participants undertook think-aloud interviews while reading a graded reader excerpt at their respective levels. Their transcripts were then evaluated using semantic assessment, procedural development measurements and error counts. It was established that the participant reading for fluency development experienced significant growth in that area. This suggests that fluency training should be included in university language preparation courses.

Introduction

International students make up approximately 25% of the Australian tertiary student population; they are recruited on the basis that they are already literate in their first languages and have at least basic proficiency in English. Universities have therefore developed curricula that are suitable for multicultural settings. However, they have not prioritised the need to determine students' capability for studying in a second language, and matching their abilities to suitable study programs (Hirsch, 2007). Nevertheless, English as a second language (ESL) students need to develop their English language skills both prior to and during their university study (Akoudis & Tran, 2010; Murray & O'Loughlan, 2007). In their review of international students' learning environments and perceptions, Robertson, Line, Jones and Thomas (2000) find that 'there is common acceptance that language comprehension and competence are at

the heart of difficulties for international students' (p. 100). Fluency development can help these students make best use of the English language skills they already have.

The primary purpose of reading is the competent construction of meaning from text, and fluency is a precondition for this. The development of fluency progresses from decoding words to extracting meaning and then on to the smooth and meaningful understanding of texts. Many international students read more slowly and with less confidence in English than in their first language. This is likely to restrict their ability to manage required academic reading and leads to a belief that they can gain more information and knowledge through their first language (Fraser, 2007). A plausible reason for limited fluency in reading is that ESL students are often preoccupied with processes involving word-by-word decoding for pronunciation and meaning. This is then often ponderously followed by the translation of semantic, syntactic and orthographic difficulties into first languages (Chang, 2010). These difficulties are partially accounted for by the diverse writing systems that code the morphology and phonology of different languages and this problem is compounded for those international students whose first languages are non-alphabetical (Grabe, 2009). Nevertheless, competent first language readers will already have experienced the benefit of fluency, opening the possibility of transference to second language fluency development (Pichette, Segalowitz, & Connors, 2003). Of relevance to this mutual compensation between first (L1) and second languages (L2) are patterns of reading behaviour common to both; these relate to the cognitive automatic information processing mechanisms that all readers deal with in symbol recognition and phonological processing. L2 learners are usually older than L1 beginners and will have greater metacognitive and metalinguistic resources to apply to cognitive reading processes (Nation, 2009). Nevertheless, while there are vital differences, much can be learned from first language research where Grabe (2009) records the reporting of high correlations between reading comprehension and fluency skills in reading aloud. This suggests that reading fluency should be one of the earliest stages of reading development (Chall, 1996; Kuhn & Stahl, 2003); it is a first order skill because the rapid and easy recognition of words is a crucial first step in comprehension. Furthermore, students whose attention is focused on decoding rather than on comprehension lack the opportunity to develop fluency; one solution is to provide Extensive Reading (ER) texts that are easier to read (Samuels, 1994). The fluency effect of very easy-to-read books is the subject of this research.

This study concerns fluency development through ER by the examination of two participants' reading practices. One participant, Lin (a pseudonym), undertook a course to develop her reading fluency by reading at a simplified-intermediate level and was compared with Ken (a pseudonym), who undertook a course aimed

at language growth by reading at an intermediate level. The ER courses involved shared-book reading based on dialogic reading and inquiry learning, both of which foreground learner communication and employ strategic questioning designed to promote learners' initiation of thoughtful responses. This study lowers Lin's linguistic threshold, the language proficiency level at which a learner can benefit from that language, by simplifying her reading to an easily comprehended level (simplified-intermediate). At this level she can make use of fluency strategies, some of which she may have developed in her first language as an enthusiastic leisure reader.

Literature review

A considerable body of research attests to the benefits of ER in language learning. Day and Bamford (2010) advocate integrating ER in English for Academic Purposes (EAP) preparation courses because ER 'has an essential role in developing the sight vocabulary, general vocabulary, and world knowledge on which fluent reading is based' (p. 44). In addition, reading provides its own enjoyable rewards and Sustained Silent Reading (SSR) capitalises on this rewarding feedback to have learners become 'hooked', reading individually, compulsively and silently, at their own pace, when and where they please.

ER and fluency

ER is an approach involving concentrated sessions of SSR; it can promote fluency development by providing massive exposure to text, resulting in implicit learning. Attaining fluency is regarded as an incremental procedure involving rapid and accurate reading with appropriate rhythm and intonation (when reading aloud), and resulting in comprehension without undue strain (Grabe, 2010). The cognitive mechanisms for demonstrating a direct relationship between fluency and comprehension are the subject of ongoing research. However, as well as the positive correlations in L1 studies just mentioned, Kuhn and Stahl (2003) in a review of the theory and research concerned with fluency development and instruction, find that teaching fluency is usually effective and that assisted approaches, such as employed in the present study, are generally even more effective. Meanwhile, most second language practitioners agree that fluency is a necessary, but not in itself a sufficient skill for learners (Taguchi, Gorsuch & Sasomoto, 2006). While SSR is an essential ER component for the maximisation of reading input, assisted activities are often practised in conjunction with SSR, including book-reports, speed-reading, book-clubs/circles, reciprocal/repeated reading, read-alouds and shared reading. For example Belgar, Hunt and Kite (2012) conducted an investigation of the effects of pleasure reading on fluency development assessed through the reading speed of Japanese EFL university students over 1 year. They find that the participants who read simplified books made greater

reading speed gains than those undertaking academic intensive reading. Despite these encouraging observations, fluency is often neglected in EAP courses. Nation (2009) suggests that an overweening desire of learners and teachers for ever new material leads to a focus on language growth rather than fluency development. Nation adds that academic preparation programs could benefit from more flexible student-centred course components that strengthen learners' existing skills.

Shared book reading and read-alouds

As Grabe and Stoller (2011) observe, most students of English as a first language can read fluently with subconsciously acquired parsing knowledge, but would have difficulty completing a grammar exercise on their reading. On the other hand, many second language international students have little fluency, but considerable grammatical knowledge with which to tackle such a test. These authors conclude that it is often overlooked that ESL/EFL learners do not need more grammatical knowledge but, like L1 developing readers, they require countless hours of interaction with print to develop their fluency. It is only by spending a great deal of time reading that students can move beyond mere accuracy to automaticity (Samuels, 1994).

ER then appears to be a natural choice for EAP programs to provide international students with the additional hours of reading required for fluency development. Stories in ER books may be selected to be intriguing and understandable to young adults, but there also needs to be compatibility between their language learning goals and the task demands of ER (Escribe & Huet, 2005). SSR programs therefore need interactive activities such as mentoring and shared-book reading to strengthen learner motivation. A shared-reading approach involves the teacher and students reading together from the same text. With primary students, this is often referred to as Big Book Reading featuring large text and illustrations, both of which can be viewed by children grouped within a few metres; however, the question remains as to whether shared reading can be an effective ER strategy with adult ESL/EFL learners. Shared-book reading generally begins with a teacher, parent or carer reading aloud then, as the listener's confidence develops through a period perhaps of reciprocal reading, it usually leads to the learners themselves choosing to read aloud. Amer (1997) compared two groups each of approximately 38 EFL learners from an intermediate school in Cairo; they read the same book and experienced the same book activities including pre-reading explanations of vocabulary and book discussions. The distinction was that the experimental group undertook reading aloud, following the text in the book as the teacher read the story with expression. The other group read the book under supervised SSR conditions. Pre- and post-study multiple-choice comprehension tests and a cloze story-frame test were administered to both groups, finding that the experimental group outperformed the control group

in both evaluations. The author expresses the opinion that reading aloud assists learners to move on fluently from decoding obstacles.

Day and Bamford (2010) have a similar view when they comment that silently reading the written text while being read aloud to helps build sound/symbol correspondence and assists L2 students to feel at ease in the alien print environment. This is especially so for beginners encountering a script different from that of their first language. When learners read aloud either in shared-reading sessions or in family groups, they experience reading interest; according to personal attraction this could be from any number of sentiments such as romance, adventure, mystery and so on. It is posited that this interest becomes associated with feelings of self-efficacy that can provide support for the private SSR element of ER, and the development of a reading habit (Eidswick, Rouault, & Paver, 2011). This interest and enthusiasm are illustrated in Wang and Lee's (2007) research project with middle-primary EFL students in Taipei, meeting after class for two 90-minute sessions each week. The study was conducted over four years with half the reading sessions being storytelling read-alouds. In the fourth year, 10 minutes of SSR preceded the read-aloud sessions. Interesting books within the children's comprehension level were chosen. The story was read mainly in English, but Mandarin was used on occasions to assist with comprehension. The researchers report that creating autonomous readers was the ultimate goal of the program and that 'the read-alouds successfully brought the pupils to the stage of independent reading, confirming the hypothesis that reading aloud and silent reading are natural partners in developing enthusiasm for reading' (p. 5). This SSR was supported by a consulting teacher and integrated with the read-alouds. Thus these learners progressed from the controlled stage of storytelling read-alouds to an autonomous stage of independent reading.

The Wang and Lee (2007) study made some concurrent use of the participants' first language, Mandarin. Investigations of the variance of L2 reading have identified L1 reading ability as a significant factor, because proficiency in L1 reading can provide the basis for L2 reading development. A study with Bosnian migrants to Quebec shows that L1 positive transfer to L2 occurs when learners establish a threshold L2 level of knowledge while continuing their first language reading (Pichette et al., 2003). However, their participants would not have had to demonstrate the language proficiency requirements of international students. Yamashita's 2002 study of 241 Japanese university students investigated the effect of L1 reading ability and L2 proficiency on L2 reading comprehension. The findings indicate mutual compensation between these variables suggesting a two-way benefit to L2 reading comprehension, one resulting from their first language reading ability and the other from their second language proficiency.

Modifications for fluency development

Books such as those in Wang and Lee's (2007) study are written or modified to suit learner's interests and proficiency levels. Learner levels and ER books are grouped into approximate language proficiency levels such as beginner, elementary, intermediate and so on. These levels are reflected, for example, in the language entry requirements for international students, and are typically based on IELTS or other proficiency test scores. The intermediate level of IELTS band 5.5 is generally the most basic entry level, requiring up to 40 weeks of additional language preparation (Macquarie University, 2015). Intermediate-level ER books contain approximately 1,600 headwords (stem noun or verb forms) (Claridge, 2012). At this level, an intermediate learner could expect to understand 95–97% (the lexical coverage) of words in an ER or course book modified to that level. This range of difficulties at fewer than 5 words per hundred may not completely stymie enjoyment, especially when the difficulties are repeated throughout the text, making new items available for learning. However, this difficulty rate is considerable, representing up to 15 interruptions to attention in the average page of an ER book, and probably distracting the reader's understanding. As Samuels (2002) comments, when learners are able to recognise words more easily, the bulk of the attentional resources is available for comprehension. Claridge (2012) sets out the level for achieving this: 'If they are to read easily and for pleasure, readers should be reading extensively at . . . the level below their perceived proficiency level' (p. 118). The easier level (termed the simplified-intermediate level in this study), is reading for fluency development at which learners can expect almost complete understanding with a 99–100% lexical coverage (Hu & Nation, 2000). However, there is not yet precision regarding the recommended number of words to be encountered in each aspect of knowledge to be learned; therefore, lexical coverage is expressed as a range (Hu, 2013).

To accomplish simplification to different levels requires the skilful use of modification strategies and the creative talents of skilled writers and materials developers (Claridge, 2012). Simplification is integral to the process of preparing ESL graded materials and the methods of modification such as linguistic and semantic simplification, elaboration and glossing, alone or in combination, have been shown to assist language learning. The elaboration method employed in the present study involved the retention of a text's original syntactic and lexical complexity, but with the illumination of this through the use of strategies such as added redundancy, paraphrasing, and repetition. However, simplification by its very nature is individual, intuitive and vague (Crossley, Allen, & McNamara, 2011).

The present research is a case study of two learners (Ken and Lin) who had just completed a five-week ER course but read differentiated ER texts. It seeks to explore

the relationship between semantic knowledge and lexical density in think-aloud interviews. This builds on the knowledge that fluency is an essential component in comprehension, that regular L1 reading transfers positively to L2 reading, that assisted ER is more effective than stand-alone SSR, and that virtually complete understanding of ER texts is more effective for fluency development. To accomplish this, the current study employed elaboration to additionally modify intermediate texts which were originally at 95–97% lexical coverage, to a simplified-intermediate level of 99–100%. It was expected that Lin, reading at the latter level, would express more fluent responses in the think-aloud interviews than Ken, reading at the intermediate level. This led to the following research question:

> Is the fluency assessed in think-aloud interviews affected by the lexical coverage level of the Extensive Reading texts read by the participants?

Research design

This project used case-study to investigate the possible fluency differences between participants undertaking two forms of ER in separate five-week courses, one participant reading for language growth (Ken), and the other for fluency development (Lin). After the completion of the courses, think-aloud interviews were used to investigate the mental processes of the participants as they read an extract based on their respective forms of ER. The interviews were conducted in a meeting room at their college, and the participants made their own recordings using their mobile phones – this facilitated follow-up discussions.

Think-aloud strategies are comparable to learning strategies, which Griffiths (2007) describes as 'activities consciously chosen by learners for the purpose of regulating their own language learning' (p. 91). Block and Israel's (2004) insights into these strategies were derived from studies of what expert readers think as they read; this led to the development of a Think-Aloud Matrix. This study employed the slightly modified form shown in Table 1. The results from the thematic analysis of Ken and Lin's transcripts were reported according to this plan. First, a baseline comparison of Ken and Lin's automatic oral fluency was established as they read an identical, unmodified section of the excerpt. Then the participants' think-aloud verbal statements were coded in accordance with the matrix. Finally, evidence was gathered from the mean length of stretches of speech in responses and from error counts (De Jong & Perfetti, 2011).

Table 1

Think-Aloud Matrix Responses

Code	Think-Aloud Strategies
A	Connecting to the author's big idea
B	Recall, activating relevant knowledge
C	Relating self to the story
D	Revising prior knowledge and predicting
E	Recognizing the author's writing style
F	Determining word meanings
G	Asking questions

Source: Block & Israel, 2004

Four assessment procedures were followed:

(i) A comparison of the baseline automatic oral fluency levels of the participants

(ii) The constant comparison analysis of think-aloud responses based on the Think-Aloud Matrix responses

(iii) Comparison of the procedural knowledge of the participants by considering the mean length of stretches of speech expressed in the think-aloud responses

(iv) Error count comparison: if the ER grading were correct, Ken should experience 2–5 errors per 100 words and Lin no more than 1 error per 100 words.

Participants

Ken and Lin were from the same lowest entry level class at an English Language Centre (ELC). In the present study they were volunteers, randomly assigned to the two levels of ER before meeting the researcher. Ken is a 39-year-old man from Vietnam, recently arrived in Australia to attend the ELC. He is a self-funded student supported by his part-time work as a cleaner. Ken studied English as part of his Vietnamese primary and secondary education where he estimated the time devoted to English lessons at about 3 hours per week. Ken stated that his present situation of having a considerable English vocabulary but a low level of speaking competence was perhaps the result of an education system focussing on form and the rote learning of vocabulary. Ken received post-secondary education in the area of automotive engineering and this enabled him to join his family's taxi business. Ken is a leisure reader in his mother tongue with a preference for fantasy fiction. He mentions having read Vietnamese translations of *The Inheritance Cycle* (Paoline, 2004), in which a 15-year-old believes

that he is merely a poor farm boy until his destiny as a Dragon Rider is revealed. Other books he has read include *The Lord of the Rings* (Tolkien, 2014) and the Harry Potter series (Rowling, 1997). He was also influenced by Chinese fantasy books obtained from Vietnamese websites and from the exchange of some books amongst friends sharing his interest. However although he had studied English, he did not undertake any leisure reading in English prior to commencing the ER course.

Lin is a 25-year-old Chinese woman who is also new to Australia. Her English learning experiences were similar to Ken's, studying secondary school English through the grammar translation method. As with Ken, Lin had only limited opportunities to practise her target language. Lin also enjoyed recreational reading in her first language with a preference for romance stories; like Ken, she had previous professional training and work experience in her homeland as an auditor. Unlike Ken, Lin had incorporated English in her recreational reading before coming to Australia and undertaking the ER course. She mentions only being able to find children's English language books, but estimates that perhaps a quarter of her leisure reading was of this genre.

The two participants had similar backgrounds and similar proficiency levels as determined by their ELC entry level requirements and by the observed oral fluency assessment completed within the think-aloud interviews. They also read for pleasure in their first languages. During their five-week ER project, the participants kept reading diaries. However, these show that Ken read 123,500 words at the intermediate graded reader level, while Lin read just 42,400 words at the simplified-intermediate level. This gave rise to the question of whether the substantial difference in words read was due to the simplified-intermediate level being a more efficient form of ER; that is, although reading much less, did Lin's 99-100% lexical coverage develop more fluency than Ken's large amount of reading at the intermediate level? When asked why he had read so much more than other participants, Ken said it was because he was very interested and he read for longer than the 30 minutes per day suggested.

Procedures

The five-week ER courses that preceded the think-aloud case studies featured 1 hour per week of shared-book reading and an undertaking by the participants to complete an average of 30 minutes of SSR per day. A selection of approximately 30 graded reader books in print, KINDLE and e-book formats was available at the two levels of simplification under investigation. The books, predominantly at the intermediate level, were from the publishers of international books with the simplified-intermediate texts produced from books in the public domain as detailed in the next section. The shared-reading involved various types of sharing such as repeated and reciprocal reading as well as discussions based on dialogical questioning and inquiry learning. In conventional shared-reading, irrespective of whether in the family home or

an ESL classroom, the teacher/adult reads and the student/child listens, but in dialogic shared reading the student becomes the storyteller. The teacher takes on the role of an interested listener, asking questions, inducing students to refine their understanding of the text and speak frankly (Whitehurst & Lonigan, 1998). For example this facilitated understanding of some participants' reservations about the inclusion of the Chinese short story, Kong Yiji, a tale that was already known to the Chinese participants who explained that similar stories had been taught in their school years. Several participants stated that they were already familiar with their Chinese culture and that one value of ER to them was being exposed to 'Western' cultural knowledge. Nevertheless, there were many opportunities for dialogic inquiry as in the following line about Chinese drinking habits which always sparked *why, how* and *where* discussion:' . . . hot water was always ready for warming up hot-wine . . .'

In addition, during shared-reading sessions there was frequent inquiry and reference made to the participants' SSR with encouragement for learners to share their enjoyment of whatever book they had chosen. Therefore, for the two case study participants to become involved in a think-aloud interview was the continuation of a familiar approach.

Materials

The participants read the same 464-word intermediate-level graded reader extract from *Strawberry and the Sensations* (Viney, 2009). The version read by Ken has previously been described as one in which a learner can be expected to understand 95–97% of the vocabulary; it was not additionally modified as it was already at the intermediate level. This text, however, was then further modified to the simplified-intermediate level for Lin and has been previously described as being at 99–100% lexical coverage. The text was unaltered, but there were 18 modifications by elaboration in Lin's version. Readers were not encouraged to search for mental connections, but rather were asked to talk spontaneously about what came to mind during their reading.

The elaboration process is illustrated by a few lines from the public domain story *The Upper Berth*:

The Mystery of Cabin 105 = *a cabin is a room on a ship*

by F Marion Crawford

We were all tired and sleepy after a long dinner one evening, but nobody wanted to go home. Then somebody shouted, 'Bring the cigars!' It was Brisbane - a big,

strong man. Everybody turned to look at him. = cigars are made of tobacco like cigarettes, but they are much bigger and made of brown tobacco leaves.

Lighting his cigar, he said, 'It's strange, you know.' We all stopped talking. 'It's strange,' he said again. 'People are always asking if anyone's seen a ghost. Well, I have.' = a ghost the spirit and shape of a dead person that some living people believe they can see, usually as a white figure.

Somebody said, 'Tell us the story, Brisbane.' We lit our cigars, ordered another bottle of champagne, and listened to his story. = a popular alcohol drink, it is white wine with bubbles in it. Called sparkling wine because bubbles sparkle like light.

In this process the author's text remains intact, having had notes added rather than alterations made. Readers can easily identify the highlighted words and phrases that may be difficult, or, if the term is already known, they ignore the elaboration and read on.

Qualitative assessment

The data from the participants' transcripts were grouped into thematic categories for comparison. In order to overcome the problem of purely anecdotal interpretation, the procedure of analytic induction was used. This involved focusing on each section of data after every think-aloud response to evaluate whether there was a match with any of the thematic propositions in the Think Aloud Matrix. There are a number of steps that can be taken to develop the validity of think-alouds; however, the over-arching consideration is that the validity of this approach 'is questioned because it is not known whether the act of verbalizing while completing a task is reactive, acting as an additional task and altering the cognitive processes rather than providing a true reflection of thoughts' (Bowles, 2010, p. 14). A significant difference between this think-aloud procedure just described and that followed in the current study is that no task completion was required. Rather, it compared the un-prompted think-alouds expressed by the two participants and there was no intervention or task to interrupt the flow of thoughts.

Findings

These are organised according to the four assessment procedures set out in the research design section.

(i) Oral fluency levels

Some prior consideration of the automatic oral fluency levels of the participants is useful as a benchmark in this overall comparison. Automatic fluency is defined here as the smooth and rapid production of utterances, without undue hesitations and pauses (Gatbonton & Segalowitz, 2005). In discussing measurements of fluency,

De Jong and Perfetti (2011), observed that the mean length of fluent runs can be calculated. This concept is operationalised in the study by using a 76-word section of the stimulus extract in which there were no elaborations. For this section, no additional assistance was available to Lin. The think-alouds, counted as stretches of speech, were analogous with Ken using 59 words and Lin 52, indicating little difference in their observed oral fluency.

(ii) The Think-Aloud Matrix

The results reported in Table 2 below are derived from processing the participants' transcripts using the constant comparison method of analysis (Block & Israel, 2004). Lin's total strategy usage is 50% greater than Ken's.

Table 2

Think-Aloud Matrix Responses

Code	Think-Aloud Strategies	Comparisons	
		Used by Ken	Used by Lin
A	Connecting to the author's big idea	9	16
B	Recall, activating relevant knowledge	9	12
C	Relating self to the story	5	2
D	Revising prior knowledge and predicting	8	10
E	Recognising the author's writing style	2	0
F	Determining word meanings	3	14
G	Asking questions	7	9
	Strategies Total Use	**43**	**63**

Source: Block & Israel, 2004

However, an illustration of the determination of the results process is contained in the following example from the transcripts, accompanied by a description of how the formal generalisations were determined. The think-aloud responses were transcribed verbatim and contain grammatical inconsistencies. The stimulus text is highlighted in bold, while an asterisk marks sections where a think-aloud could have been expressed; however, there was no compulsion. The elaborations made to Lin's text are underlined.

The example is of Strategy F: Determining word meanings – this strategy serves two roles. Firstly, coding establishes the amount of strategy use. Secondly, it establishes whether the two stimulus readings were at their nominated lexical-coverage levels.

In the overall comparison (Table 2) Ken's responses for this category were coded as occurring 3 times whereas Lin used the elaborations to establish meaning 14 times. This number of occasions in which Lin used the modifications to resolve difficulties resulted in her understanding 100% of the stimulus reading, which is significant evidence of successful modification to the 99-100% lexical-coverage level. This process is illustrated as follows:

Excerpt 1

A road manager gave Cyndi a towel for her face.*

Ken: 'A towel, a towel for her face. I don't know these words.
A towel?' (14 words)

(Researcher explains: 'What you use in a bathroom to dry your body.')

Ken: 'Maybe she had to (remove) make-up for the show?'

Excerpt 2

Lin had the assistance of an elaboration as underlined: *A road manager gave Cyndi a towel to clean and dry her face.**

Lin: 'Because Cyndi's face is a little dirty and they give something to him to clean her face. Yeah yeah yeah.' (18 words). (Viney, 2009, p. 2)

Ken needed the researcher's assistance to understand this sentence, but the elaboration allowed Lin to understand of her own accord.

(iii) Procedural development

Another method of comparing the effect of reading for fluency development is to compare the participants' mean length of stretches of speech. As De Jong and Perfetti (2011) observe, '. . . fluency development is often explained in terms of procedural knowledge and automatic processes . . .' (p. 536), indicating a comparison of the participants' fluency development can be made by measuring the length of their think-aloud responses. It should be emphasised that there was no novelty effect as both participants had been reading texts at their respective lexical levels for five weeks. The Fluency Procedural Development Summary in Table 3 contains a summation of the results, unequivocally demonstrating the fluency development of Lin who, with a 640 word-length of responses, was three times more responsive than Ken at a 197 word-length of responses.

Table 3

Fluency Procedural Development: Response Summary

Participants	Length of think-aloud responses	Mean length think-aloud responses	Range of responses
LIN @ 99-100% lexical coverage	640 words	38 words	9–57 words
KEN @ 95-97% lexical coverage	197 words	12 words	2–27 words

(iv) Error count comparison

Errors were identified and counted from the transcript. A poor quality elaboration concerning the word 'Cokes' miscued Lin and she followed the poor directions, as discussed below, about 'Cokes or Coca-Cola'; discounting this miscue, Lin had no difficulties in her reading. Also her reference to a 'guitar' as a 'piano' is counted as an unsystematic error. In all, Ken had at least eight difficulties, which locates his proficiency within the 95–97% lexical coverage of intermediate readers. The results of the four assessments are summarised in the table below.

Table 4

Summary of Assessments

Assessment	Ken	Lin	Summary
Oral fluency levels expressed to 76-word excerpt	59 words expressed	52 words expressed	Analogous
Responses to the Think-Aloud Matrix	43	63	Lin used 50% more think-aloud strategies than Ken
Procedural knowledge responses	197 words used in responses	640 words used in responses	Lin was 200% more responsive than Ken
Error counts	At least 8	No difficulties	Lin and Ken's tests were at the expected lexical coverage levels. Ken had 8 opportunities for language growth. Lin read for fluency growth with complete understanding.

Discussion

The studies considered in the literature review all employed different ER-assisted approaches to demonstrate improvements in fluency. There is some commonality with the approaches used in the present study, for example read-alouds and shared reading were used in the Amer (1997) and Wang and Lee (2007) studies, while

simplified books and SSR were used in the Belgar, Hunt and Kite (2012) study. However, simplification to the level of virtually complete understanding (the 99–100% lexical coverage level) and the use of adult shared-reading is unique to the present study. The effect of L1 reading on L2 reading comprehension was also referred to in the literature review; both Lin and Ken were enthusiastic leisure readers in their first languages and as recent arrivals, this experience was current. The research question posed the possibility that the lexical-coverage levels of 95–97% and 99–100% could differently affect fluency measures such as the number of problems encountered, the number of reading strategies used and the length of stretches of speech in the participants' responses.

The response data summarised in Table 4 constitute a state of constant comparison indicating that Lin was more fluent than Ken. In this process, connections between the data and conceptualisations about ER emerge as formal generalisations. Therefore, from this qualitative research it can be asserted that ER modified by elaboration to a lexical-coverage level of 99–100% is likely to be significant in the development of fluency, when compared with ER at the usual intermediate lexical-coverage level of 95–97%. An advantage of strategies such as think-aloud responses is that they can be fine-tuned to the 'investigation and description of a relatively finite aspect of reading' (Afflerbach, 2000, p. 166). This was the case in these studies where the method was used to focus on differences resulting from elaborations to produce the more easily read text.

Think-aloud verbal strategies can take several forms and Cohen (1996) describes how each type of verbal report is time-referenced to the activity being investigated. Concerning the current study, immediacy was paramount because the learners' stream-of-consciousness was sought. Therefore, these think-aloud reports were styled as *self-revelation* because the 'data are only available at the time the language learning or language use events are taking place' (Cohen, 1996, p.13). Consequently, the think-aloud responses occurred simultaneously with the reading and revealed some language learning idiosyncrasies of which the researcher was unaware. For example, both participants were unfamiliar with the term *Cokes* for the globally known drink, Coca-Cola.

In relation to the difficulties encountered, it is noted that a learner such as Lin, dealing with text simplified so as to make her reading virtually completely understandable, should not reveal any comprehension problems in a think-aloud interview; this was indeed the case. She relied heavily on the text modifications and had only one problem with the word *Cokes*, due to a misleading elaboration:

Excerpt 3

*Bobbi and Denise were drinking Cokes <u>or Coca-Cola</u> in their dressing room**

The elaboration <u>or Coca-Cola</u> was meant to inform Lin that *Cokes* means *Coca-Cola*. Not knowing the word *Cokes,* she took the elaboration to mean that either of two kinds of drink was being consumed (Cokes or Coca-Cola) so her think-aloud was: 'Bobbi and Denise they are drinking coffee or Coca-Cola.' This, therefore, is counted as a miscue rather than an error. The elaboration would have been better expressed as:

*Bobbi and Denise were drinking Cokes <u>another name for the drink, Coca-Cola</u> in their dressing room**

However, Ken also had trouble with the word *Cokes* and dealt with the problem as follows:

Excerpt 4

*Bobbi and Denise were drinking Cokes in their dressing room.**

'Two err another people. Drinking Cokes! Drinking Cokes! I have no idea about this sentence.' This, therefore, counted as an error for Ken. (Viney, 2009, p. 2)

This discussion serves to signal that the quality of modifications can have a significant effect on research; however, as noted earlier, simplification by its very nature is individual, intuitive and vague. In comparison with Lin, Ken was shown to read with less fluency however his language growth is impressive. He knew the most common meaning of *sensation,* and used words such as *congratulations* and *biased*, all of which would be low-frequency words (rarely encountered) for an intermediate learner. He also knew the meaning of words such as *microphone, dressing-room* and *autograph* which were explained by elaboration in Lin's more simplified text. There is perhaps, then, a case for arguing that Ken seems to be the type of second language learner who should focus a little less on language growth and a little more on fluency development. Nevertheless, the intermediate level grading of 95–97% matched his proficiency level allowing him to read comfortably and pay attention to the few difficulties; possibly even learning from them. Lin, on the other hand, relied heavily on the elaborations to enjoy uninterrupted understanding. It is therefore concluded that the text simplified to 99–100% allowed Lin to enjoy full understanding providing the potential for fluency development.

Conclusions

This paper began with a claim that in language development, fluency should come first, noting that attention to fluency is preceded by processes of print familiarisation such as phonemic awareness and basic sound-symbol relationships. These pre-reading stages are the launching pad for fluency development. As also observed earlier, all international students are familiar with this launching pad, having fluency in their first language and having experienced at least the decoding principles in English, a requirement of their enrolment. Most students will also have some accuracy in decoding and some halting fluency, but must next develop the fluency skills of automaticity, speed and comprehension. The present study was on a small-scale, limited by a relatively small sample population size. Confidence in the thematic analysis process used to interpret the think-aloud responses could have been improved with additional raters and the calculation of inter-rater reliability according to the degree of agreement on rating scales. Furthermore, the construct validity would have been improved with the inclusion of control participants who were not involved in ER. In addition more comparisons of proficiency levels would have strengthened the study. Elaboration was the modification method used in the present study; however, it would be useful in future to compare other types of simplification such as glossing and linguistic simplification when also used to achieve the 99–100% lexical-coverage range. Also, the influence of L1 reading on L2 fluency was inferred; future empirical investigation of this would be of interest. The present study has found significant evidence of fluency development from ER simplified to a 99–100% lexical coverage. Therefore, an enjoyable and relaxing period of easily understood ER will likely project most EAP students towards accomplishing fluency growth in English.

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